



Rural Health Services Task Force

ACT 26 OF 2019

REPORT AND RECOMMENDATIONS

JANUARY 10, 2020

Table of Contents

- I. Introduction
- II. Rural Health Delivery in Vermont
- III. Workforce
- IV. Revenue Stability
- V. Care Management
- VI. Telehealth
- VII. Resources

Introduction: The Task Force

Act 26 of 2019 Legislative requirements:

1. Inventory of current system of rural health delivery in Vermont, including the role of rural hospitals in the health care continuum
2. Consider how to ensure sustainability of rural health care system, including identifying the major financial, administrative, and workforce barriers
3. Identify ways to overcome any existing barriers to the sustainability of the rural health care system, including prospective ideas for the future of access to health care services in rural Vermont across the health care continuum
4. Identify ways to encourage and improve care coordination among institutional and community service providers
5. Consider potential consequences of the failure of one or more rural hospitals in Vermont

Introduction: The Task Force & Report

Membership

Robin Lunge, J.D., MHCDS, Board Member, GMCB – Task Force Chair

Ena Backus, Director of Health Care Reform, Agency of Human Services

Dr. Rick Barnett, Licensed Psychologist-Doctorate, Licensed Alcohol/Drug Counselor

Dan Bennett, Present & CEO, Gifford Medical Center

Kate Burkholder, LADC, Treatment Associates, Inc

Dillon Burns, Director, Mental Health Services of Vermont Care Partners

Michael Fisher, Chief Health Care Advocate, Office of the Health Care Advocate

Steve Gordon, President & CEO, Brattleboro Memorial Hospital

Jill Olson, Executive Director, VNAs of Vermont

John Olson, M.Ed., Chief, State Office of Rural Health & Primary Care, VT Dept. of Health

Tony Morgan, Executive Director, The Rutland Free Clinic; **Steve Maier**, Executive Director, VT Coalition of Clinics for the Uninsured

Dr. Paul Parker, Richmond Pediatric & Adolescent Medicine

Laura Pelosi, Policy and Regulatory Affairs, Vermont Health Care Association

Dr. Melissa Volansky, MD, Stowe Family Practice, Executive Medical Director, CHSLV

Meetings

10 meetings from June – January, including one [public forum](#) in St Johnsbury and one workforce meeting in Brattleboro

Vote on Final Report

The **Task Force** voted 12-0-2 in support of the final report (2 absences)

The **Green Mountain Care Board** voted 3-0-2 in support of the final report (1 absence and 1 abstention)

Note: Steve Maier was appointed designee for Tony Morgan effective December 6, 2019

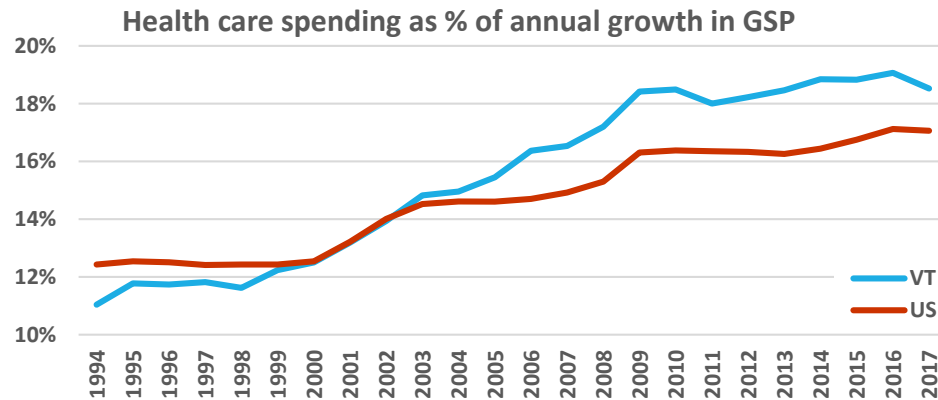
Introduction:

Financial Sustainability and Cost Containment

Cost Growth is Unsustainable

Cost Growth

- In 2017, the most recent year of data available, health care spending in Vermont grew 1.7%.
- Vermont's share of gross state product devoted to health care spending was 18.5% in 2017, vs. 11.8% in 1995.



Health Outcomes

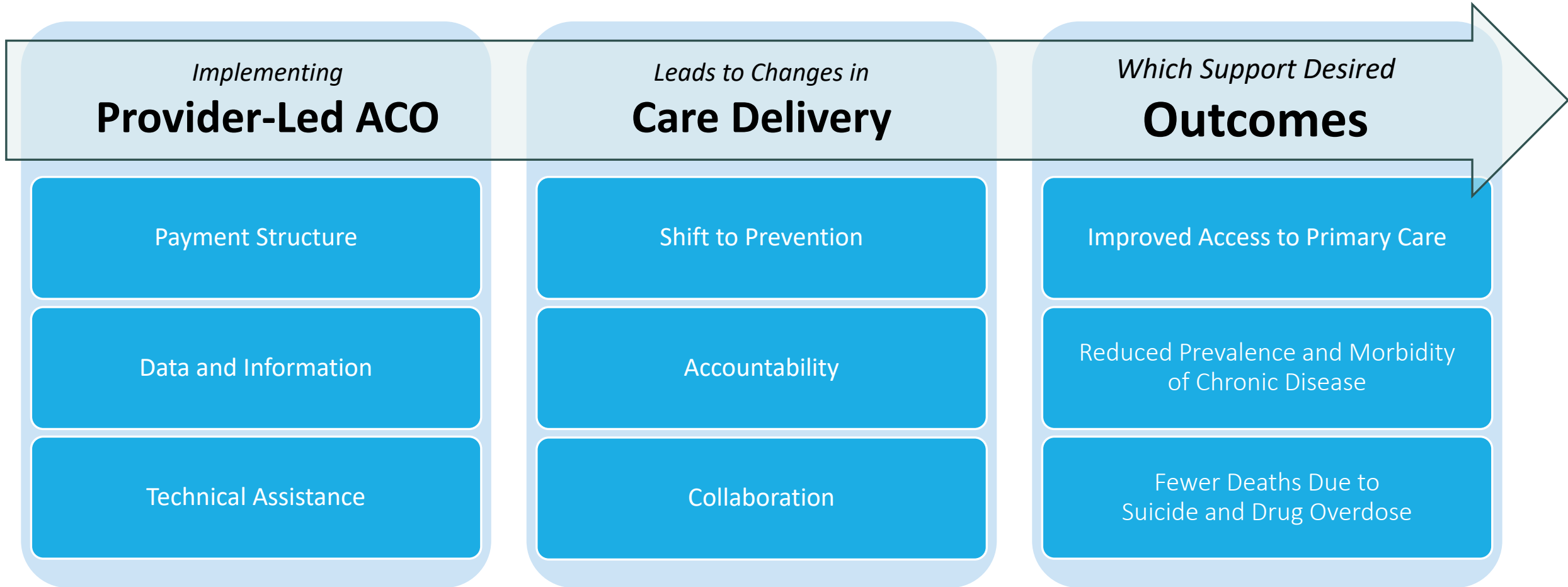
- Chronic diseases are the most common cause of death in Vermont.
- In 2014, **78% of Vermont deaths** were caused by chronic diseases.
- Medical costs related to chronic disease were over **\$2 billion in 2015** and are expected to rise to nearly \$3 billion by 2020.
- Vermont's **death rates from suicide and drug overdose** are higher than the national average.

Aging, less healthy population and poor social determinants of health exacerbate this trend

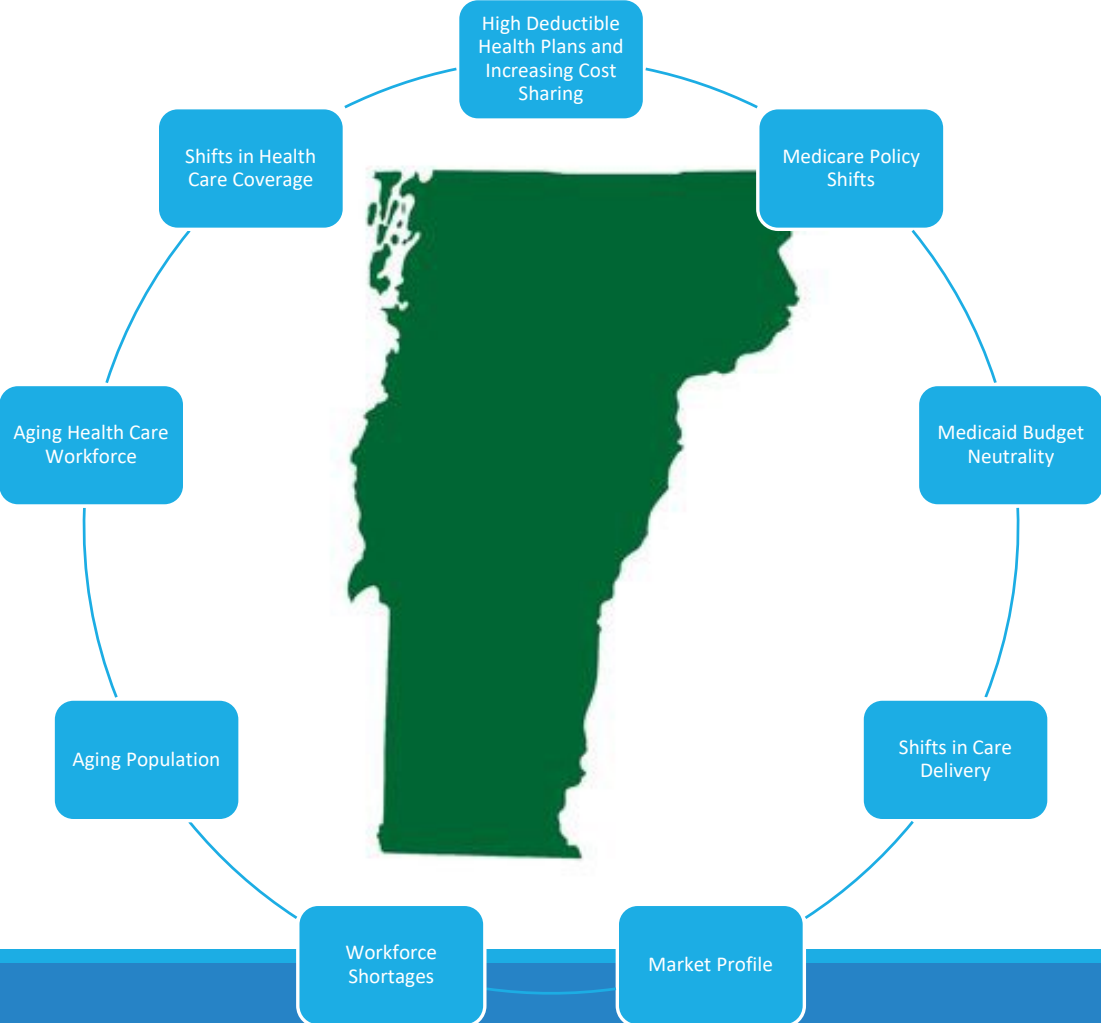
Health Outcomes Must Improve

Source: [2017 Vermont Health Care Expenditure Analysis](#); Vermont Department of Health; Kaiser Family Foundation

The Vermont All-Payer Accountable Care Organization Model



Introduction: Health Care is Changing



Introduction: National Trends & Pressures Impact Vermont

Vermont health care providers are not immune from national pressures focused on reducing reimbursements in fee-for-service and destabilizing the Affordable Care Act

High Deductible Health Plans & Increasing Cost Sharing

- Value (Cost x Quality) More Important to Patients
- Uncompensated Care again on the rise

• Source: [The New Future of Rural Healthcare Strategies for Success, Stroudwater presentation to the Green Mountain Care Board 4/3/2019](#)

Medicare Policy Shifts

- Centers for Medicare & Medicaid Innovation programs (bundles; ACOs; medical home);
- Reduced FFS payment (MACRA; Sequestration) and Value Incentives (MIPS)
- New Payment Models (e.g. SNF, home health)

• Source: [The New Future of Rural Healthcare Strategies for Success, Stroudwater presentation to the Green Mountain Care Board 4/3/2019](#)

Medicaid Budget Neutrality

- Federal Medicaid budget neutrality requirements for 1115 waivers could limit federal resources for addressing provider financial sustainability

• Source: AHS Presentation to Task Force, Dec 5, 2019

Shifts in Care Delivery

- Hospital inpatient care moving to outpatient settings
- Primary Care medical home programs expanding (Majority of practices in Blueprint for Health in Vt)
- Expansion of telehealth
- Focus on Integrated Care

• Source: [The New Future of Rural Healthcare Strategies for Success, Stroudwater presentation to the Green Mountain Care Board 4/3/2019](#)

Market Profile

- Vermont hospital system (14 nonprofits) was already highly regulated, non-competitive
- About 2/3 of physicians employed by hospitals
 - Source: [GMCB Fair Reimbursement Report](#)
- Vermont insurance also consolidated (2 insurers)
- New entrants (e.g., “minute clinics”; ASC; Walmart; CVS/Aetna) Source: [The New Future of Rural Healthcare Strategies for Success, Stroudwater presentation to the Green Mountain Care Board 4/3/2019](#)

Workforce Shortages

- Largest growing jobs sector in November 2019
Source: CNBC, [Here's Where the Jobs Are 12/6/19](#)
- Tight national and local labor market
- Aging workforce
- Provider burnout
- Rising higher education costs

Introduction: National Context

CMMI Direction: Continuing with Value-Based Payment



- If there was any doubt about the Trump administration's desire to push healthcare towards a value-based system, Center for Medicare & Medicaid Innovation (CMMI) Director Adam Boehler makes things clear:

*"I'll tell you a lot of what I do in my role running CMMI as senior adviser to Secretary Azar is to **blow up fee for service...** That's one of our prime goals—is to get rid of fee for service."*

- However, getting rid of fee for service is easier said than done given the industry's current reliance on the existing infrastructure.

34%

of healthcare payments tied to an APM in 2017

10.5%

of Medicare payments in traditional legacy arrangements not linked to quality

>50%

of Medicare FFS payments with some level of pay-for-performance

Source: FierceHealthcare, *CMMI's Adam Boehler wants to 'blow up' fee for service*, Evan Sweeney, 11/29/18
<https://www.fiercehealthcare.com/payer/cmmi-s-adam-boehler-wants-to-blow-up-fee-for-service>

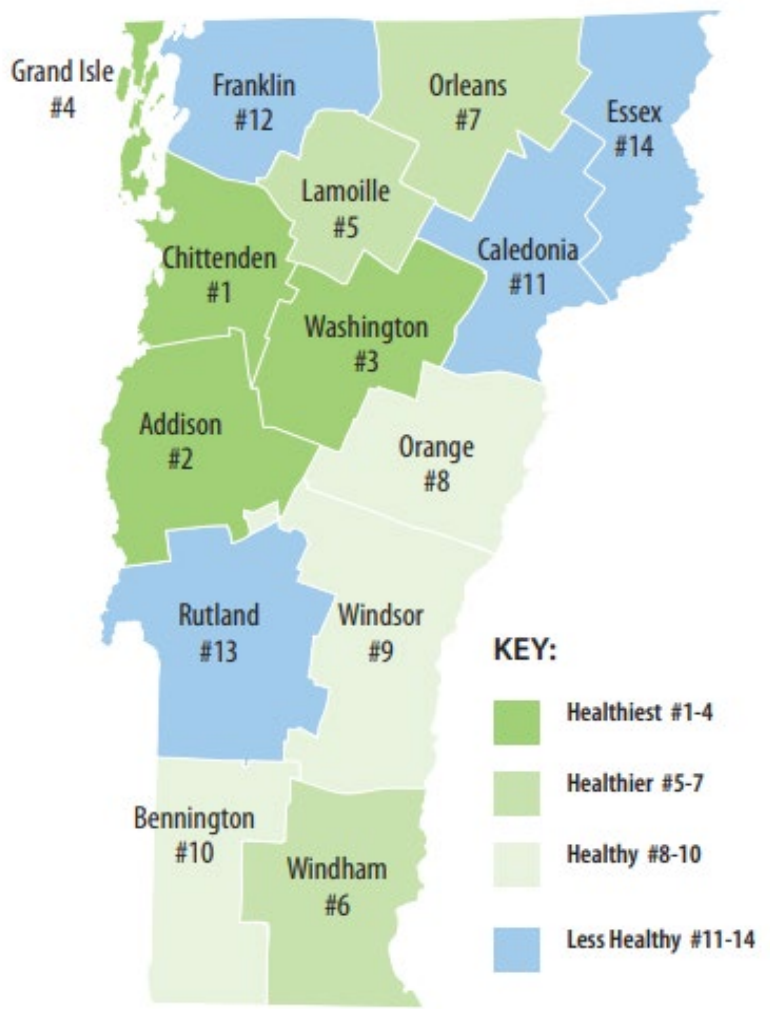
Source: [The New Future of Rural Healthcare Strategies for Success, Stroudwater presentation to the Green Mountain Care Board 4/3/2019](#); [CMS Newsroom](#)

Seema Verma, September 2019:

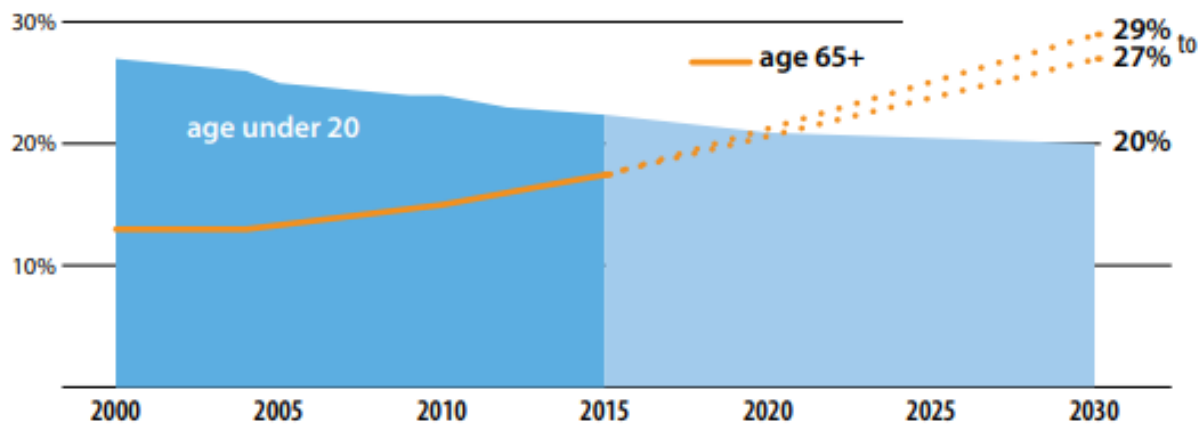
"And finally, in order to deliver lower cost higher quality care, we must move past the status quo, and past a fee-for-service payments to a system in which we're paying providers to keep people healthy, reduce costs and deliver better outcomes."

Source: <https://www.cms.gov/newsroom/press-releases/remarks-administrator-seema-verma-american-hospital-association-regional-policy-board-meeting>

Introduction: Rural Vermont Older and Less Healthy



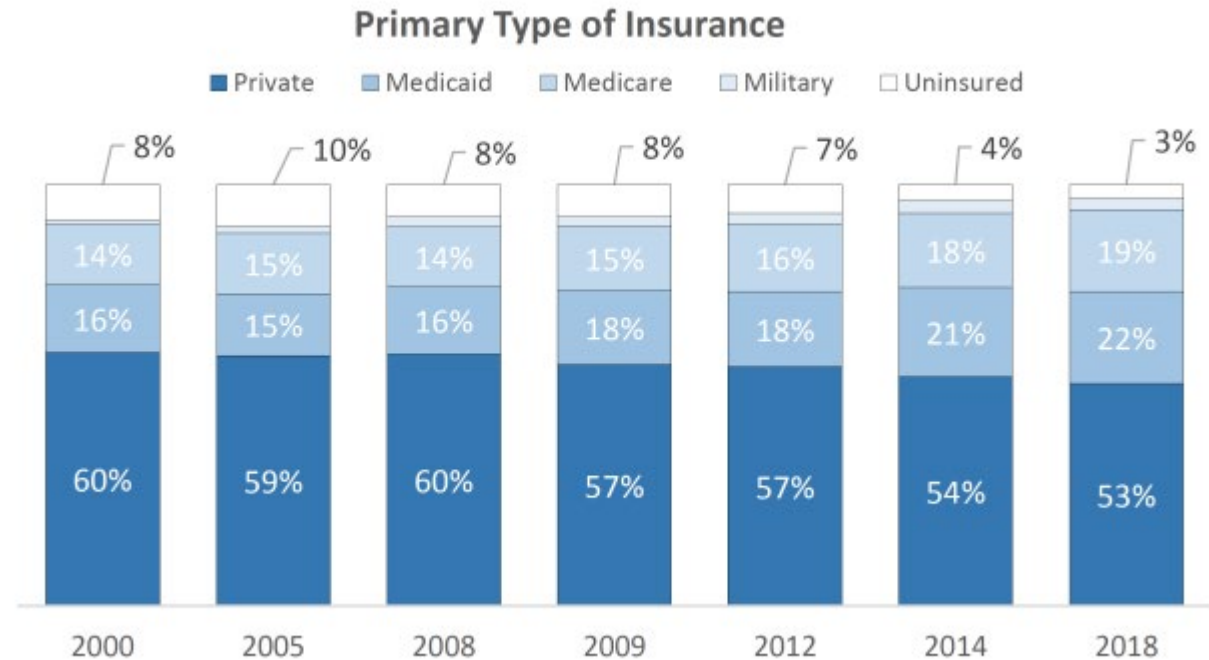
- Vermont is one of the most rural states in the nation, based on size of cities and towns
- Vermont is the 3rd oldest state and is aging at a faster rate
- % of Vermonters age 65+ is growing while the % under age 20 is declining
- In Vermont, the least populated and most rural counties are the oldest and have the poorest health outcomes



Source: [State Health Assessment Plan: Healthy Vermonters 2020](#); [Vermont Department of Health State Health Assessment](#)

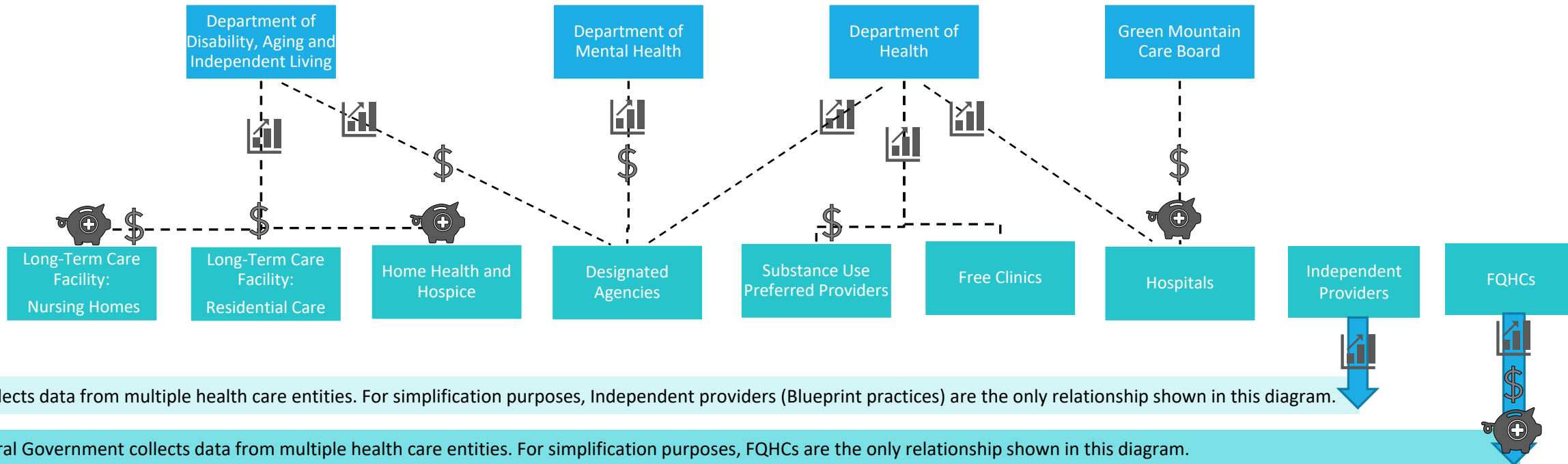
Introduction: Vermont Health Coverage by Type

Overtime, the proportion of Vermonters covered by Medicare and Medicaid has grown, while the proportion of coverage by private insurance has declined.






Source: [Vermont Department of Health, 2018 Household Health Insurance Survey](#)

Financial Data and Reporting: System Level



Purpose of Reporting- Key

		
Financial Assessment	Reimbursement & Rate Setting	Key Performance Indicators

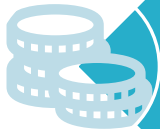
Introduction: Priority Areas – National Perspective



Build and retain the rural workforce



Expand telemedicine services



Create appropriate payment models and value-based care programs that account for low patient volumes, and a reliance on Medicare and Medicaid



Allow rural communities to adjust their own health care services to better fit the community's needs, including changes to Critical Access Hospitals, small rural clinics, and rural hospitals

BIPARTISAN POLICY CENTER

Rural Health Care: Lessons Learned

JANUARY 2018

Source: [Reinventing Rural Health Care, Bipartisan Policy Center](#)

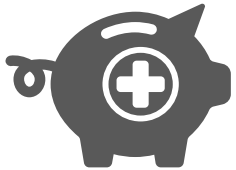
The Task Force: Priority Areas



Workforce



Care Management

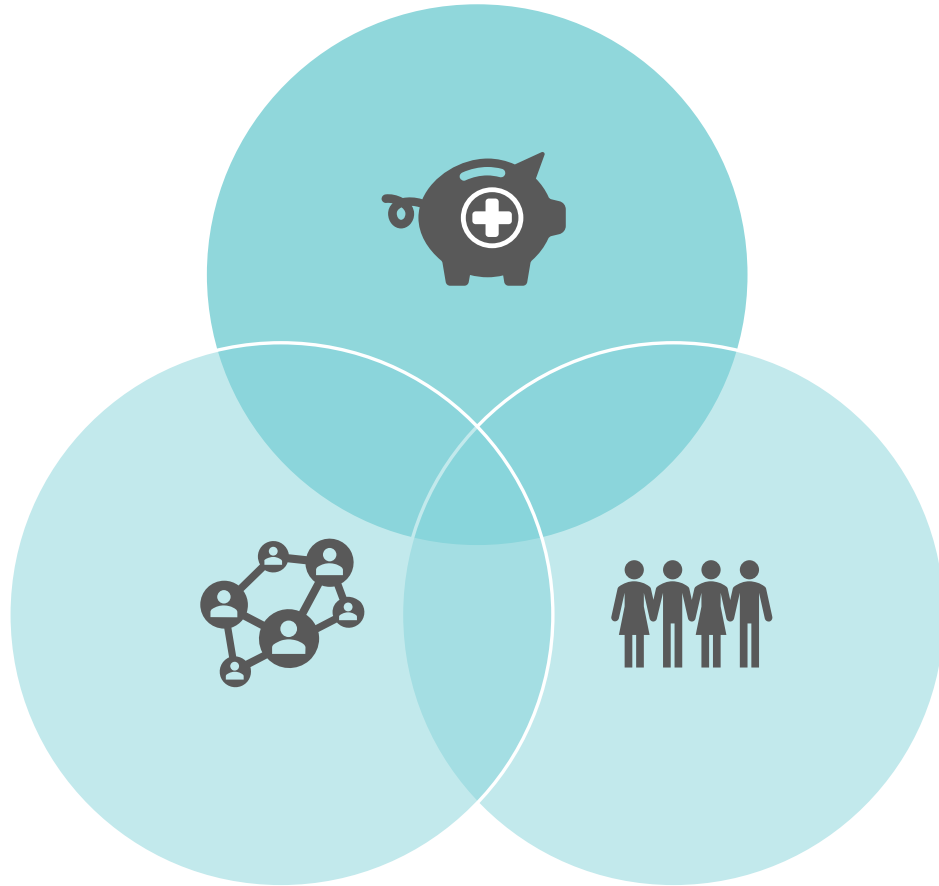


Revenue Stability



Expanding Telehealth
impacts all 3 priorities

Introduction: Recommendations



Task force recommendations aim to be:

- Focused on the three priority areas, including expanding telehealth as a cross-cutting issue
- Consistent with prior policy work
- Inclusive of financial and non-monetary solutions
- Beneficial to all health care sectors

Introduction: Beyond the Scope of the Task Force

Broader economic development challenges:



Transportation



Childcare

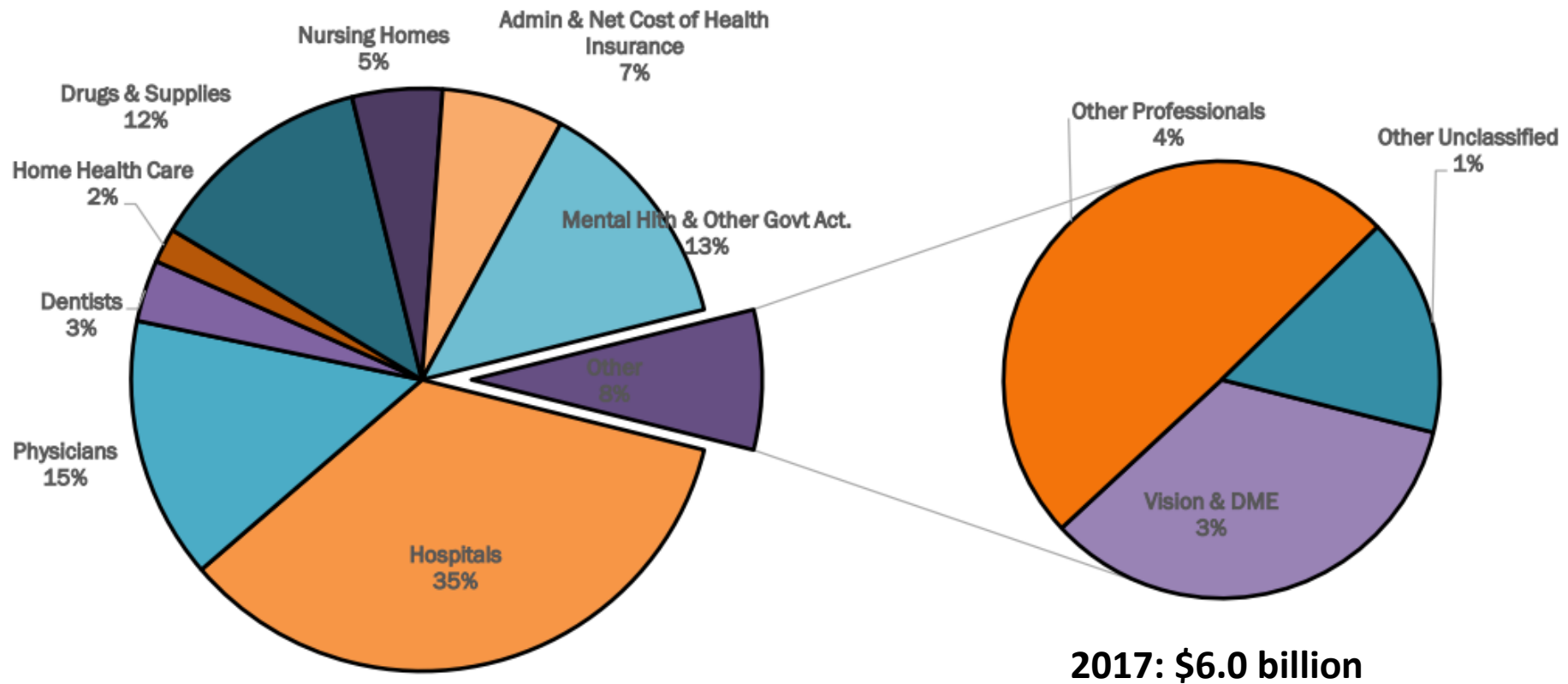


Housing



Rural Health Delivery in Vermont

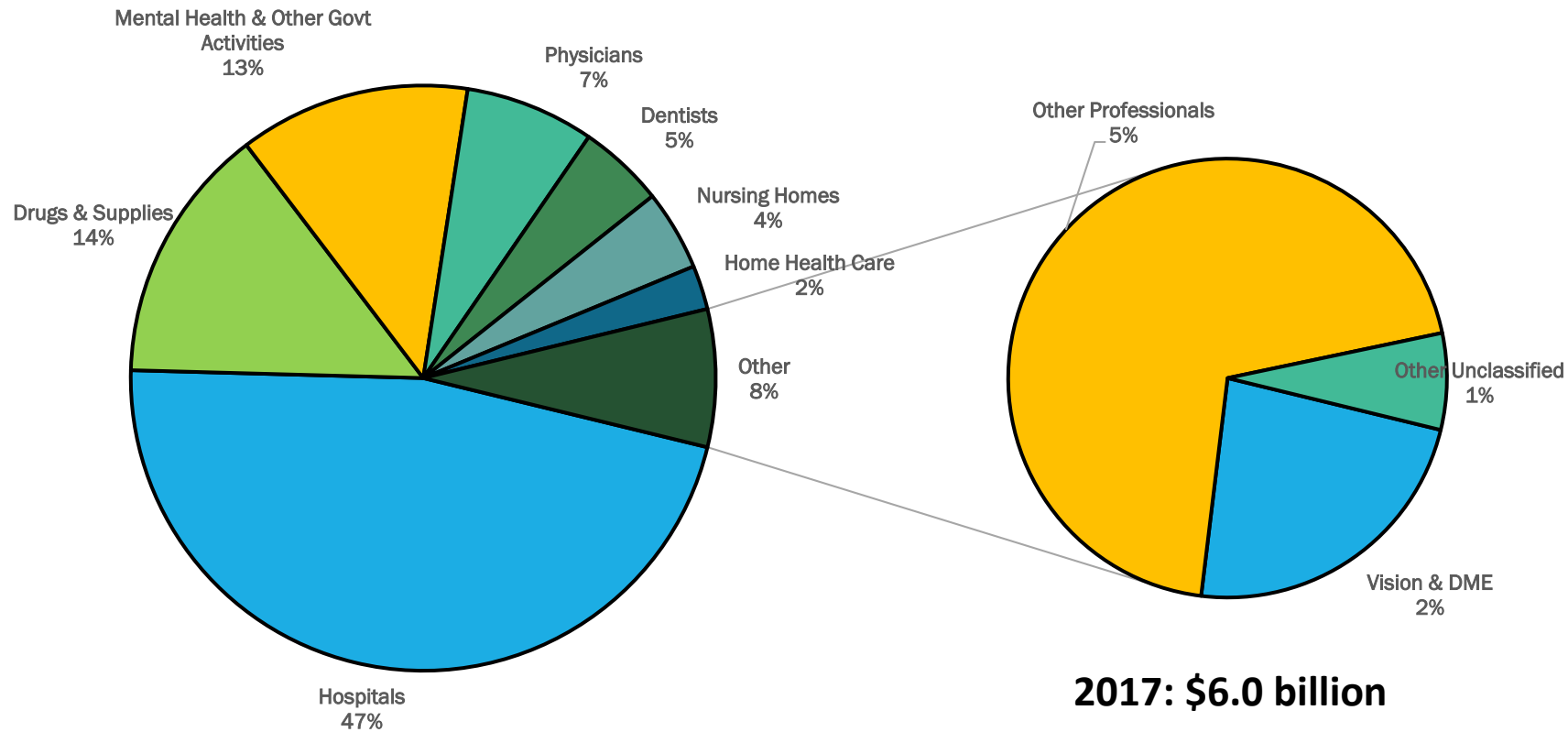
Vermont Health Care: Residents % of total health care expenditure (2017)



Source: [GMCB Expenditure Analysis, 2017 Vermont Resident Analysis](#)

Vermont Health Care: Providers

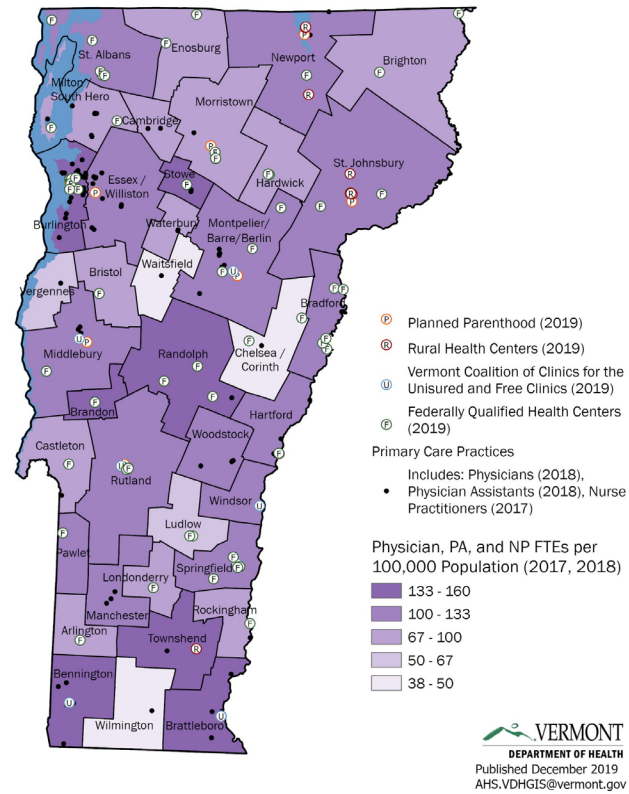
% of total health care expenditure (2017)



Source: [GMCB Expenditure Analysis, 2017 Vermont Provider Analysis](#)

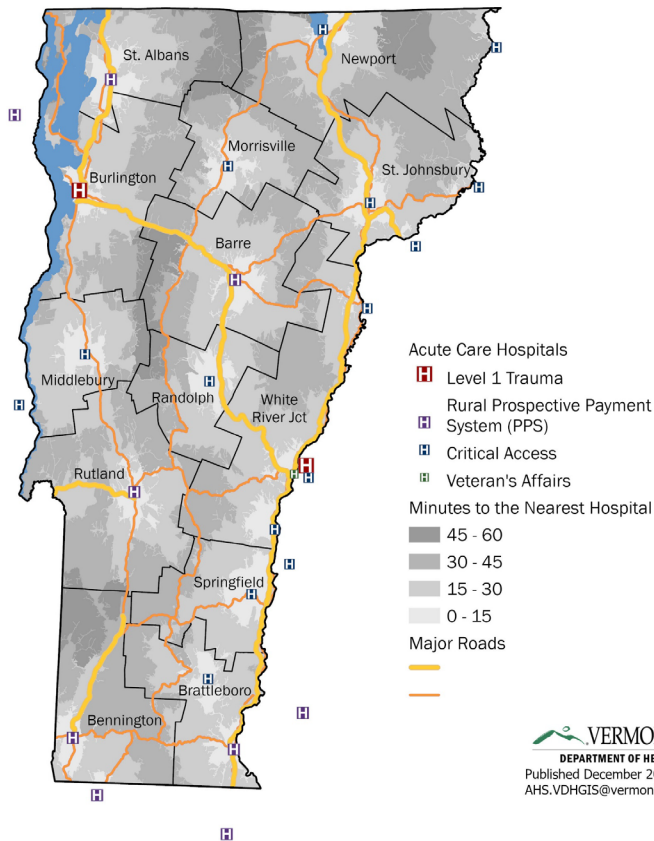
Health Care Resources: Inventory

Primary Care Practices by Rational Service Area



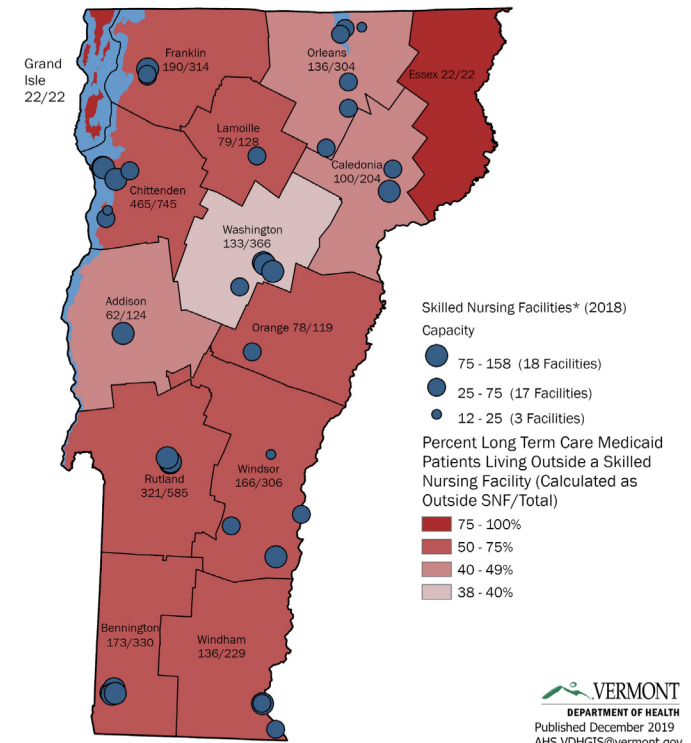
Source: Vermont Department of Health; Health Care Provider Census (2017, 2018), BiState Association; Safety Net Provider List (2019)
Rational Service Areas (RSAs) are designed based on where people receive primary care and where they live, as determined from data from Medicare, Medicaid and the Vermont Behavioral Risk Factor Surveillance System.
FTE ratios only includes providers in locations open to the public. Facilities that do not offer outpatient services, do not offer on-site services, or are urgent care clinics are excluded. Locum tenens providers are excluded. Locations include independent practices, hospital owned practices, and group practices.

Hospitals in and near Vermont by Hospital Service Area



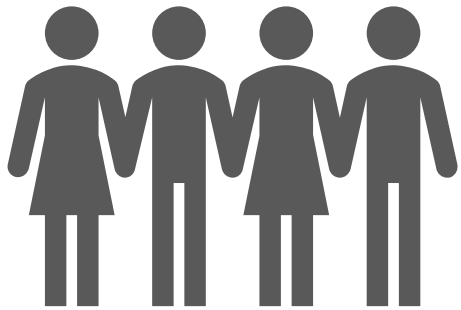
Source: Vermont Department of Disabilities, Aging, and Independent Living; Facility Directory (2018)

Medicaid Long Term Care (Choices for Care) by County



Source: Vermont Department of Disabilities, Aging, and Independent Living; Facility Directory (2018), Vermont Choices for Care: Nursing Home Residents and Home & Community-Based Participants by County (2017)

Bennington's percentage exclude Medicaid residents in Vermont Veterans' Home, the location of Vermont Veteran's Home is represented.
Nursing facility and enhanced residential care figures are based on current recorded residence, and often do not reflect county of residence prior to admission.
Medicaid patients receiving skilled care in hospital settings are not represented

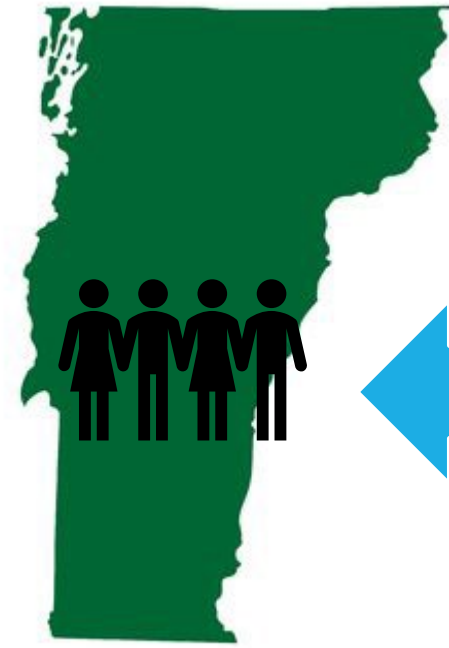


Work Force

Workforce: Issues



Come to Vermont

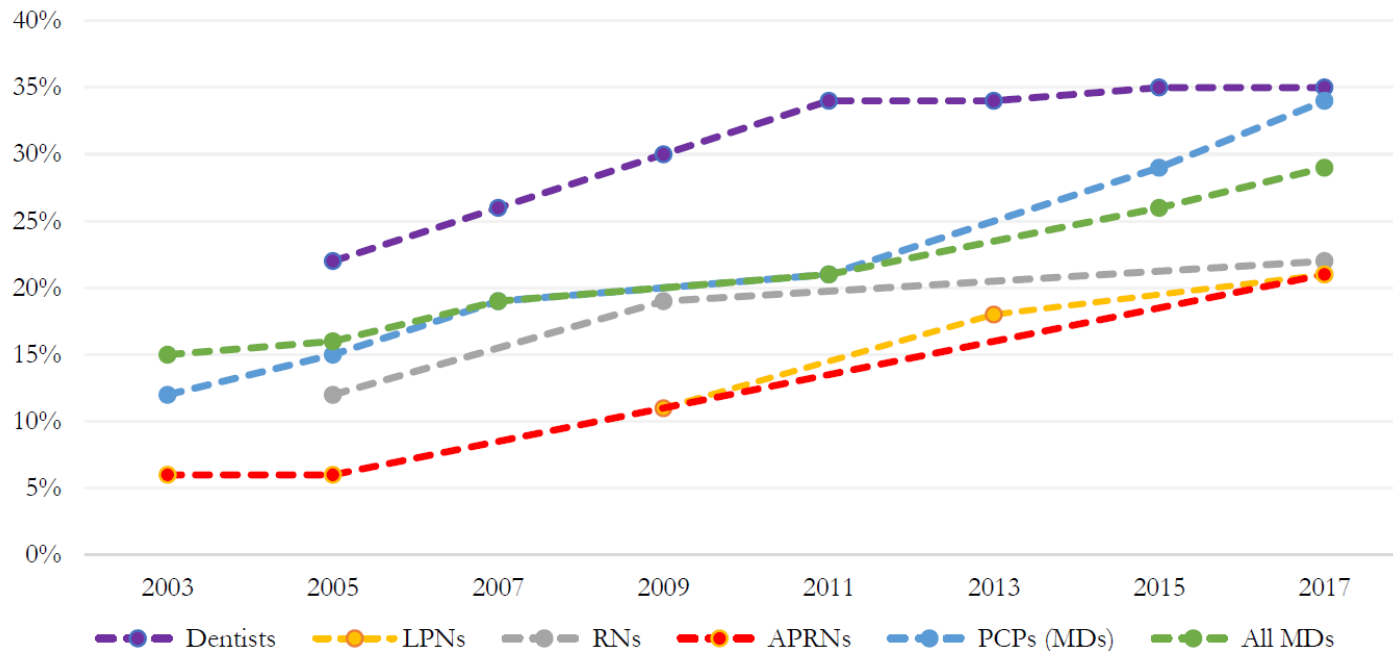


Stay in Vermont



Workforce: Aging health care workforce and decline in licensed professionals

Percentage of Health Care Workforce over Age 60 (By Profession)



Vermont's health care workforce

- Vermont's health care workforce is aging and approaching retirement
- The number of licensed health care professionals is decreasing

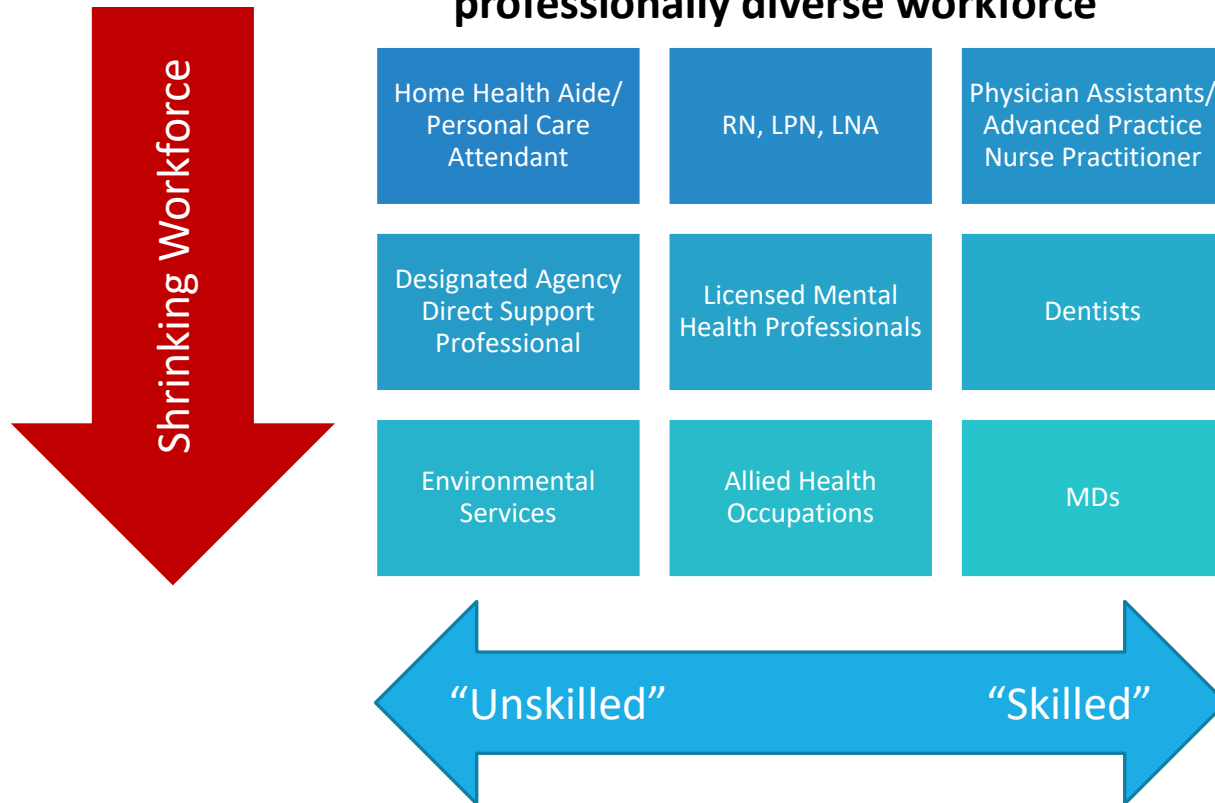
Percentage Decreases in Licenses from 2010 to 2018	
License Type	Percentage Decrease
Licensed Nursing Assistant	6.1%
Licensed Practical Nurse	8.1%
Registered Nurse	24.5%
Primary Care Physician	9.1%

Source: Workforce White Paper



Workforce: Issues

A Health System requires a professionally diverse workforce



Workforce Vacancies in Every Sector

- 3,900 nursing-related job vacancies by 2020 (low estimate, primarily hospital data)
- 70.5 primary care providers shortage
- 571 long-term care facility vacancies currently
- 386.5 home health nursing vacancies currently
- 28% annual turnover rate in FY19 at designated agencies (over 400 vacancies)

Turnover Rates

	Long-Term Care	Home Health
RNs	31.4%	23%
LPNs	34.5%	23%
LNAs	45.2%	27%
PCAs	52.1%	26%

Vacancies are expected to grow as Vermont's health care workforce ages



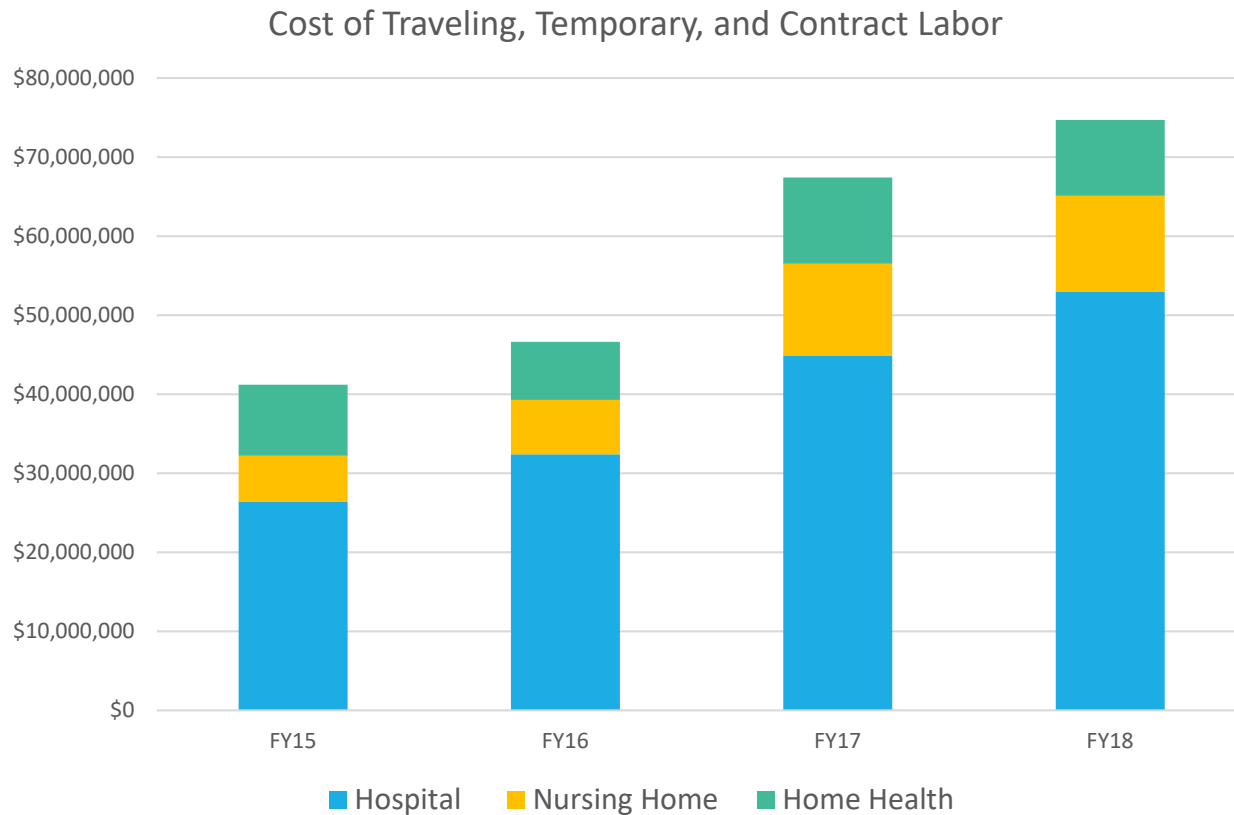
Workforce: Bottlenecks and Challenges

Vermont's health care workforce crisis is driven by several immediate factors:

- Student Debt
- Education and credentialing challenges
- Licensing challenges
- Provider "burn out"
- Aging workforce
- Marketing Vermont as employment destination
- Housing and Childcare
- Transportation
- Employment for partner
- Tight national, regional, and local labor market
- Insufficient Medicaid rates to cover wage increases



Workforce: Cost of Vacancies



Workforce Vacancies = Traveling, Temporary, and Contract Employees

- These employees fill gaps in staffing needs
- For example, traveling nurses are typically twice the cost of staff
 - Travel term is typically 13 weeks
 - Travelers typically serve in hospital settings, however, travelers in other health care sectors is growing

Financial Impact

- \$74.7 million in FY18
- FY19 preliminary data show continuation of this trend
 - Hospitals: \$56.4 million
 - Home Health & Hospice: \$10.5 million
 - Skilled Nursing Facilities: \$12.0 million

Notes: “Temporary and contract employees” include travelers (nurses), locum tenens (physicians), and other contract employees; Home Health includes contract labor and services; Hospital data collected from 11 hospitals, including The Brattleboro Retreat



Workforce: Actions taken to date

Under these pressures, Vermont has been innovative to improve recruitment and retention.

Provider Best Practices

- Increased Wages
- Financial Incentives such as:
 - Sign-on bonuses
 - Loan repayment
 - Tuition reimbursement
 - Paid time off
 - Premium pay for nighttime and weekend shift
 - Internships
 - Referral bonuses
- Provider and Higher Education Collaboration

Note: Initiatives at the entity level may unintentionally exacerbate regional workforce competition. For example, sign-on bonuses at one Vermont entity may attract workers from another Vermont entity. The increased cost of recruitment may have a zero sum systemwide impact and are costly to individual entities.

Government and Non-Profit Organization Initiatives

- Area Health Education Centers (AHEC) and loan repayments
- Vermont Student Assistance Corporation (VSAC) grants and scholarships
- Establishment of Medication Nursing Assistants – Act 38 of 2015
- Establishment of Dental Therapists – Act 161 of 2016
- Interstate Medical Licensing Compact
- Direct pathway for military medics to become licensed nurse assistants
- Workforce data collection initiatives
- Commissioned studies
- Department of Labor recruitment initiatives



Workforce: Recommendations

Task Force Recommendation	Action Required By		
	Legislature	Administration	Office of Professional Regulation (Sec of State)
Occupational Licensing Reforms:			
Enter the Interstate Nurse Licensure Compact	X		
Change clinical faculty requirements	X		X
Create a Pathway for Military Medics to LPN	X		X
Remove statutory barriers to Physician Assistant Employment	X		
Align mental health clinician licensing requirements	X		X
Accept PGY-1 Licenses as an immediate pathway to licensure of dentists	X		X
Explore licensing pathways for foreign dentists	X		X
Explore licensing pathways for foreign physicians	X	X	
Explore joining the psychology interjurisdictional compact (PSYPACT)	X		X



Workforce: Recommendations

Task Force Recommendation	Action Required By		
	Legislature	Administration	Private
Higher Education Reform			
Lower minimum age of admission for LPN program			X
Re-open University of Vermont's Psychiatric-Mental Health Nurse Practitioner Program	X		X
Expand Apprenticeship programs for non-degree allied health careers		X	
Financial Incentives			
Increase scholarship funding	X		
Increase loan repayment funding	X		
Implement Tax Incentives	X		



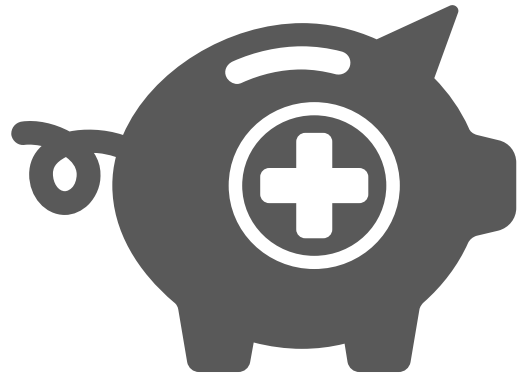
Workforce: Recommendations

Task Force Recommendation	Action Required By			
	Legislature	Administration	Federal	Private
Maximize Existing Workforce				
Telehealth (recommendations in telehealth section of report)				
Reduce Administrative Burden				
Streamline Quality Measures		X	X	X
Reduce/eliminate prior authorizations				
Eliminate where lacking evidence to support benefit		X	X	X
Expand ACO prior authorization pilot		X	X	X
“Gold Card”		X	X	X
Remove Medicare credentialing restrictions to expand access to mental health & substance abuse			X (APM 2.0)	
Increase State Recruitment Efforts				
Establish a state-led immigration and New American initiative	X	X		
Establish statewide marketing campaign	X	X		
Prioritize health care on the Vermont Workforce Development Board		X		

Workforce: Recommendations – Federal Issues

- Vermont can rarely utilize the National Health Service Corps and Nurse Corps programs due to competition with other states for limited federal resources. Federal funding should be increased to access these programs by all states, or several awards should be reserved for each state.
- Implementation of the Public Service Loan Forgiveness program has been challenging.
 - U.S. Department of Education must clarify requirements and increase access to the program
- Increase the Federal State Loan Repayment Program Grant to Vermont
- Raise the H-2B cap to alleviate workforce shortages



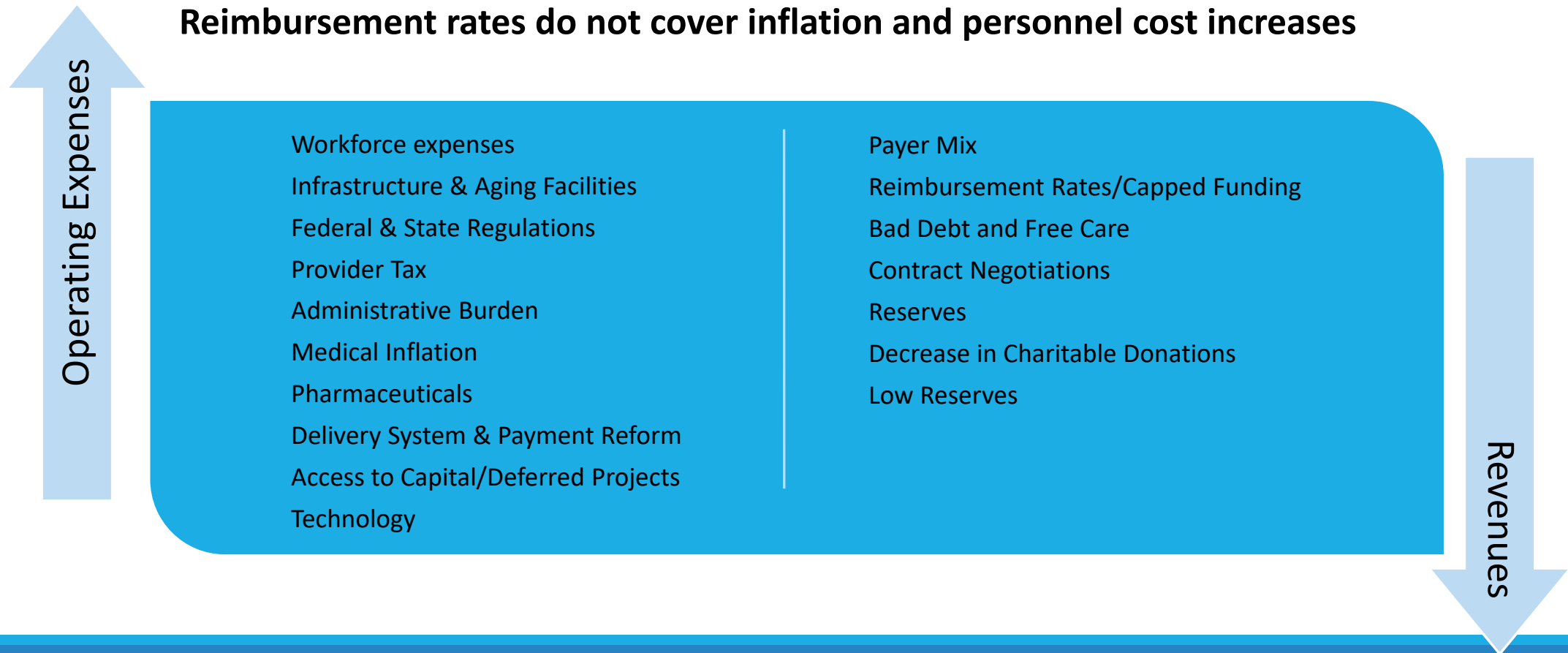


Revenue Stability



Revenue Stability: Issues at the Entity Level

Operating expenses are growing faster than revenues
Reimbursement rates do not cover inflation and personnel cost increases



Revenue Stability: Financial Metrics

To assess financial sustainability of each health care sector, the Task Force attempted to collect 3 years of data for each health care sector. The Task Force selected the following financial metrics to review based on their applicability to all health care sectors and based on the data that was available:

1. Operating and Total Margin:

- **Operating Margin:** is an indication whether an organization's **patient revenues** cover its expenses. It excludes revenue from grants, investments, donations, and other sources.
- **Total Margin:** is an indication whether an organization's **total revenues** cover its total expenses. Unlike operating margin, it includes revenue from grants, investments, donations and other sources.

2. Days Cash on Hand: is a liquidity measure that indicates the number of days that an organization can continue to pay its operating expenses with its available cash

3. Payer Mix: is the percentage of revenue coming from each payer – commercial, government, self-pay or other. Government payers typically reimburse at a lower rate than commercial.

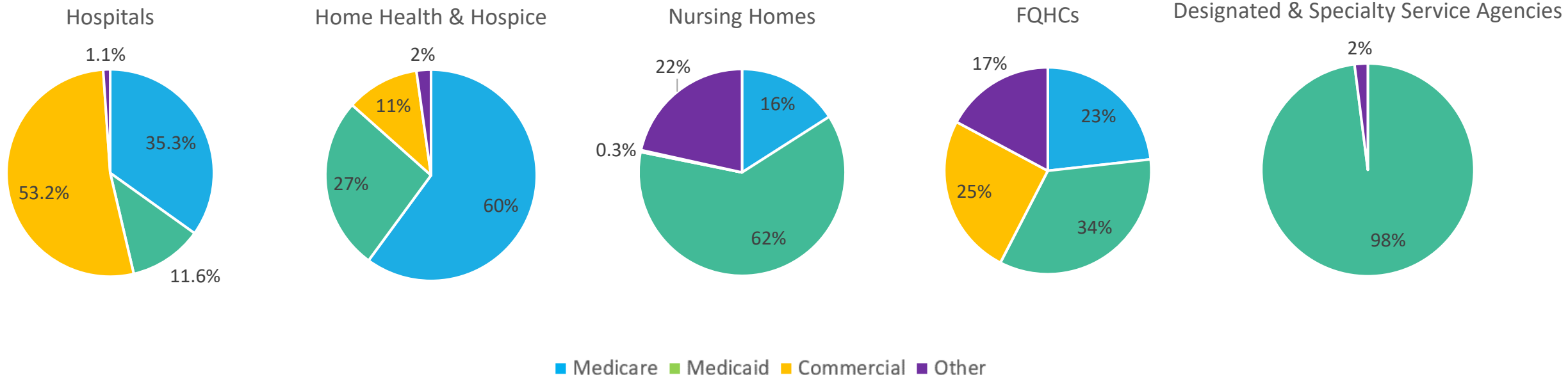
Data Limitations

- **Financial years:** may differ within sectors. For example, home health agencies do not share a common fiscal year.
- **Audited financials:** audited financial data is preferred, but was not available for all sectors
- **Limited availability:** financial metrics were not available for all sectors. Additionally, data is limited to the most recent three years.
- **Systemwide analysis:** while system looks are useful to assess sector-wide performance, they do not adequately portray the financial health of individual entities.



Revenue Stability: 2018 Payer Mix (System Level)

Payer Mix is the percentage of revenue coming from each payer – commercial, government, self-pay or other. Government payers typically reimburse at a lower rate than commercial.

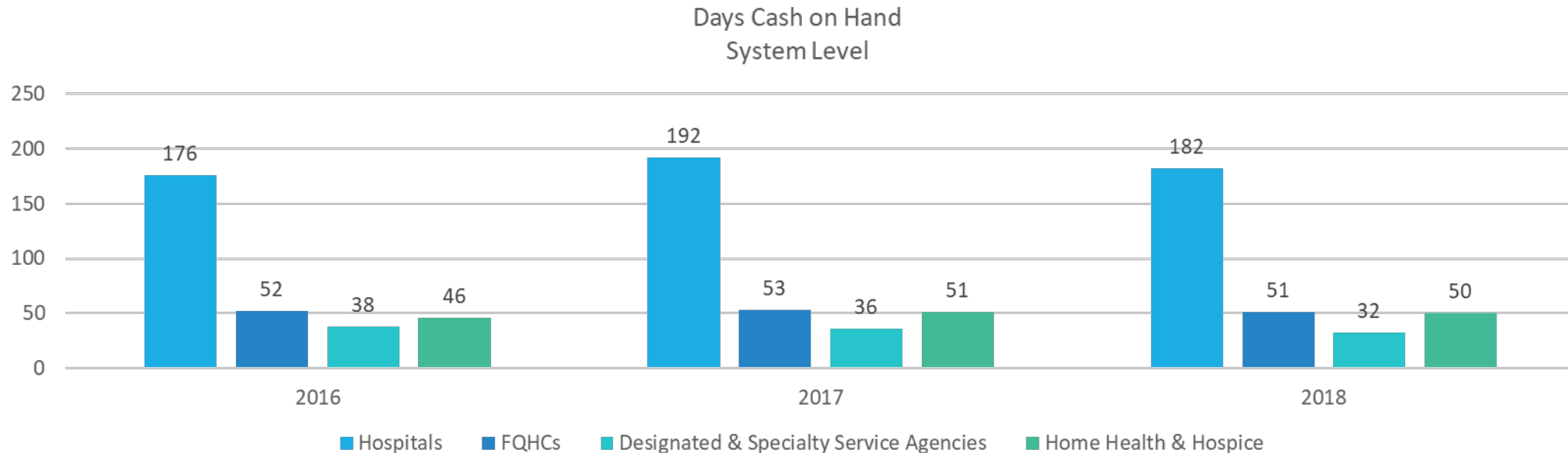


Source: Green Mountain Care Board; Bi-State Primary Care; Department of Mental Health, Department of Aging and Independent Living
 Note: "Other" includes disproportionate share payments (DSH) and self-pay. Hospital chart does not include the Brattleboro Retreat at this time.



Revenue Stability: Days Cash on Hand (System Level)

Days Cash on Hand is a liquidity measure that indicates the number of days that an organization can continue to pay its operating expenses with its available cash.

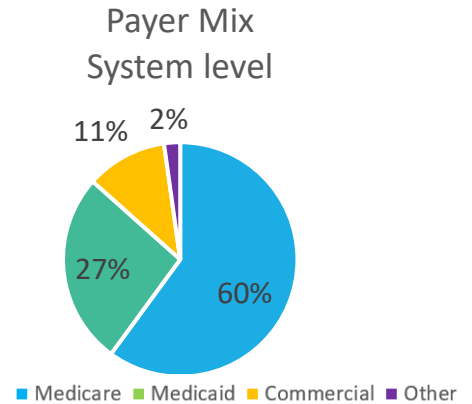
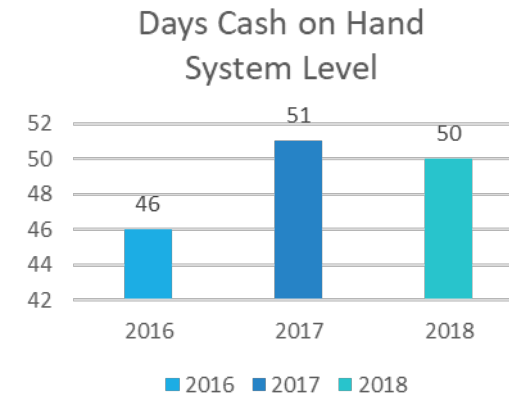
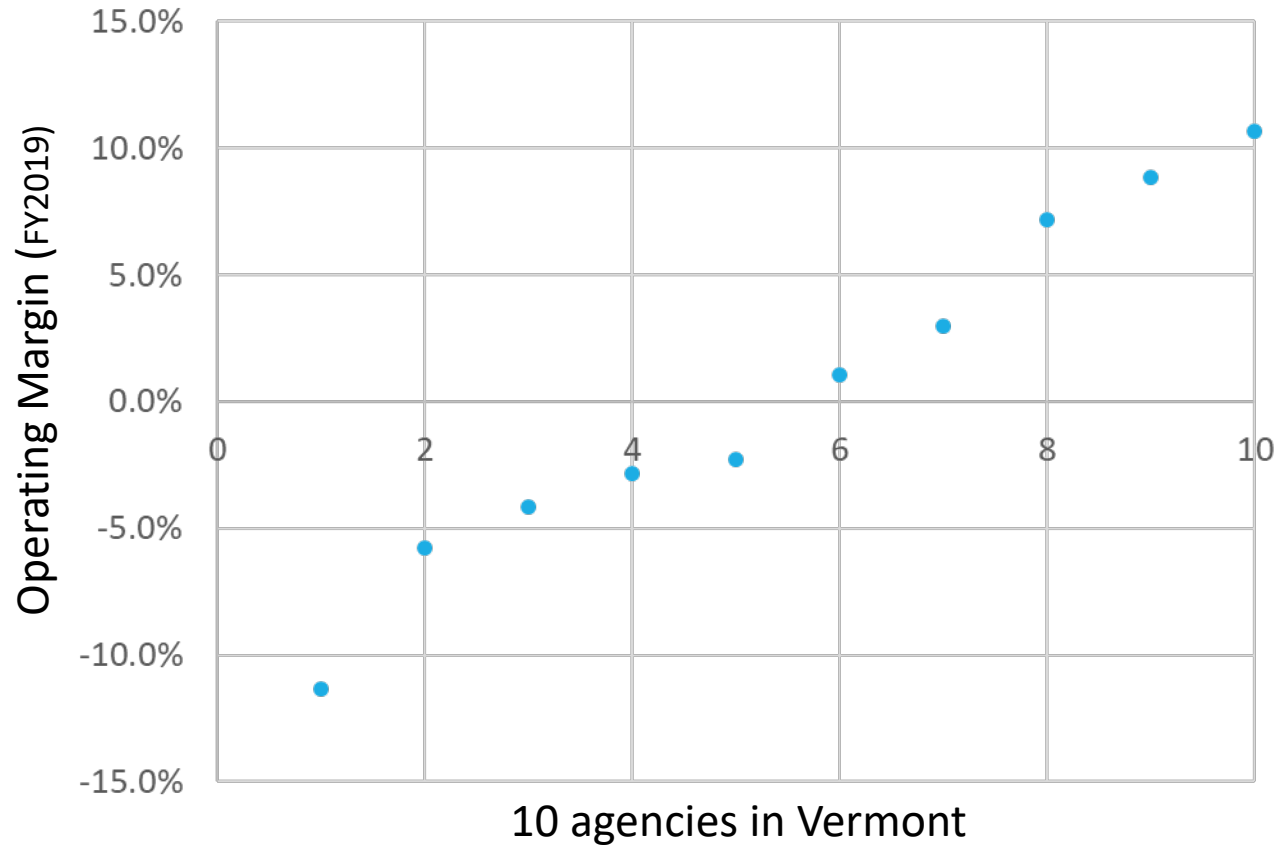


Source: Green Mountain Care Board; Bi-State Primary Care; Department of Mental Health, Department of Aging and Independent Living

Notes: Home Health & Hospice data for 2016 and 2017 unavailable. System look does not demonstrate significant variability of days cash by entity within a sector. Hospital chart does not include the Brattleboro Retreat at this time.



Revenue Stability: Home Health and Hospice

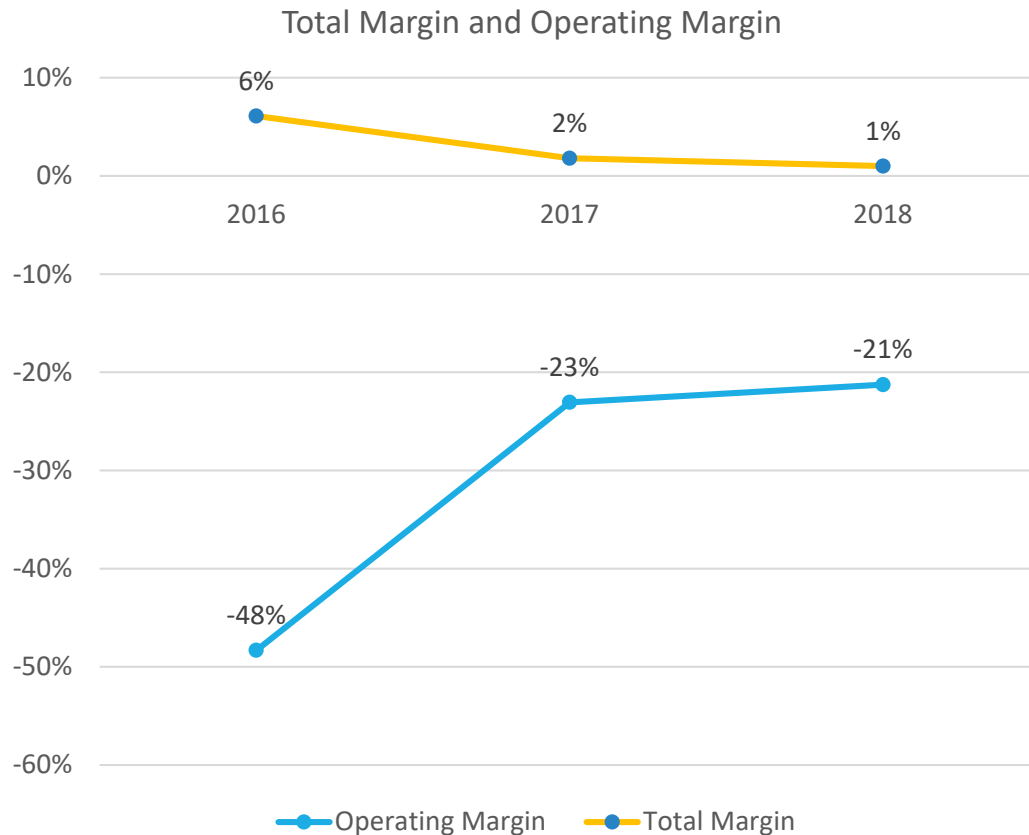


- 50% of home health and hospice agencies experienced negative operating margins in FY19
- Data Limits
 - Data is not audited
 - Data is reported by state fiscal year, not agency fiscal year

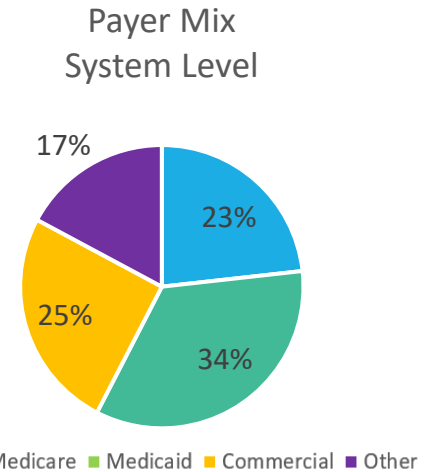
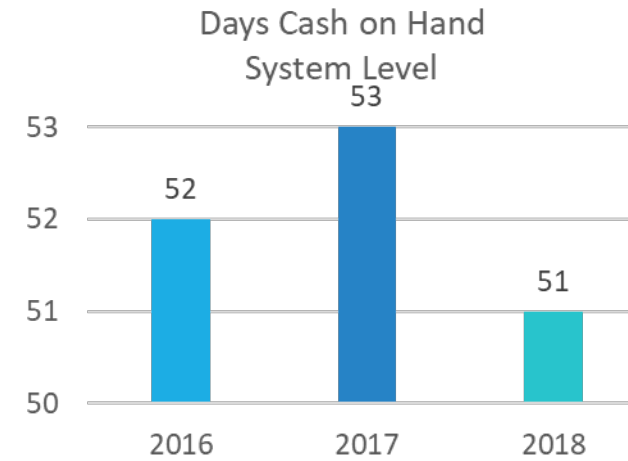
Source: Department of Aging and Independent Living



Revenue Stability: FQHCs



Source: Bi-State Primary Care



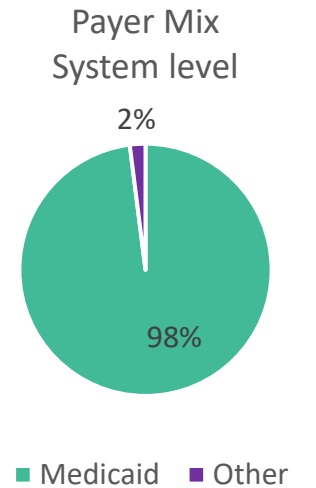
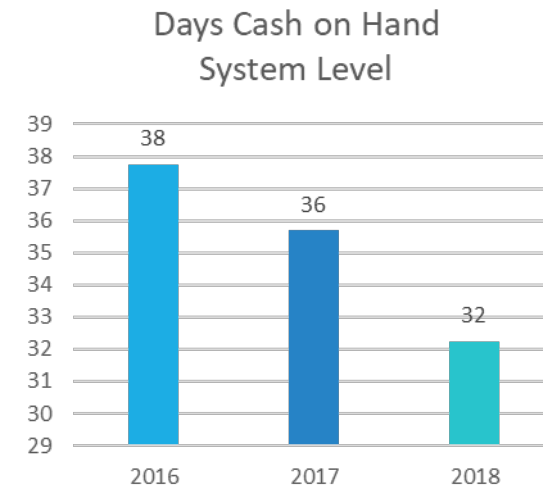
- FQHCs receive grant funds from the Health Resources and Services Administration (HRSA) to support uncompensated care and their sliding scale. These funds are not factored in operating margin and are factored in total margin.
- FQHC margins have been declining since 2009



Revenue Stability: Designated and Specialty Service Agencies

Total Margin

	FY15A	FY16A	FY17A	FY18A	FY19	5 -year avg
CM	1.4%	1.3%	1.0%	0.5%	1.6%	1.2%
CSAC	1.1%	3.0%	0.9%	1.4%	0.9%	1.5%
NCSS	2.4%	1.8%	1.3%	1.1%	3.4%	2.0%
HCRS	-1.4%	-1.0%	1.9%	2.0%	0.9%	0.5%
HC	0.8%	0.3%	0.6%	2.6%	1.8%	1.2%
LCMH	1.6%	1.4%	0.9%	-0.8%	0.4%	0.7%
NFI	1.2%	2.1%	1.4%	1.8%	0.4%	1.4%
NKMH	1.0%	-1.0%	1.6%	2.2%	1.9%	1.2%
RMHS	-1.0%	0.2%	1.2%	0.1%	1.0%	0.3%
UCS	0.2%	1.2%	0.5%	1.6%	0.2%	0.8%
WCMH	-0.8%	0.9%	0.3%	0.2%	1.6%	0.5%
CCS (DS Only)	0.7%	-0.1%	1.6%	0.4%	0.7%	0.7%
FF (DS Only)	4.7%	3.2%	2.9%	2.3%	0.9%	2.8%
LSI (DS Only)	2.8%	2.5%	4.7%	3.0%	4.2%	3.4%
GMSS (DS Only)	0.0%	1.7%	2.2%	1.5%	-0.1%	1.1%
UVS (DS Only)	0.0%	0.4%	0.4%	0.3%	0.7%	0.3%
System Total Margin%	0.3%	0.6%	1.2%	1.4%	1.5%	1.0%



- Designated and Specialty Service Agencies are 98% Medicaid
- Data limits:
 - FY19 total margin data is preliminary

Source: Vermont Care Partners

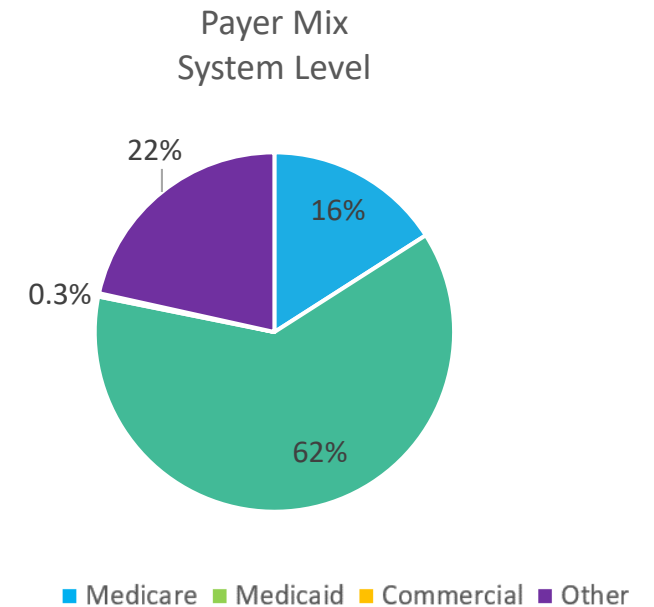


Revenue Stability: Long-Term Care Facilities

Audited financial statement, and other data is collected by AHS, including to monitor on-going financial stability and to provide early identification of nursing homes in financial distress. This data was not available for this report.

- Extraordinary Financial Relief (EFR) is a process available when a nursing home is in immediate danger of closing
- There have been less than 5 EFR requests over the last 5 years

Source: [Nursing Home Oversight Working Group report](#) from 2019; Department of Disabilities, Aging and Independent Living, Division of Rate Setting, August 2019



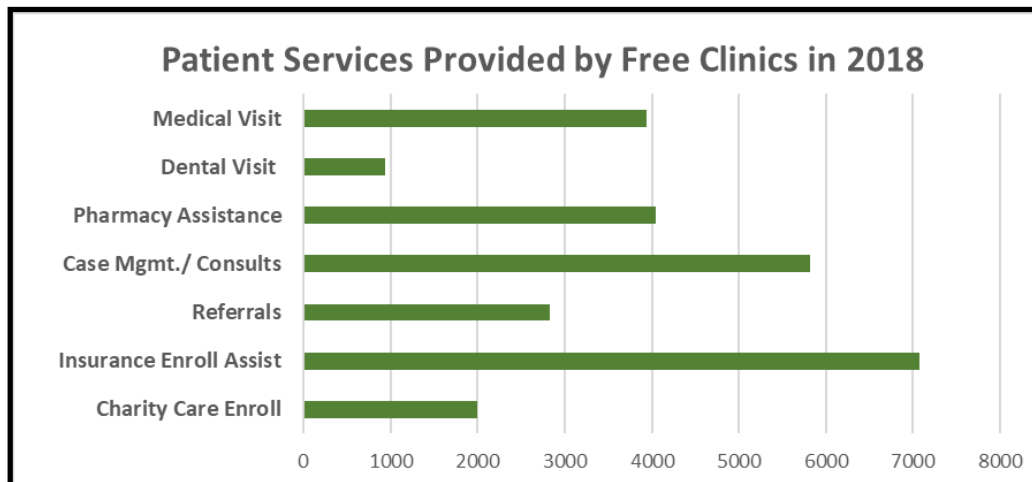
Revenue Stability: Independent Providers

- In Vermont, financial metrics and other quantitative evidence of the financial state of independent practices is not available
- In the U.S., one analysis shows:
 - Improvement in total profit per physician over 2017 (from \$2,396 in 2017 to \$2,510), but projected to break even
 - Improvement of operating margin from a loss of over \$13k in 2016 to a profit of \$2,396 in 2017
 - Source: [RevCycle Intelligence, 2019](#); [Fierce Healthcare, 2018](#) [Note: [Original study done by AMGA](#) only available for [purchase](#)]
- Qualitative surveys with physicians' attitudes or perceptions about their financial state and ability to sustain their independent or small practice say:
 - 50% of independent doctors surveyed by TD Bank have or would consider purchasing, buying into, merging or selling their practice, most within four years. Of these, 46% said it's too expensive to run a practice today. Source: [Healthcare Finance News, 2017](#)
 - [GMCB Vermont Clinician Landscape Study](#) identified the following takeaways:
 - Independent clinicians are most frustrated by billing, paperwork, and other administrative burdens, the uncertainty of their income, and the burdens associated with running their own practice and accessing costly technology
 - The top three most commonly cited threats to independent practices are regulatory and administrative burdens, health reform payment models (Federal and/or State), and Medicaid reimbursement



Revenue Stability: Vermont Free Clinics

Who Provided Free Clinic Services in 2018?	
Many Volunteers	
75 MDs (medical)	6 Dental Hygienists/ Asst.
8 MDs (psych)	11 Mental Health Professionals
32 DMDs (dentistry)	47 Medical and Dental Students
55 RNs	60 Medical Interpreters
39 Mid-levels (NP, MA, EMT, etc.)	319 Other Volunteers
Organized and assisted by 30 paid staff	



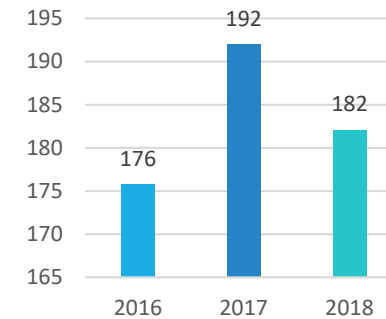
- Financial metrics and other quantitative evidence of the financial state of these clinics is not available
- Free Clinics do not charge for services or receive reimbursements from payers
- Statewide, the clinics' revenue is:
 - \$2.5 million in cash, including \$1.0 million in Medicaid dollars
 - \$3.2 million of in-kind support from local hospitals, providers, and volunteers, which include care, facilities, x-rays and labs, free medications, and dental equipment
- Their expenses are:
 - \$2.4M in cash
 - \$2.8M of in-kind expenses
- The clinics estimate saving \$7.5M in avoided hospital expenses annually



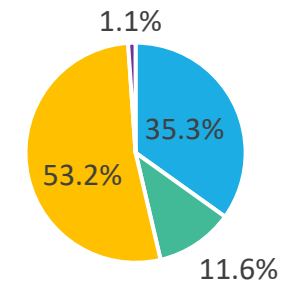
Revenue Stability: Hospitals

	Operating Margin (%)						Budget-to-Actual NPR/FPP Variance
	Actuals	Actuals	Budget	Projection	Budget	5-Year	FY19 September
	FY17	FY18	FY19	FY19	FY20	Average	Year-to-date
Brattleboro Memorial Hospital	-3.1%	-2.4%	0.0%	0.8%	1.3%	-0.7%	-0.2%
Central Vermont Medical Center	-0.9%	-3.8%	1.4%	-2.1%	0.1%	-0.3%	-1.6%
Copley Hospital	-0.6%	-3.3%	0.3%	-3.4%	1.4%	-0.9%	-4.6%
Gifford Medical Center	-1.6%	-10.7%	2.5%	-0.8%	2.9%	-1.3%	-10.5%
Grace Cottage Hospital	-6.9%	-2.9%	0.7%	-6.7%	-1.2%	-5.0%	-2.9%
Mt. Ascutney Hospital & Health Ctr	2.7%	1.9%	0.0%	-2.9%	1.0%	1.0%	-3.3%
North Country Hospital	-2.3%	-2.3%	1.1%	1.9%	1.6%	-0.2%	-1.7%
Northeastern VT Regional Hospital	1.9%	1.7%	1.8%	1.8%	2.0%	1.9%	3.8%
Northwestern Medical Center	-1.2%	-3.4%	2.3%	-8.0%	-0.2%	-1.5%	-5.5%
Porter Medical Center	2.7%	1.8%	3.7%	5.2%	3.8%	2.8%	0.5%
Rutland Regional Medical Center	1.6%	0.5%	2.3%	0.4%	2.3%	2.0%	-0.9%
Southwestern VT Medical Center	3.7%	4.6%	3.6%	3.3%	3.4%	3.7%	-0.6%
Springfield Hospital	-7.1%	-12.8%	2.1%	-18.4%	-2.0%	-6.9%	-21.6%
The University of Vermont Medical Center	5.2%	3.4%	2.8%	2.2%	3.1%	4.1%	0.9%
System Total	2.7%	1.1%	2.4%	0.6%	1.3%	2.3%	-0.9%

Days Cash on Hand System Level



Payer Mix FY2018 System level



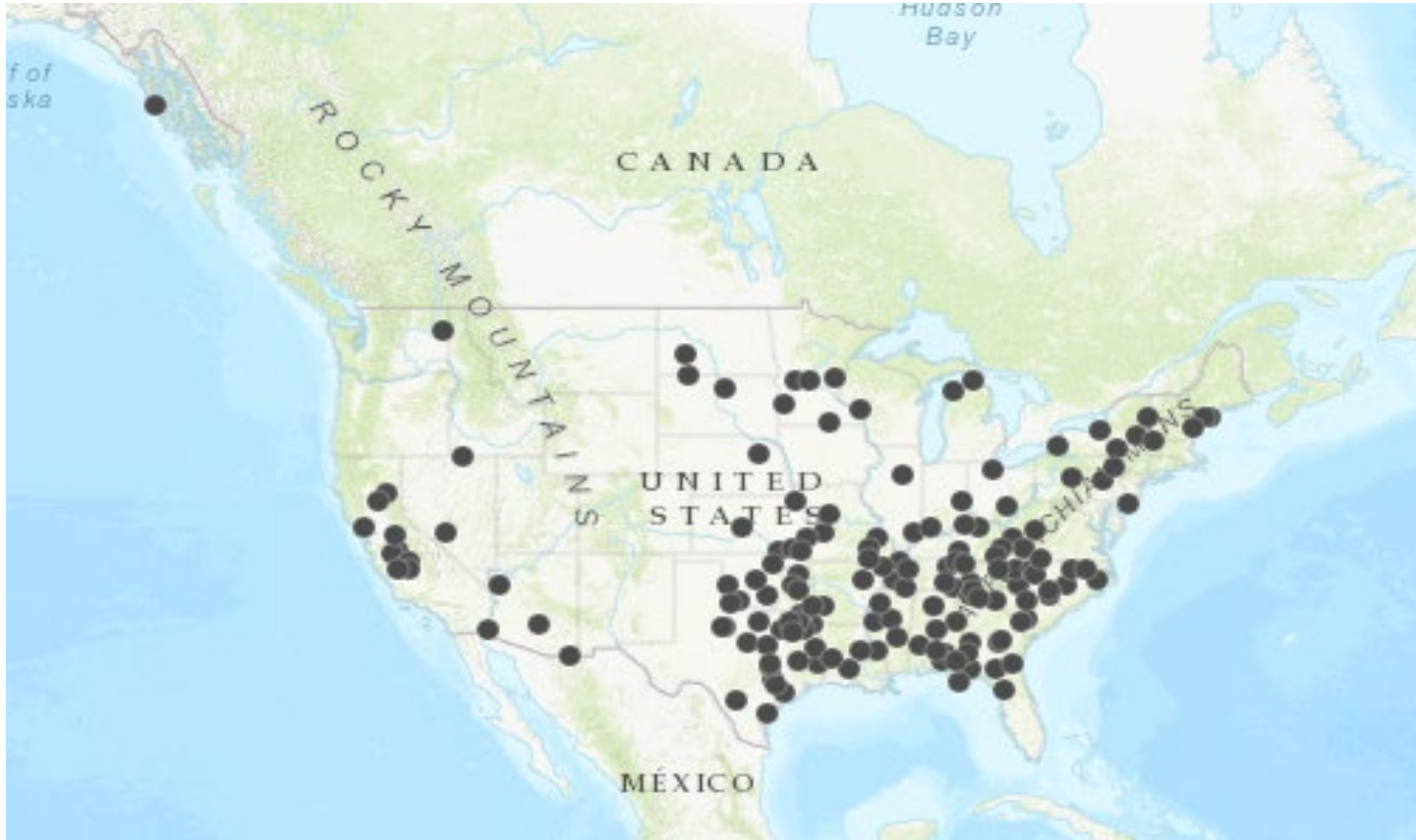
- 50% of hospitals are projecting negative operating margins in FY19
- 78% of hospitals are projecting to miss their FY19 budget targets (measured by “budget-to-actual” NPR/FPP variance)
- As operating margins decline, hospitals become more reliant on other revenue such as donations and the 340B pharmacy program

Vermont’s hospital system is comprised of both large and small hospitals – critical access, Medicare dependent, and prospective payment hospitals. Benchmarking on a system level are not useful given the diversity in hospital types.

Source: Green Mountain Care Board



Revenue Stability: National Hospital Closures



- **118** acute care hospital closures nationwide since 2010
- Springfield Hospital filed for Chapter 11 bankruptcy June 2019
- 50% of Vermont hospitals projecting operating losses in FY19

Source: [University of North Carolina Rural Health Research Program](#)



Revenue Stability: Hospital Closures Impact in Vermont

As required by Act 26 of 2019, the Task Force must consider potential consequences of the failure of one or more rural hospitals in Vermont.

Rural hospitals provide critical services to Vermont patients and other health care organizations:

- Flow of services from the hospital and to the hospital
- Emergency Care
- Shared Services
- Community Services
- Specialty Services

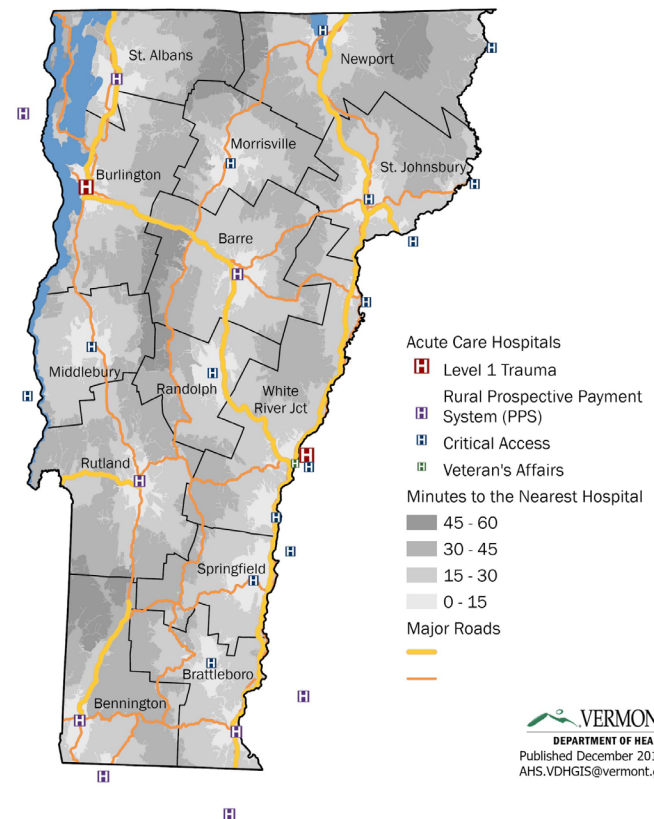
Hospitals are geographically dispersed in Vermont, the closure of one acute care hospital would leave a service void in that part of the State.

Closure of a Vermont hospital may result in:

- Decreased access to services
- Wait times for certain services, potentially
- Reduced jobs in a community
- Negative economic impacts to communities

The GMCB has engaged 6 acute care hospitals in financial sustainability planning in FY20. This is an ongoing effort.

Hospitals in and near Vermont
by Hospital Service Area



Source: Vermont Department of Disabilities, Aging, and Independent Living; Facility Directory (2018)



Revenue Stability: Hospital Closures Financial Impacts

Hospitals have an economic impact on their communities by:

- Providing employment
 - In Northern New England, health care workers are 10% of each state’s workforce
 - Closure of a community’s sole hospital is estimated to reduce per capita income by 4% and increase unemployment by 1.6% in that community
- Purchasing services

“Ripple Effect”

- Each hospital job supports two additional jobs
- Every \$1.00 spent by a hospital supports approximately \$2.30 of additional business activity in the community

Vermont Hospital Ripple Effect			
# of hospital jobs	Effect of hospital jobs on total jobs in state economy	Hospital Payroll	Effect of hospital payroll and benefits on total labor income
17,022	33,964	\$1.3 billion	\$2.2 billion

Source: [Hospitals are Economic Anchors in their Communities, American Hospital Association, 2016](#); [Declining Access to Health Care in Northern New England, Regional Brief 2019-01, NE Public Policy Center, Federal Reserve Bank of Boston \(2019\)](#)



Revenue Stability: Hospital Closures Other Impacts

When a sole, acute care hospital in a county closes

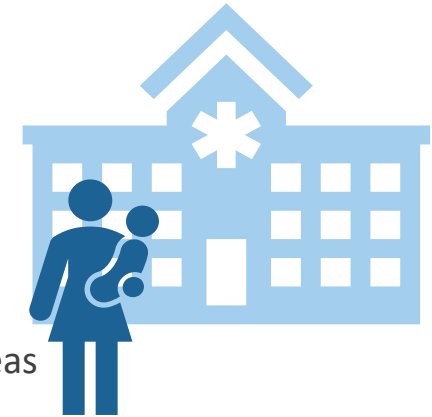
- 19.3% decline in physician supply, including primary care

Reduction in services – Example: maternity care

- 9% of rural communities in the U.S. have lost maternity services over the past decade
- 54% of rural communities in the U.S. do not have an acute care hospital with any obstetric services
- In the U.S., maternal mortality is higher among women living in rural areas versus women living in urban areas
- In Northern New England (Maine, NH, VT), 22 of 75 acute care hospitals lack a maternity ward
- In Vermont, Springfield Hospital closed its obstetrics department in 2019

Aligning services is complicated:

- Right sizing for a declining and aging population
- Impacts on access & travel times
- Health outcomes
- Community preferences



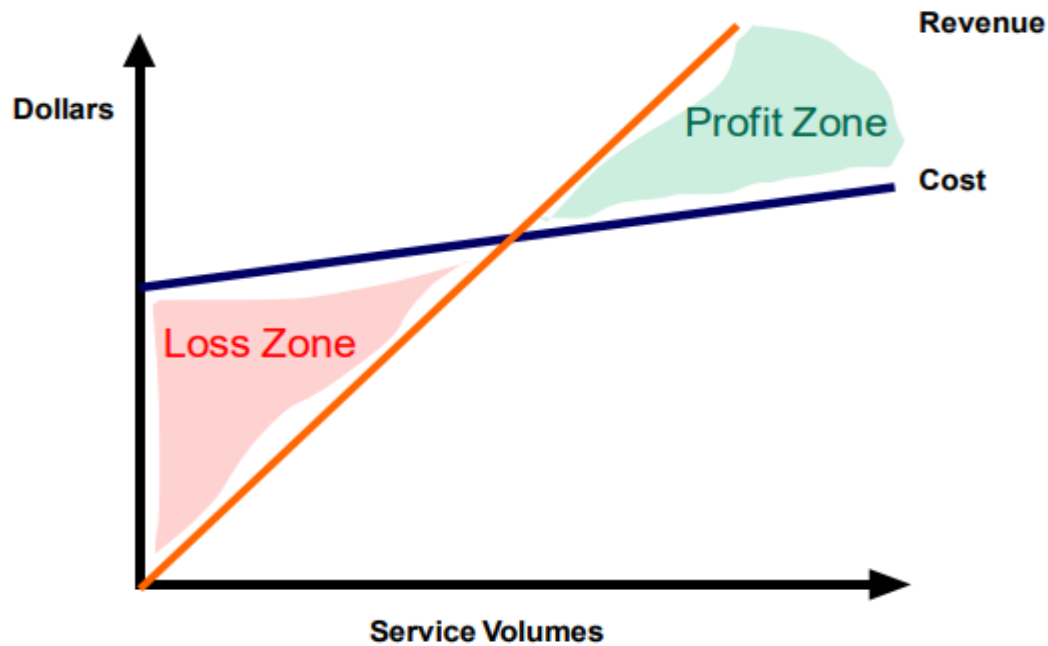
Source: [Health Affairs, When Rural Hospitals Close, The Physician Workforce Goes, December 2019](#); [Declining Access to Health Care in Northern New England, Regional Brief 2019-01, NE Public Policy Center, Federal Reserve Bank of Boston \(2019\)](#)



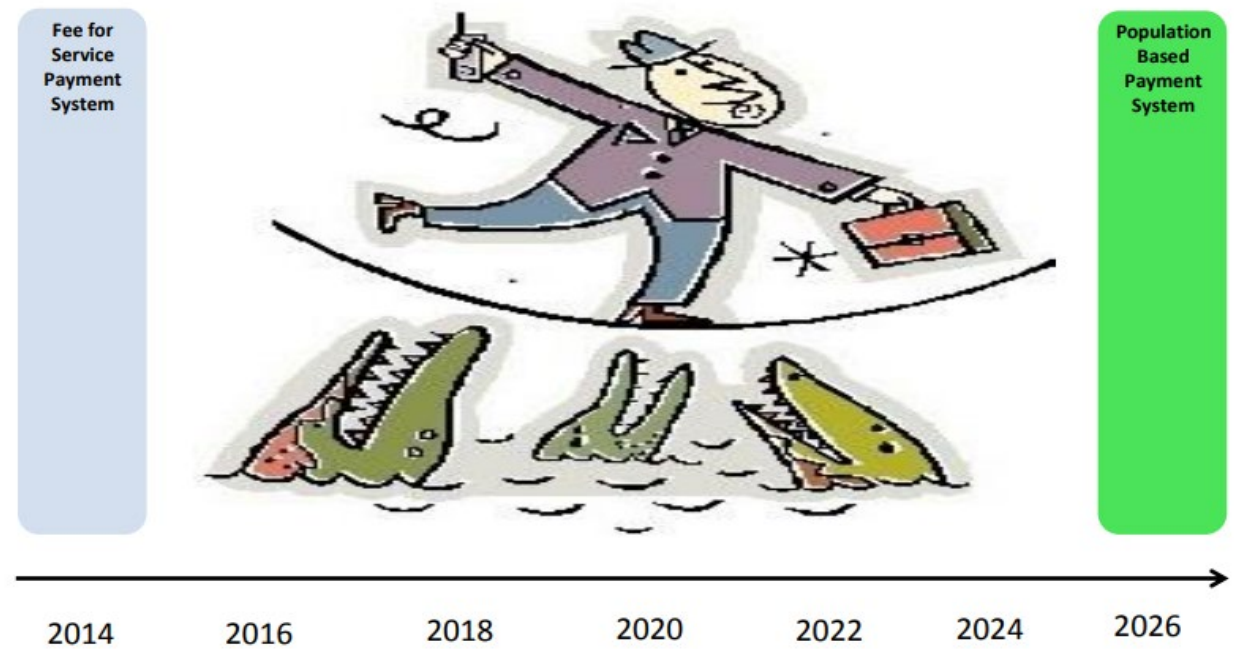
Revenue Stability: Areas of Discussion

“As payment systems transition away from volume-based payment, the current economic model of increasing volume to reduce unit costs and generate profit is no longer relevant. New economic models based on patient value must be developed by hospitals, but not before the payment systems have converted.”

Value Equation



Crossing the Shaky Bridge



Source: [Eric Shell, The New Future of Rural Healthcare: Strategies for Success, Presentation to GMCB \(2019\)](#)



Revenue Stability: Areas of Discussion

The State of Vermont is in a resource constrained environment and is also actively engaging in cost containment to reduce the growth in health care rates that are closer to economic growth rates.

The Governor and the General Assembly determine priorities for state funding based on many considerations. However, there is no structure currently in place to prioritize scarce state resources based on *sustainability of our health care sectors*.

The following efforts are also underway, but have different goals or are not comprehensive:

- The Health Resources Allocation Plan, which is under development at this time, is meant to identify and prioritize health needs of Vermonters and identify gaps in resources. It does not currently review the sustainability of each health care sector. It could help identify *current* access issues or clinical priorities.
- The Green Mountain Care Board is engaging in sustainability planning with 6 hospitals, with an additional hospital engaged in reorganization through bankruptcy. The goal is to engage hospitals, their Board of Directors and others as necessary to discuss how to ensure that Vermonters have access to vital services given the current financial environment.



Revenue Stability: Areas of Discussion

The Task Force identified two broad areas that would assist all providers in sustainability:

1. Targeted increases in reimbursement
2. A reduction of administrative burden

Each provider has identified industry-specific recommendations as examples, but these have not been endorsed globally by Task Force members.

National experts and the federal Rural Health Task Force identify telehealth (discussed in a later section of report) and moving from fee-for-service to value-based payment as a way for rural health care providers to weather national pressures, increase stability, and improve value.

- Health care reform is challenging for small independent primary care providers because they lack the infrastructure and personnel to analyze the implications of participation and perform the administrative work required to accomplish practice transformation.



Revenue Stability:

Examples of Targeted Revenue Suggestions

Examples	Hospitals	Designated Agencies	Home Health & Hospice	Long-Term Care	Independent Providers, including mental health and substance abuse providers	FQHCs	Free Clinics
Daily Reimbursement for Emergency Departments for patients in mental health crisis with long stays	X						
Implementation of Act 82 of 2017 to set reimbursement rates that "are reasonable and adequate to achieve the required outcomes for required populations."		X					
Annual inflationary increase per the recommendation of the Older Vermonters Working Group. Approximately \$375,000 Gross (including federal match) per 1.0% of increase	X		X	X			
Review and consider the recommendations in the Ongoing Financial Sustainability section (p. 10) of the Nursing Home Oversight Working Group Report submitted in 2019	X			X (Nursing Homes)			
AHS should evaluate the cost associated with providing Enhanced Residential Care and Assistive Community Care Services relative to Medicaid reimbursement to ensure the rates are adequate to support those services.				X (Residential care homes/ assisted living residences)			
Reinstate Medicaid primary care case management payment to \$2.50 PMPM for any rural primary care practice (legislative change)					X	X	
Reinstate Medicaid vaccine administration rates to 2017 levels					X	X	



Revenue Stability:

Examples of Reducing Administrative Complexity

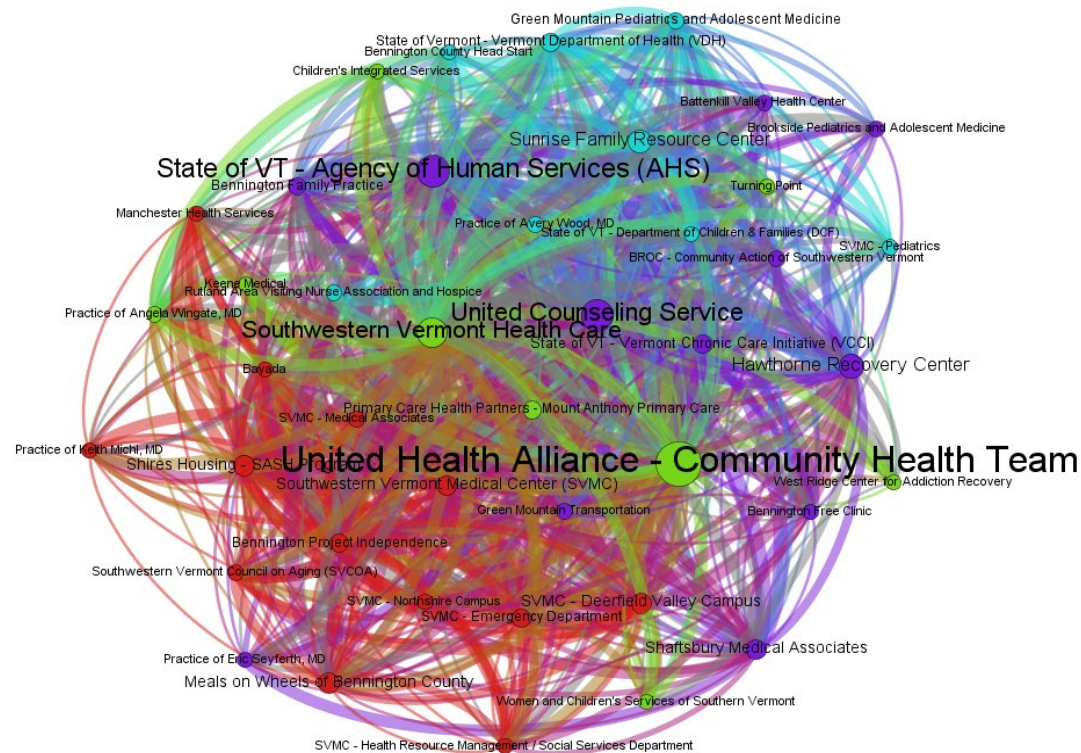
Examples	Hospitals	Designated Agencies	Home Health & Hospice	Long Term Care Facilities	FQHCs
Streamline GMCB hospital budget process	X				
Reduce the number of legislative reports required of the GMCB	X				
Standardize rules and data submission across AHS departments where possible		X			
Cost reporting could be simplified	X	X	X (use audited financials)		X (federal)
Review and consider the recommendations regarding Certificate of Need and transfer of nursing home ownership contained in the Nursing Home Oversight Working Group Report submitted in 2018	X			X	

Note: Independent providers' suggestions on reducing administrative burdens are included in the consensus recommendations related to workforce.



Care Coordination

Care Coordination: Interactions between entities



Health care sectors should work as a system to provide care to Vermonters in the most appropriate setting.

Care coordination reduces costs by promoting early intervention, disease management, and prevention.

Care coordination is a core service of home and community-based service providers.

Care coordination efforts in progress by the Blueprint for Health and OneCare Vermont are working to increase the efficiency and effectiveness of these interactions by providing clinical expertise, data, and communication tools to providers.

Source: [Blueprint for Health Bennington](#)

Note: Health Care Resource Maps available in Resources section of this report



Care Coordination: Issues

Continued investment required for existing care coordination functions in home and community-based services

Transition in payment reform & delivery reform: both too fast and too slow

Payer limitations to telehealth, telemonitoring, & providing care in home settings (see telehealth section)

Continued evolution of technology tools

- Greater data integration, fewer disparate tools, possible broadening use of Care Navigator to a more providers and social services agencies

Variation in care model(s) across communities: balance needed between local control versus standardization

Continued provider concerns about appropriate information sharing

- 42 CFR legal constraints related to substance use disorder services
- Need for broader understanding and mechanisms about patient consent/privacy and understanding how to appropriate share information in a streamlined way

Reimbursement limits in FFS for provider communication (mental health in particular)

In a zero-sum workforce environment, new care coordination initiatives can shift direct service staff to coordination activities



Care Coordination: Examples of Success



Bennington Community Care Team

The Community Care Team is an innovative program that helps social service providers throughout the community coordinate their work for the clients and patients they share. The program improves the lives of patients and clients by meeting their needs more efficiently. The change has related to a 44% decrease in Emergency Department visits among the participants.



Brattleboro Memorial Hospital Post-Acute Care

This program provides a Medical Director to the Nursing Homes for long-term care patients and sub-acute rehab patients in need of skilled nursing and has recently expanded to assisted living facilities. The MD's are part of the BMH Medical Staff. The PAC team has been able to decrease utilization in the ED's for patients due to frequent rounding in the Nursing Homes and consistent on call coverage for off hour questions/concerns.



Northwestern Counseling & Support Services

Northwestern Medical Center contracts with NCSS to fund Blueprint Community Health Team positions, promoting a holistic model of care through embedded mental health services and care coordination. Supporting patients to receive mental health care at their medical home reduces barriers to access caused by stigma, giving patients access to the full range of all mental health services available at the designated agency. The contracts also support greater communication and collaboration at a systems level between the partners.



UVM Home Health & Hospice Longitudinal Care Program

Patients with full onset chronic illness(es) and/or complex acute catastrophic conditions are enrolled when "discharged" from Medicare-eligible skilled home health services. They continue to receive nursing, community health worker visits & telemonitoring services. The program has successfully reduced hospital admissions and emergency department visits – and their attendant costs. This program is one of the rare interventions that has demonstrated a short-term return on investment that also represents an improvement in the experience of care for patients and families. The VNAs of Vermont is partnering with OneCare Vermont to expand the program to other home health agencies serving Vermonters.

Source: [Southwestern Vermont Medical Center](#); Northwestern Counseling and Support Services; Brattleboro Memorial Hospital, UVMHHH

Care Coordination: Key Themes

Care Coordination spans the full continuum of health care providers

Care models need more time to develop and mature

Primary care should continue to be a focus, and...

- The definition of primary care should be extended to include care happening outside of the physician's office (e.g. home, nursing homes, telehealth, etc.)
- Designated agencies and other community-based providers provide extensive care coordination, but workforce vacancies and turnover impacts consistency
- Current care coordination models require infrastructure that may not be feasible for smaller, independent practices or certain kinds of providers
- "Buy don't build": utilize low-cost, experienced care coordination expertise at existing home and community-based service providers



Care Coordination: Recommendations

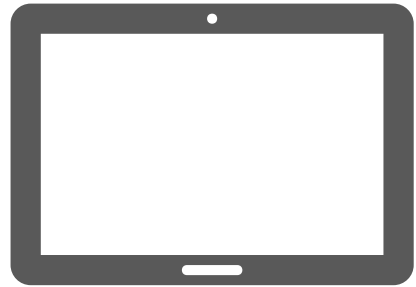
Task Force Recommendation	Action Required By			
	Legislature	Administration	All Payer Model 2.0	Private
Support current efforts: <ul style="list-style-type: none"> • Maintain and build investment in existing care coordination functions in home and community-based services • Allow provider-led ACO reform efforts to mature • Allow delivery system time to continue to change 	X	X	X	X
Provide investment in delivery system reform efforts	X	X	X	X
Continued investment and improvement of technology that supports effective coordination of care and could reduce administrative burdens	X	X		X
Promote the coordination of data sharing across AHS and ACO (e.g. integrate social determinant of health data)		X		X
Increase access for Medicaid patients to telemonitoring (see telehealth section)				



Care Coordination: Recommendations

Task Force Recommendation	Action Required By			
	GMCB	Administration	All Payer Model 2.0	Private (including payers)
Continue to mature & expand adoption of the OneCare Vermont (OCV) Care Model by:				
Evolving OCV's Complex Care Payment Model			X	X
Expanding to additional payers and increase # Vermonters under an aligned care model (scale)			X	X
Continuing to evaluate pilot innovations (expand or sunset as appropriate)			X	X
Continuing to explore and evolve pediatric models to ensure appropriate level of care coordination			X	X
Ensure sustainability of community-based Blueprint/ACO Model by demonstrating: positive outcomes for patients; financial return on investment (ROI)			X	X
Improve alignment of reporting, screening, and performance indicators	X	X	X	X

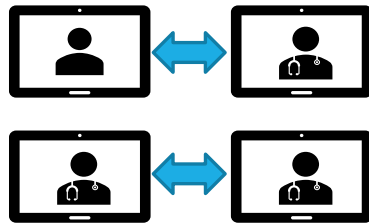




Telehealth

Telehealth: Modalities

Telemedicine “synchronous”



Video Visit

Provider to Patient
Providing care directly to patient at a remote location (“originating site”)

Video Consult

Provider to Provider
Provider to provider consultation concerning patients in emergent episodes

Store and Forward “asynchronous”



E-Consult

Provider to Provider
Enables providers to provide asynchronous consultation

Remote Patient Monitoring “telemonitoring”



Remote Patient Monitoring (RPM)

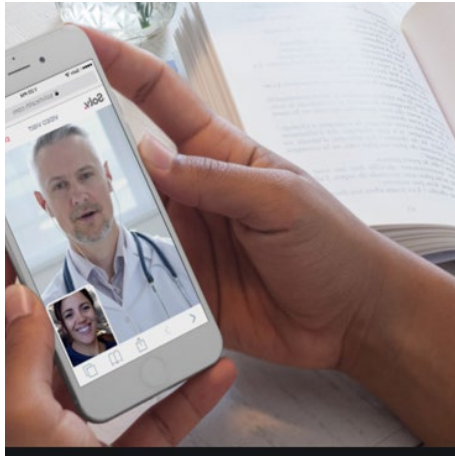
Patient to Provider
Monitoring key patient health measure such as weight, blood pressure, oxygen, from a patient’s home

Telehealth should be used to enhance access, but not supplant face-to-face relationships between providers and patients.



Telehealth: Examples

Telemedicine



TelePsychiatry



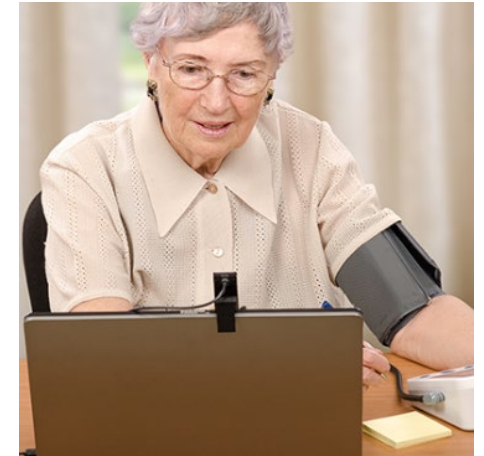
TeleEmergency

Store and Forward



TeleDermatology
eConsult

Remote Patient Monitoring



Remote Blood
Pressure & Pulse

Telehealth in Vermont FAQs

- Parity for approved telehealth services
- Must be clinically appropriate and within the provider's licensed scope of practice

- Patient must consent (unless emergency)
- Prescriptions permitted
- Telehealth consultations are not recorded



Telehealth: Impact in Rural Communities

Potential Benefits of Telehealth

- Mitigates access issues, reducing wait times for specialty care
- Cost effective follow up visits
- Mitigates costs associated with patient lost work time, transportation, and childcare
- Supports Care Management, Workforce and Financial Sustainability

Effective Telehealth Programs for Rural Communities

- Chronic care management interventions
- Emergency Care
- Home Monitoring
- Intensive Care Units
- Long-Term Care
- Psychotherapy and remote counseling
- Interpreter services

Source: [NCSL, Increasing Access to Health Care Through Telehealth](#); [American Journal of Managed Care](#)



Telehealth: Regional Impact & Limitations

Regional Impact

University of Vermont Medical Center

- No-show rates: for in-person specialty visits as high as 30% vs video visits as low as 2%
- Evaluated 561 video visits in 2018
 - 47,000 driving miles
 - 1007 hours of driving time
 - An estimated 6.6 tons of CO2 emissions avoided

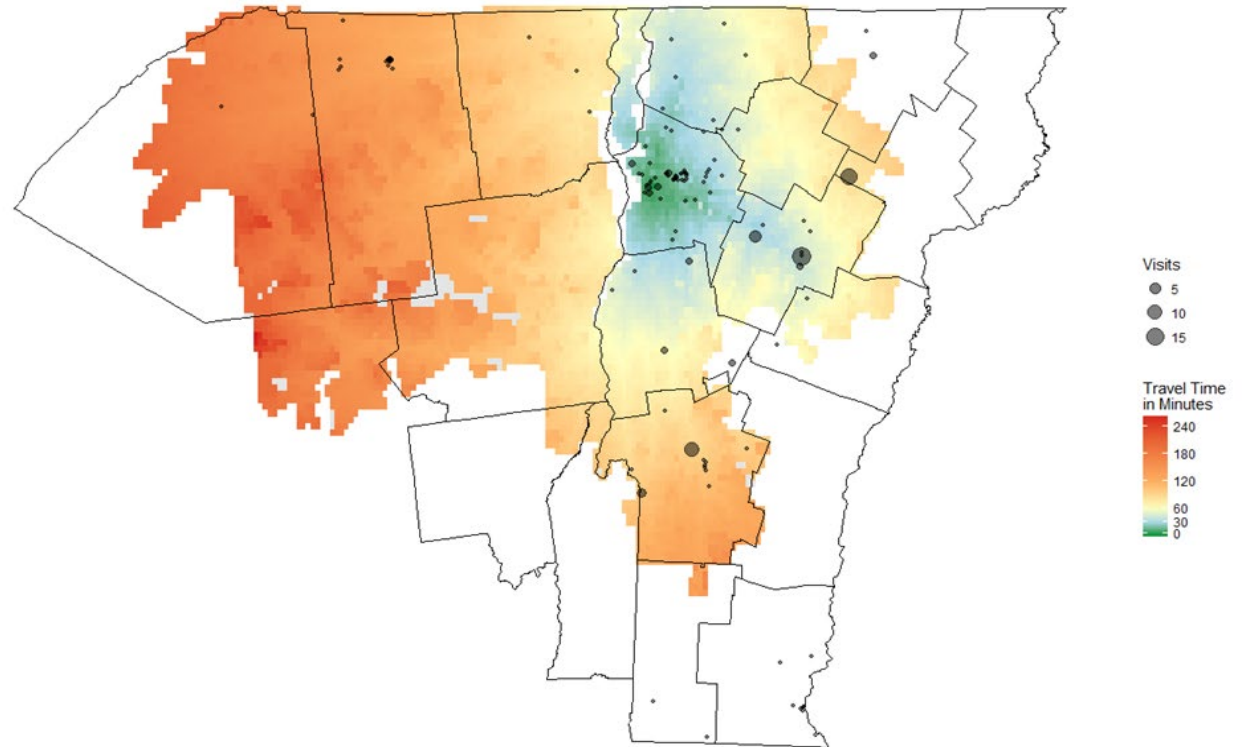
Limitations

There are barriers to telehealth today, including:

- Who can be paid to deliver telehealth services
- What services can be reimbursed
- What technology can be used
- Incorporating telehealth into the regular workflow

Broadband limitations are also a factor

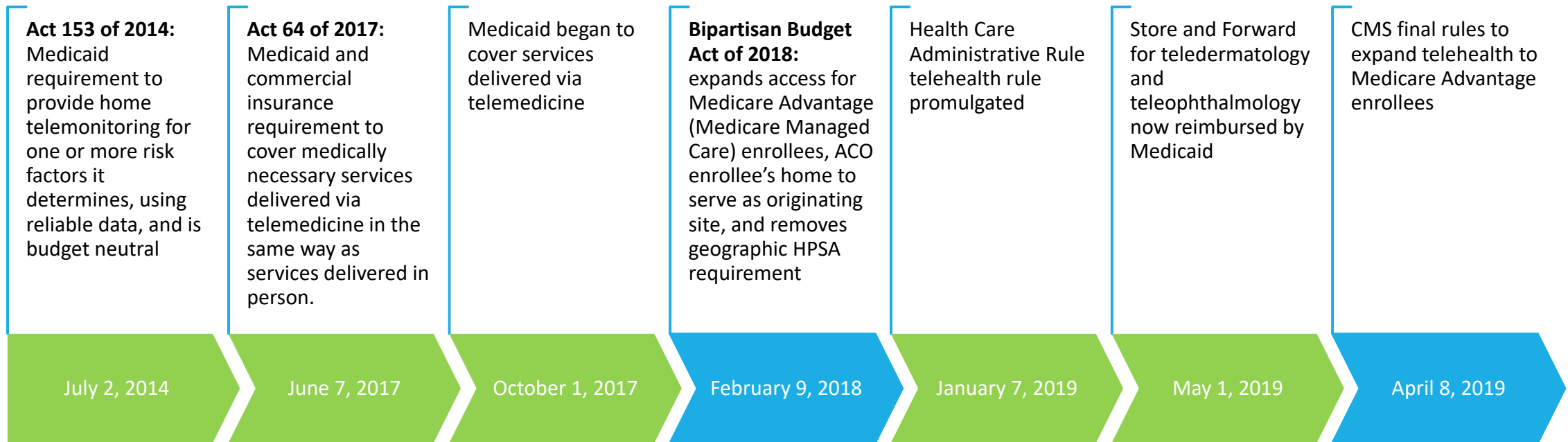
Locations of Telehealth Patients with Travel Times to UVMHC
Patients using UVMHC Telehealth in 2018. Dot size scaled to number of visits per patient.



Source: University of Vermont Health Network



Telehealth: in Vermont



Green: State of Vermont Initiatives
Blue: Federal Initiatives

Source: Department of Vermont Health Access



Telehealth Reimbursement in Vermont (DRAFT)

	Commercial 8 V.S.A. § 4100k	Medicaid Rule 3.101	Medicare	Medicare Advantage	Medicare- APM Telehealth Expansion Waiver
Patient's Home Approved Originating Site	Yes	Yes	No Exemptions: substance use disorder or a co-occurring mental health disorder, end-stage renal disease home dialysis, stroke	Yes – starting in 2020	Yes
Extends beyond Health Professional Shortage Area (HPSA)	Yes	Yes	No	Yes – starting in 2020	Yes
Qualified Provider	Licensed, certified, or otherwise authorized by law to provide professional health care services in this State	Provider who is working within the scope of his or her practice and enrolled in Vermont Medicaid	Physicians, nurse practitioners, physician assistants, nurse midwives, registered dietitians, clinical nurse specialists, certified registered nurse anesthetists, clinical psychologists, clinical social workers, nutrition professionals		<ul style="list-style-type: none"> Follows Medicare Requires that provider is part of the ACO
Store and Forward	Insurer may cover Ophthalmology and Dermatology E-consult: unclear	Limited to Ophthalmology and Dermatology E-consult: Allowable	Services are not limited, starting in 2020 E-consult: Allowable, codes 99452 and 99451		Store and Forward: allows Ophthalmology and Dermatology
Remote Patient Monitoring	Limitations unclear	Limited to Congestive Heart Failure diagnosis	Home health agencies are not reimbursed for RPM, however, can include on their cost report	Yes	
Other Limitations	Commercial does not reimburse at same rate as in-person visit		Federally Qualified Health Centers (FQHCs): Medicare does not reimburse FQHCs as a distant site.		

Note: Subject to change



Telehealth: Expansion Initiatives

Medicare Limitations

CMS Initiatives

- Starting January 2019, updated Value-Based Insurance Design (VBID) model of care to give providers treating people on Medicare Advantage more access to telehealth in place of in-person checkups
- Starting 2020, Medicare Advantage members no longer restricted by geographic restrictions and homes are eligible originating sites

Pending Federal Legislation

- H.R. 4932 “Creating Opportunities Now for Necessary and Effective Care Technologies for Health Act of 2019”: promotes expansion of Medicare telehealth services
- Reducing Unnecessary Senior Hospitalizations (RUSH) Act: aims to give skilled nursing facilities (SNFs) more incentives to use telehealth

Store and Forward Limitations

State Proposals

- Dental Access and Reimbursement Working Group (Act 72 of 2019): recommendation for DVHA to further study Medicaid store and forward teledentistry and include recommendation in FY2021 budget presentation

Planning Initiatives

Vermont

- Vermont Program for Quality in Health Care (VPQHC) facilitation of a Telemedicine Technical Assistance Working Group
 - Broad group of stakeholders
 - Established under current 9416 contract statutory funding



Telehealth: Recommendations

Task Force Recommendation	Action Required By				
	Legislature	Administration	All Payer Model 2.0	Private	Federal
Store and Forward- E-Consults					
<ul style="list-style-type: none"> Expand coverage to Teledentistry Expand reimbursement to include consultations or other services, such as between primary care and specialty (state samples include consultation, diagnostic, therapeutic and interpretive services, psychotherapy and pharmacological management services) Expand reimbursement from Medicaid and commercial insurers to align with Medicare reimbursement 	X	X			
Remote Patient Monitoring					
Expand Medicaid coverage beyond Congestive Heart Failure <ul style="list-style-type: none"> Allow monitoring whenever clinically appropriate Examples from other states include diabetes, chronic obstructive pulmonary disease, wound care, polypharmacy, mental or behavioral problems, and technology-dependent care such as continuous oxygen, ventilator care, total parenteral nutrition or enteral feeding 		X			
ACO Waiver: Ensure ACO telehealth waiver supports primary care and mental health at skilled nursing facilities			X		
Funding: Grants for Telehealth planning and programs	X	X	X	X	X



Additional Resources

Additional Resources

- I. Telehealth Definitions
- II. Related Task Forces & Reports
- III. Inventory
- IV. Bibliography of Articles & Other Materials Circulated
- V. Public Comments

Materials from the Task Force Meetings are available on the [GMCB Website](#)

Telehealth: Definitions

Term	8 V.S.A. § 4100k	Health Care Administrative Rule 3.101	Modalities
Telemedicine (synchronous)	Means the delivery of health care services such as diagnosis, consultation, or treatment through the use of live interactive audio and video over a secure connection that complies with the requirements of the Health Insurance Portability and Accountability Act of 1996, Public Law 104-191. Telemedicine does not include the use of audio-only telephone, e-mail, or facsimile.	Means health care delivery by a provider who is located at a distant site to a beneficiary at an originating site for purposes of evaluation, diagnosis, consultation, or treatment, using telecommunications technology via two-way, real-time, audio and video interactive communication, through a secure connection that complies with HIPAA.	Video Visit (live) Video Consult (live)
Store and Forward (asynchronous)	Means an asynchronous transmission of medical information to be reviewed at a later date by a health care provider at a distant site who is trained in the relevant specialty and by which the health care provider at the distant site reviews the medical information without the patient present in real time.	Means an asynchronous transmission of a beneficiary's medical information from a health care professional to a provider at a distant site, through a secure connection that complies with HIPAA, without the beneficiary present in real time.	eVisit eConsult
Remote Patient Monitoring (telemonitoring)	N/A	Means a health service that enables remote monitoring of a beneficiary's health-related data by a home health agency done outside of a conventional clinical setting and in conjunction with a physician's plan of care.	Home Health

Related Task Forces & Reports

During the course of our work, it became clear that there were others charged with related or overlapping issues. Due to time constraints, the Task Force was not able to coordinate or align with all other efforts. Below is a listing of other information which may be useful in discussing financial sustainability:

- Office of Professional Regulation (not available yet)
- [Dental Task Force](#), November 1, 2019
- DMH Strategic Plan (not yet available)
- [Older Vermonters Act Working Group Report](#), November 25, 2019
- GMCB Primary Care Spend Report, due January 15, 2020 (not yet available)
- [Green Mountain Care Board Evaluation of Howard Center Budget](#), January 2016

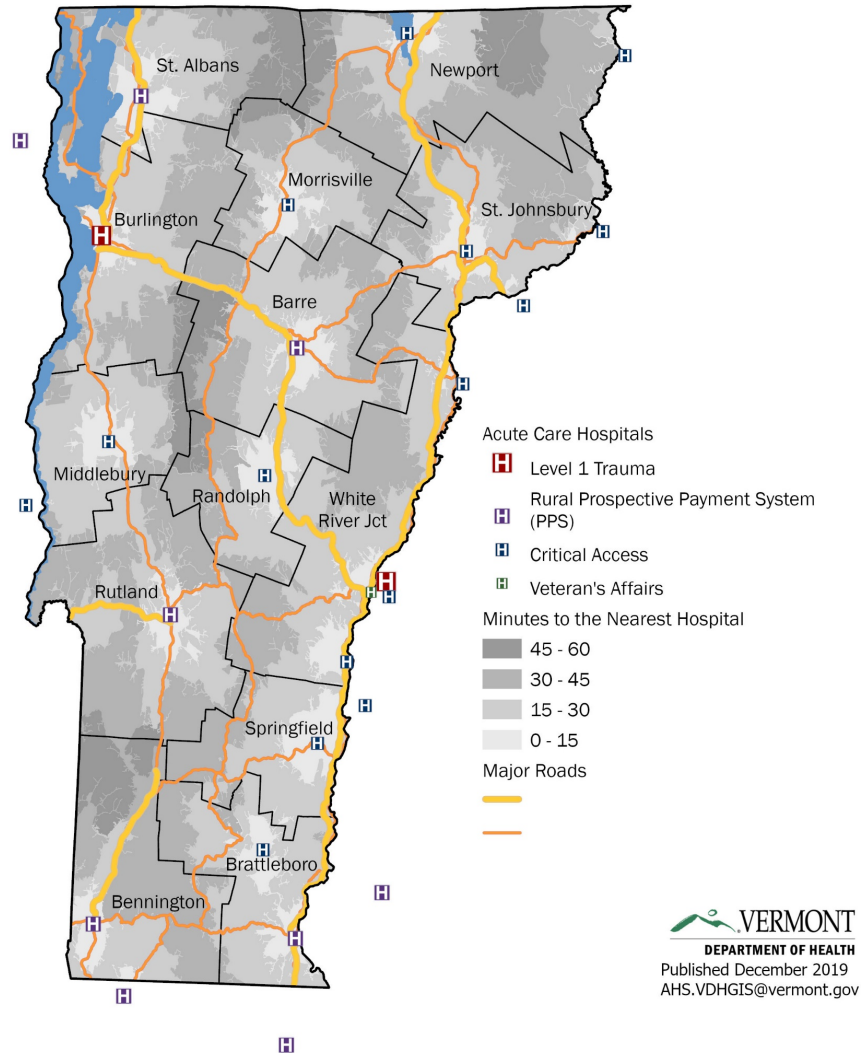
Inventory

Inventory

Act 26 of 2019 required the Rural Health Services Task Force to inventory the current system of rural health delivery in Vermont. This section contains maps of Vermont's health care system with explanatory text.

Inventory information will continue to evolve through the Health Resources Allocation Plan (HRAP). The Health Resources Allocation Plan, established in [18 V.S.A. § 9405](#), is published by the Green Mountain Care Board and identifies Vermont's critical health needs, goods, services, and resources. More information about the Health Resource Allocation plan is available on the Green Mountain Care Board [website](#).

Hospitals in and near Vermont by Hospital Service Area



Source: Vermont Department of Disabilities, Aging, and Independent Living: Facility Directory (2018)

Hospitals in and near Vermont

Most rural Vermont communities are served by one of 5 rural mid-size hospitals, 8 Critical Access Hospital (CAHs), or by academic medical centers in Burlington and Hanover, NH. For many Vermonters living in border towns, their nearest emergency, inpatient or specialty care is located at hospitals in New Hampshire, New York or Massachusetts. Vermont veterans can get most of their care at Veterans Administration hospital, located in White River Junction.

Medicare and Medicaid beneficiaries make up large portions of patients at each of these hospitals. Care provided to Medicare beneficiaries at mid-size and large hospitals is reimbursed through the CMS Prospective Payment System (PPS). CAHs are reimbursed for Medicare beneficiaries on a cost-based system to help ensure sustainable revenue flow even with low volumes of services.

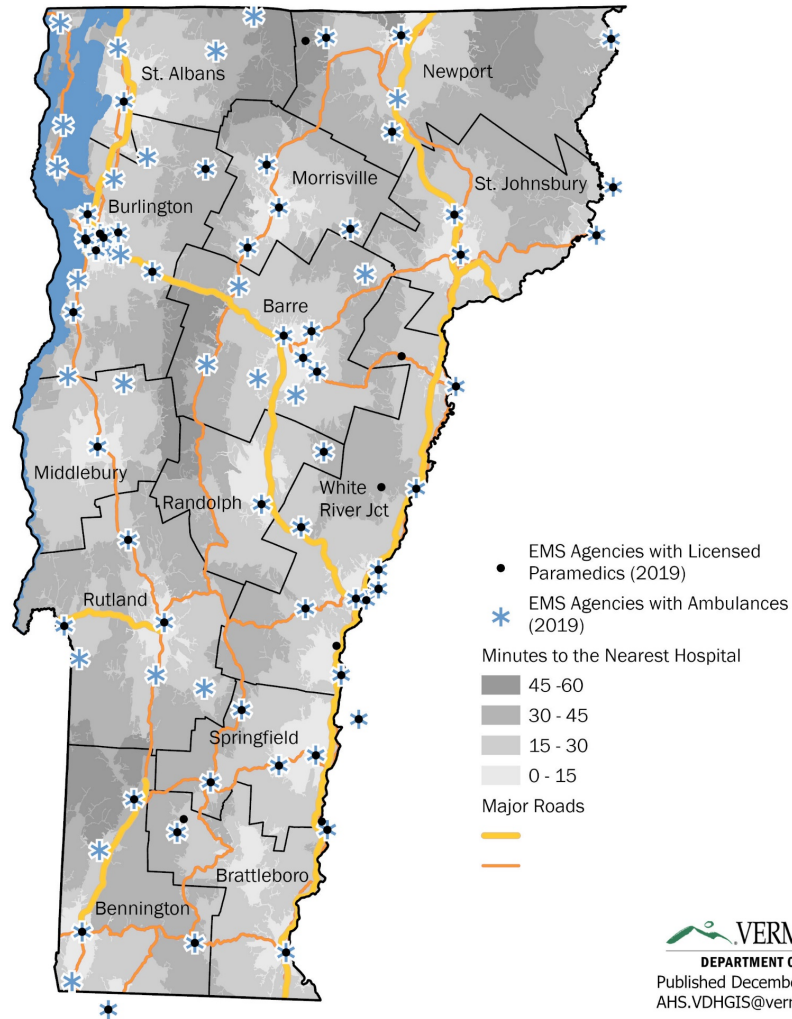
The geographic boundaries of this map represent Vermont's defined Hospital Service Areas (HSAs).

Distances from nearest hospitals

According to newest GIS mapping data, nearly all locations in Vermont served by roads are within a 60-minute drive to a hospital either in Vermont or within 10 miles of Vermont borders. However, there are many areas that are more than 45 minutes away from the nearest hospital emergency room, shown in the darkest shades on the attached map. While these distant areas typically have low populations, they are important recreation areas for hiking, skiing, camping, etc., as well as logging.

For more information, contact: <https://vahhs.org/our-members>

**Emergency Medical Services
by Hospital service Area**



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

Emergency Medical Services

Vermont’s 251 towns (in all 14 counties) are served by 169 mostly independent and volunteer Emergency Medical Services (EMS) agencies, including 80 transporting agencies and 89 first responding agencies. All of these agencies are indicated on the attached map with a blue star. Those EMS agencies with licensed paramedics are signified by a black dot on the blue star.

The geographic boundaries of this map represent Vermont’s defined Hospital Service Areas (HSAs).

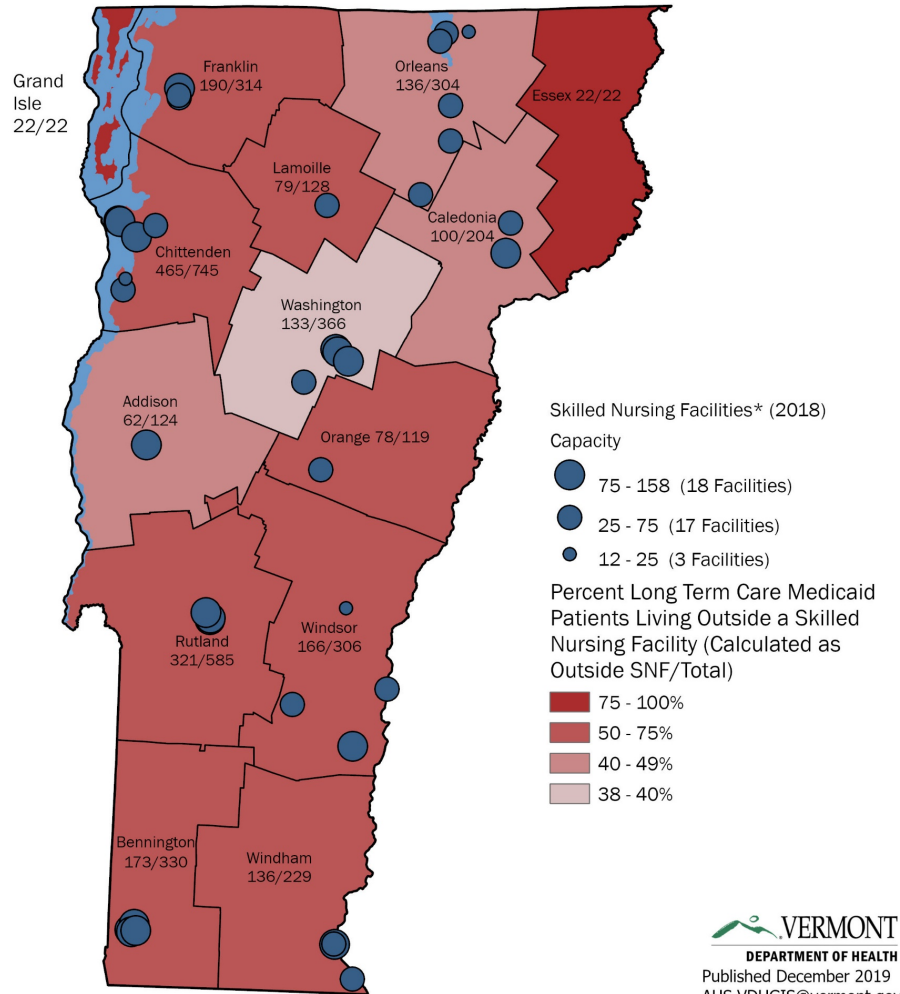
These agencies work closely with their local hospitals and emergency department staff to address emergent health issues facing their neighbors. In many cases, the Director of Emergency Medicine at the local hospital serves as the Medical Director of several EMS agencies. Vermont, like many rural states, is struggling to replace retiring EMS personnel. Employment patterns are evolving in rural communities and more potential EMS volunteers are commuting farther from home for work, and not available for EMS involvement, training, or service. Since 2017, at least one EMS agency has closed due to financial and staffing shortages.

For more information, contact: <https://www.healthvermont.gov/emergency/ems>

Source: Vermont Department of Health; Emergency Medical Services (2019)

*Paramedics are the highest level of medical first responders

Medicaid Long Term Care (Choices for Care) by County



Medicaid Long term care (Choices for Care)

Nursing Facilities

Nursing homes provide nursing care and related services for people who need nursing, medical, rehabilitation, or other special services. They are licensed by the state and may be certified to participate in the Medicaid and/or Medicare programs. Certain nursing homes may also meet specific standards for subacute care or dementia care.

Home Health Agencies and Hospice Providers

Home Health Agencies provide health services in the home. Services include nursing, personal care, physical therapy, homemaker services, hospice care, and social work services.

Choices for Care (CFC)

Choices for Care is a long-term care services program providing care and support to Vermonters at least 18 years old who require nursing home level of care. CFC helps those who are eligible receive their services in a home setting or in an authorized care facility.

Vermont has prioritized aging in place, setting a goal of 50% of Medicaid beneficiaries needing skilled nursing care to receive that care in their homes instead of more expensive facilities. The percentages for 2017 are shown on the attached map and range from 38% to 100%. Of important note is that since there are no skilled nursing facilities in either Essex County and Grand Isle County, 100% of Medicaid beneficiaries are receiving skilled nursing care at home or have moved to a facility in another county, potentially many miles away from their home community and families.

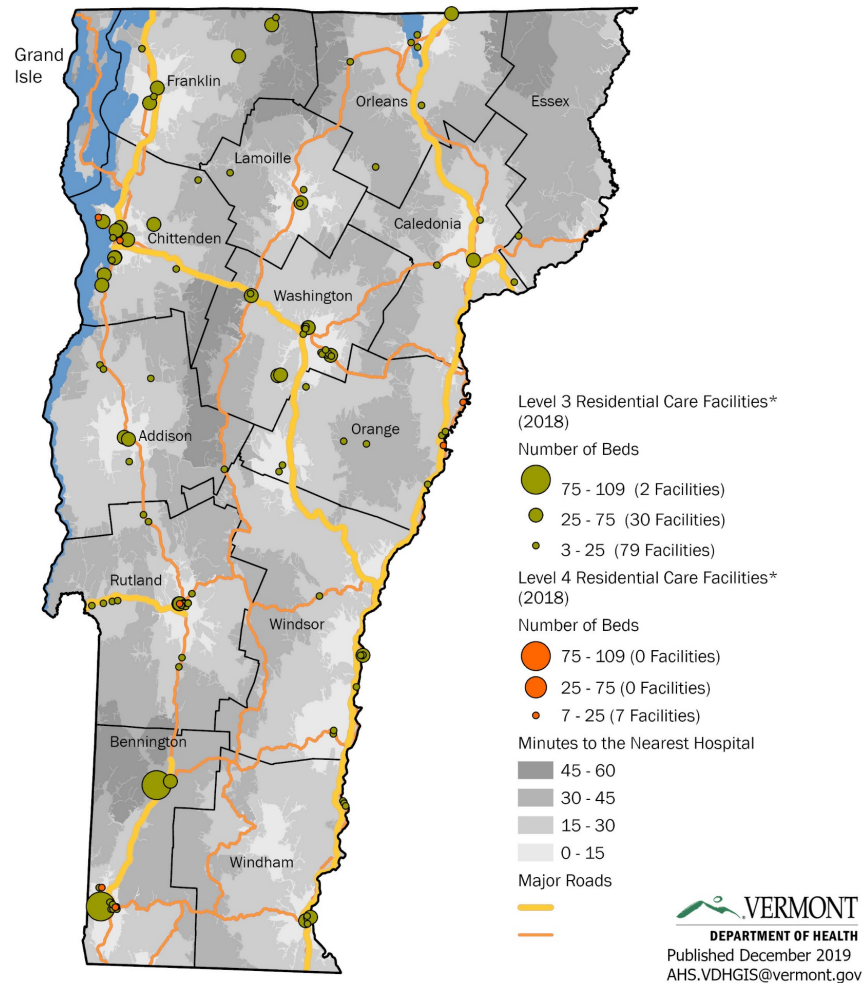
Vermont skilled nursing facilities (SNFs) range in size from 12 to 158 beds. However, most SNFs and home health agencies suffer nursing shortages. We do not show data related to nurse staffing at home or in the facilities identified here.

In addition, Medicaid reimbursement rates for Choices for Care does not cover costs of the program.

For more information, contact: <https://dail.vermont.gov/services/programs>

Bennington's percentage exclude Medicaid residents in Vermont Veterans' Home, the location of Vermont Veteran's Home is represented
Nursing facility and enhanced residential care figures are based on current recorded residence, and often do not reflect county of residence prior to admission.
Medicaid patients receiving skilled care in hospital settings are not represented

Residential Care Facilities by County



Source: Vermont Department of Disabilities, Aging, and Independent Living; Facility Directory (2018)

Long-term care – Residential Care Homes (RCH) - Level 3 & Level 4

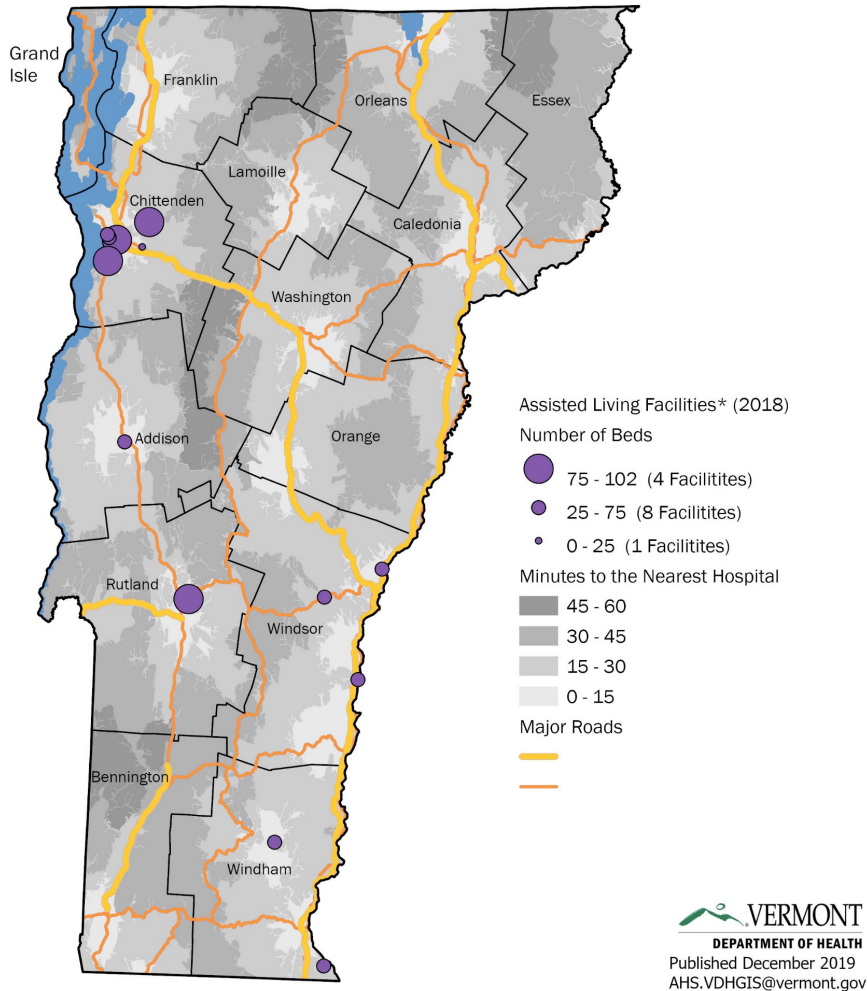
Residential care homes are State licensed group living arrangements designed to meet the needs of people who cannot live independently and usually do not require the type of care provided in a nursing home. When needed, help is provided with daily activities such as eating, walking, toileting, bathing, and dressing. Residential care homes may provide nursing home level of care to residents under certain conditions. **Level 3** homes provide nursing overview, but not full-time nursing care. **Level 4** homes do not provide nursing overview or nursing care.

There are 111 Level 3 Residential Care Homes in Vermont and only 7 Level 4 Residential Care Homes.

We have shown these facility locations on the map also showing drive times to nearest hospital. Most homes are within 30 minutes to a nearby hospital, but several are more than 45 minutes.

For more information, contact: <https://dail.vermont.gov/services/programs>

**Assisted Living Facilities
by County**



Source: Vermont Department of Disabilities, Aging, and Independent Living: Facility Directory (2018)

Long-term care – Assisted Living Facilities

Assisted Living Facilities

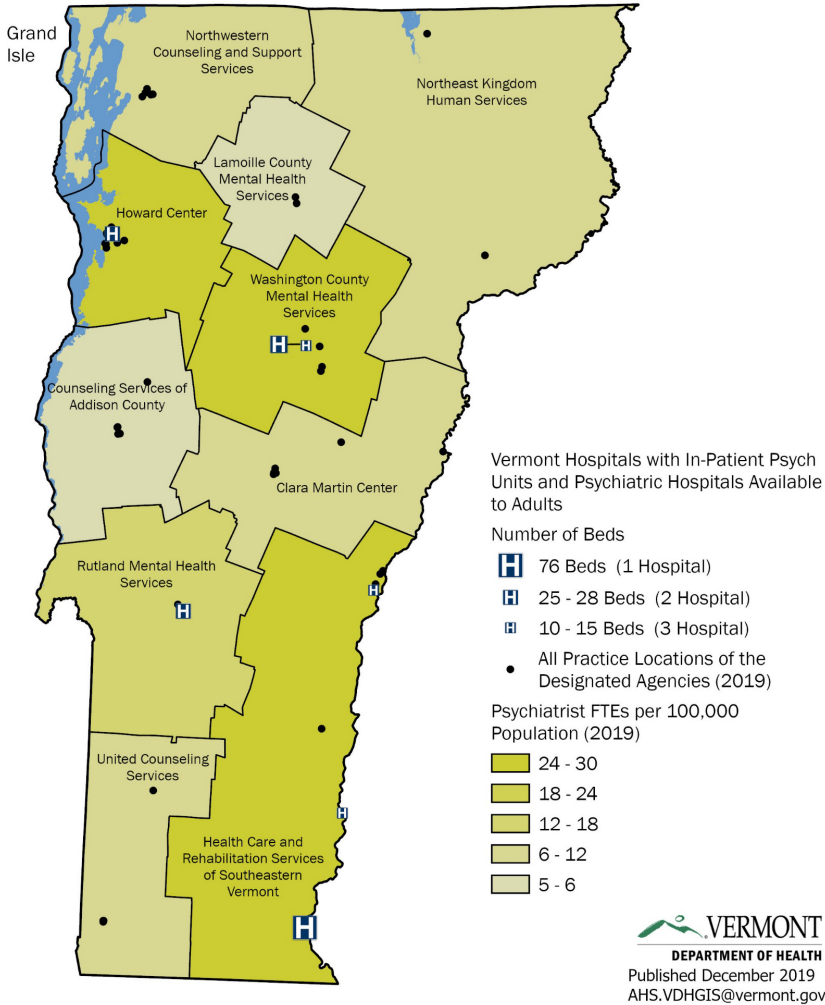
Assisted Living Facilities are State licensed residences that combine housing, health and supportive services to support resident independence and aging in place.

There are only 15 Assisted Living Residences in Vermont as of October 2019; with most beds in Chittenden County.

For more information, contact: <https://dail.vermont.gov/services/programs>

Intensive Mental Health Services by MH Catchment Area

Intensive Mental Health Services by Mental Health Catchment Area



The Department of Mental Health currently designates six hospitals to provide psychiatric inpatient care in Vermont. All six hospitals provide services to adults while the Brattleboro Retreat provides inpatient services to adults, children and youth requiring psychiatric hospitalization.

- UVM Medical Center, Burlington (28 beds)
- Vermont Psychiatric Hospital, Berlin (25 beds)
- Central Vermont Medical Center, Berlin (14 beds)
- Rutland Regional Medical Center, Rutland (21 beds)
- Windham Center at Springfield Hospital (10 beds)
- Brattleboro Retreat, (89 adult beds, 30 youth beds)
- VA Medical Center, White River Junction (12 beds) (serving veterans only)

Community Mental Health Services

The Department of Mental Health designates one Designated Agency (DA) in each geographic region of the state to provide the Department's mental health (MH) programs for adults and children. Designated Agencies are private, non-profit service providers that are responsible for ensuring needed services are available through program delivery, local planning, service coordination, and monitoring outcomes within their region (shown on the attached map). <https://mentalhealth.vermont.gov/>

Developmental Disabilities Services

There are 15 private non-profit developmental disabilities services providers in Vermont, contracted by Department of Aging and Independent Living (DAIL), who offer a variety of services to people with developmental disabilities. Supports include service coordination/case management, home supports, employment services, community supports, family and respite supports, clinical intervention and crisis services. Ten DAs provide services primarily within a defined MH Catchment Area as shown on the attached map. There are five additional [Specialized Service Agencies](#) (SSA) are separate entities also contracted by DAIL that provide developmental services in multiple regions.

<https://dail.vermont.gov/services/programs>

Mental Health Workforce

The MH workforce includes Psychiatrists, Social Workers, Psychologists, MH Counselors and Marriage and Family Therapists and other provider types. Psychiatrists are physicians that focus on the diagnosis, treatment, and prevention of mental, emotional, and behavioral disorders and are an essential part of the mental health care workforce.

On the MH map, we show distribution of practicing Psychiatrists full-time equivalents (FTEs) per 100,000 Vermonters. Statewide, 89.2% of psychiatrists report accepting new patients in 2016, and 12.9% plan to reduce their hours within the next 12 months and 5.9% reported plans to retire.

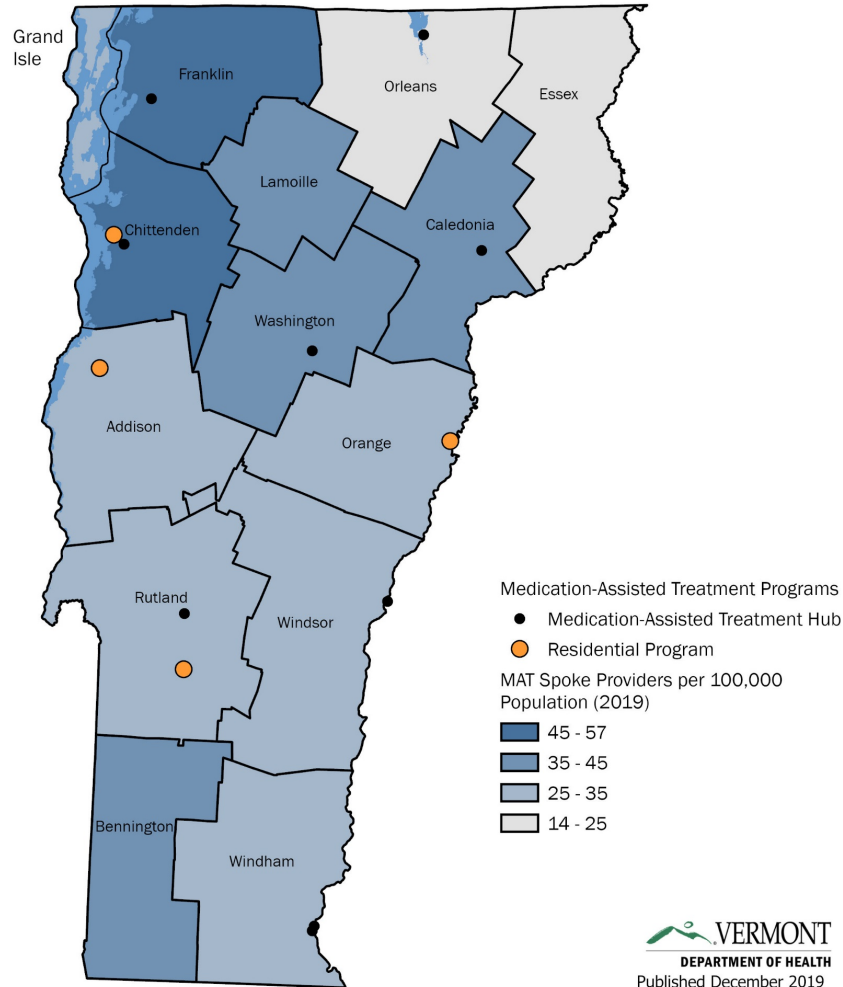
Data source: <https://www.healthvermont.gov/sites/default/files/documents/pdf/psychiatrist16.pdf>

Source: Vermont Department of Health; Health Care Provider Census (2016), Vermont Department of Mental Health; Psychiatric Hospitalization (2019), Vermont Department of Mental Health; Designated Agencies (2019)

Mental health RSAs (MCHAs) reflect the established catchment areas of the 10 designated mental health agencies in Vermont.

FTE ratios only includes providers in locations open to the public. Facilities that do not offer outpatient services are excluded.

Medication-Assisted Treatment by County



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

Source: Vermont Department of Health - Division of Alcohol and Drug Abuse; Vermont Substance Abuse Treatment & Recovery Directory(2017).
Department of Vermont Health Access - Blueprint for Health; MAT Spoke Provider List(2019)

Medication Assisted Treatment (MAT) Hubs by County

The Hub & Spoke System of Care provides medication assisted treatment (MAT) and counseling to Vermonters addicted to opioids, such as prescription opioids or heroin. Opioid Treatment Programs (OTPs) or “hubs” provide high intensity treatment with methadone, buprenorphine or naltrexone. “Spokes” are medical practices, such as primary care practices, which provide treatment with buprenorphine or naltrexone.

The attached map shows locations of OTP hubs and residential programs (treating opioid and other addictions).

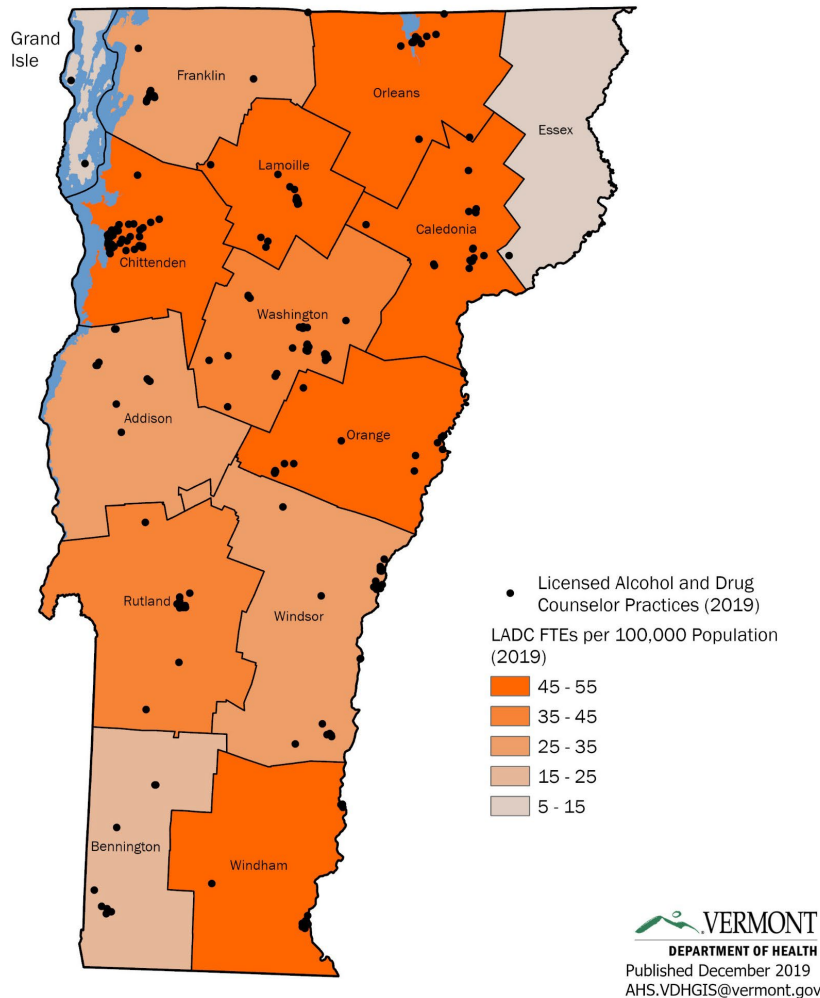
Residential Programs offer counseling and group services while living at a treatment center from several days to a few weeks. Outpatient Programs provide assessment and counseling services while living at home. This may include meeting with a counselor one-on-one or going to a group meeting one or two times a week. Intensive Outpatient Programs usually last for about 2-3 hours a day, 3 days a week, for several weeks while you live at home.

Recovery Centers provide peer supports, substance-free recreation activities, volunteer opportunities and community education and recovery supporting services such as Alcoholics Anonymous or Narcotics Anonymous meetings. Recovery Centers are available in many communities in Vermont but are not plotted here.

Data sources:

<https://www.healthvermont.gov/alcohol-drug-abuse/programs-services/treatment-options>

Licensed Alcohol and Drug Counselors By County



Source: Vermont Department of Health, Health Care Provider Census (2019), Vermont Department of Health - Division of Alcohol and Drug Abuse; Vermont Substance Abuse Treatment & Recovery Directory (2017)

FTE ratios only includes providers in locations open to the public.

Licensed Alcohol and Drug Counselors (LADCs) by County

Licensed Alcohol and Drug Abuse Counselors (LADCs) use psychotherapy, along with other methods, to assist an individual or groups of individuals understand alcohol and drug abuse dependency problems and define goals and plan actions reflecting the individuals' interests, abilities, and needs. To be licensed in Vermont, LADCs must have completed a master's degree in a human services field or a health care profession and 300 hours of substance abuse education, have two years (at least 2000 hours) of supervised practice, and pass an exam. Vermont also regulates Certified Alcohol and Drug Abuse Counselors and Apprentice Addiction Professionals who have lesser education and supervised practice hour standards.

Workforce

493 Licensed Alcohol and Drug Abuse Counselors (LADCs) renewed their licenses during the census period during 2019. Of the 493 respondents, 424 (86.0%) indicated that they were active and providing direct patient care in Vermont as Licensed Alcohol and Drug Abuse Counselors. Of the 69 respondents currently reporting a non-active status, 28 (40.6%) indicated they planned to start providing direct patient care in Vermont within the next 12 months.

Many LADCs maintained more than one mental health care license or roster position. 168 were mental health counselors, 85 were clinical social workers, 16 were psychologists. 7 were non-licensed non-certified rostered psychotherapists, 4 were marriage and family therapists and 2 were nurse practitioners.

Client population served by 493 LADCs:

- 41.5% (176) of counselors served youth age 4-17.
- 95.3% (404) of counselors served adults age 18-64.
- 55.7% (236) of counselors served older adults 65 and older.
- 36.8% (156) of counselors served military populations.
- 76.8%* (318) of counselors participated in counseling patients receiving medically assisted treatment. *Missing data for 10 individuals.

The most common setting for LADCs was private practice [36.8%], followed by substance use disorder clinics [11.6%] and community health centers [10.6%].

Data source: https://www.healthvermont.gov/sites/default/files/documents/pdf/HS_Stats_LADC19_report.pdf

Primary Care Practices by Rational Service Area (including FQHCs, RHCs, PPNNEs, Free clinics)

The following two maps show locations of over 225 primary care practices identified by health care providers in our bi-annual workforce censuses. These practices represent about 55 Federally Qualified Health Centers (FQHCs) in all 14 counties; nine Rural Health Clinics (RHCs) located in Newport, Barton, St. Johnsbury, Lyndonville and Townsend and 12 Planned Parenthood Health Centers. The balance of PC practices are owned by a hospital or an independent solo or group practice. There are also six free clinics operating full- or part-time in Rutland, Barre, Brattleboro, White River Jct., Bennington and Middlebury staffed by volunteer health care providers. While many practices offer sliding fee scales to their patients, Safety Net providers like FQHCs, RHCs, PPNNE centers and Free Clinics are required to provide care regardless of their patient's insurance status or ability to pay.

The primary care medical workforce includes physicians, nurse practitioners and physician assistants.

The data shown on this map represents the distribution of a total of 1,054 primary care practitioners, representing a total of 758.5 full-time equivalents (FTEs). Vermont's 38 Rational Service Areas (RSAs) represent the general care seeking patterns of Vermonters for primary care.

While federal shortage designations for primary care are based only on physician FTEs, this combined map represents the relative distribution of all primary care practitioners in Vermont regions, including: 615 Physicians (435.9 FTEs) in 2018; 328 Advance Practice Registered Nurses (235.5 FTEs) in 2017; and 111 Physician Assistants (87.1 FTEs) in 2018.

Vermont's primary care workforce is aging, along with our population. In 7 of 14 counties, at least 41% of the primary care physicians were over age 60. In 2018, 15% of primary care physicians reported plans to retire or reduce hours in Vermont within 12 Months. Physicians are highly concentrated in Chittenden County (142.5 FTEs); Essex County has 1.3 FTEs, Grand Isle County had 1.9 FTEs. In addition, some primary care physicians are not accepting new patients, especially internists (53-58%), Family Practice (75-80%). Counties with fewer PC physicians accepting new patients are Essex, Chittenden, Bennington & Caledonia (59-79%).

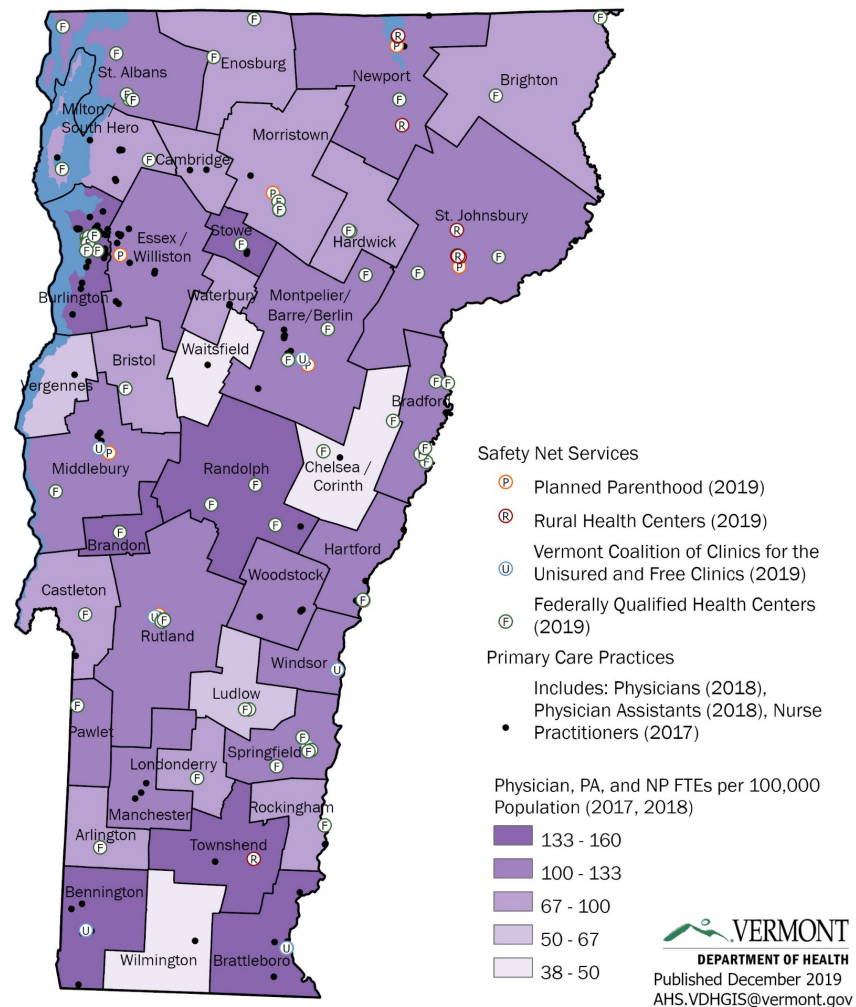
Advanced Practice Nurse Practitioners (APRNs) include Nurse Practitioners and Certified Nurse Midwives and make up an increasingly important part of the primary care workforce. Since 2015, APRNs in primary care increased from 276 to 328, and APRNs younger than 40 increased from 110 in 2015 to 170 in 2017, and the percent of APRNs over age 60 decreased from 31% to 27%.

In 2018, 111 Physician Assistants (PAs) worked in primary care representing (87.1 FTEs). Most PAs work in Health Clinics/Centers, Single Specialty Group and Hospital Outpatient settings.

Data source:

<https://www.healthvermont.gov/health-statistics-vital-records/health-care-systems-reporting/health-care-workforce>

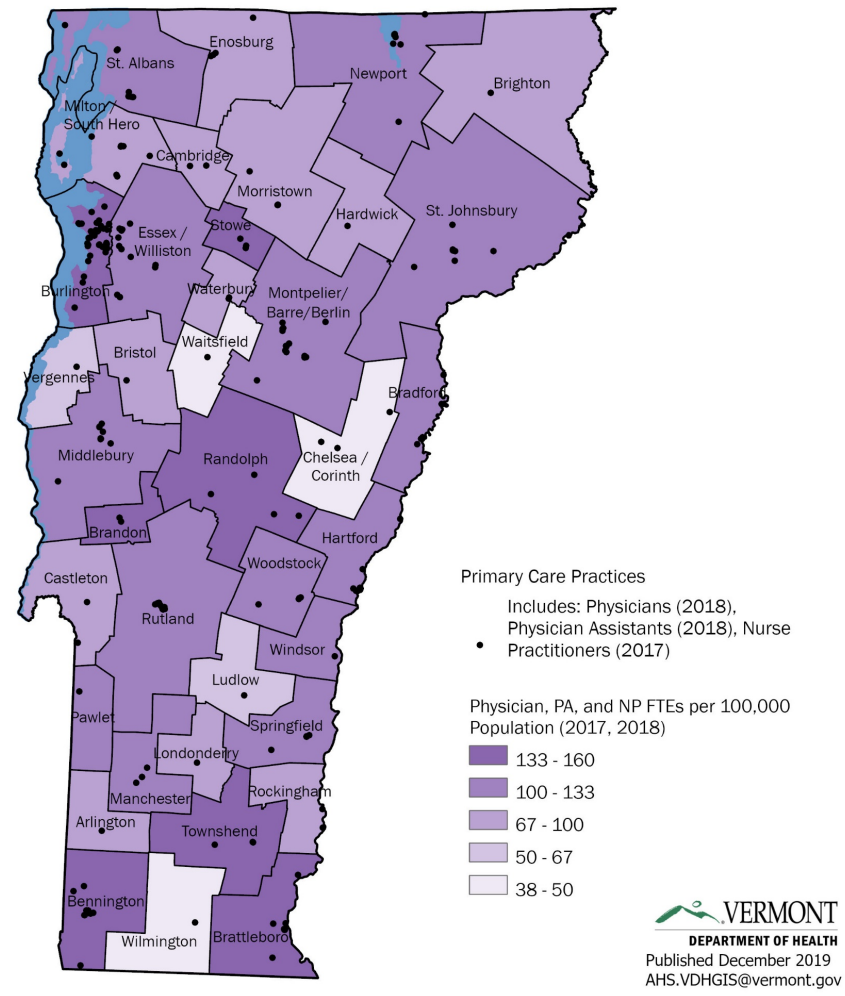
Primary Care Practices by Rational Service Area



Source: Vermont Department of Health; Health Care Provider Census (2017, 2018), BiState Association; Safety Net Provider List (2019)

Rational Service Areas (RSAs) are designed based on where people receive primary care and where they live, as determined from data from Medicare, Medicaid and the Vermont Behavioral Risk Factor Surveillance System. FTE ratios only includes providers in locations open to the public. Facilities that do not offer outpatient services, do not offer on-site services, or are urgent care clinics are excluded. Locum tenens providers are excluded. Locations include independent practices, hospital owned practices, and group practices.

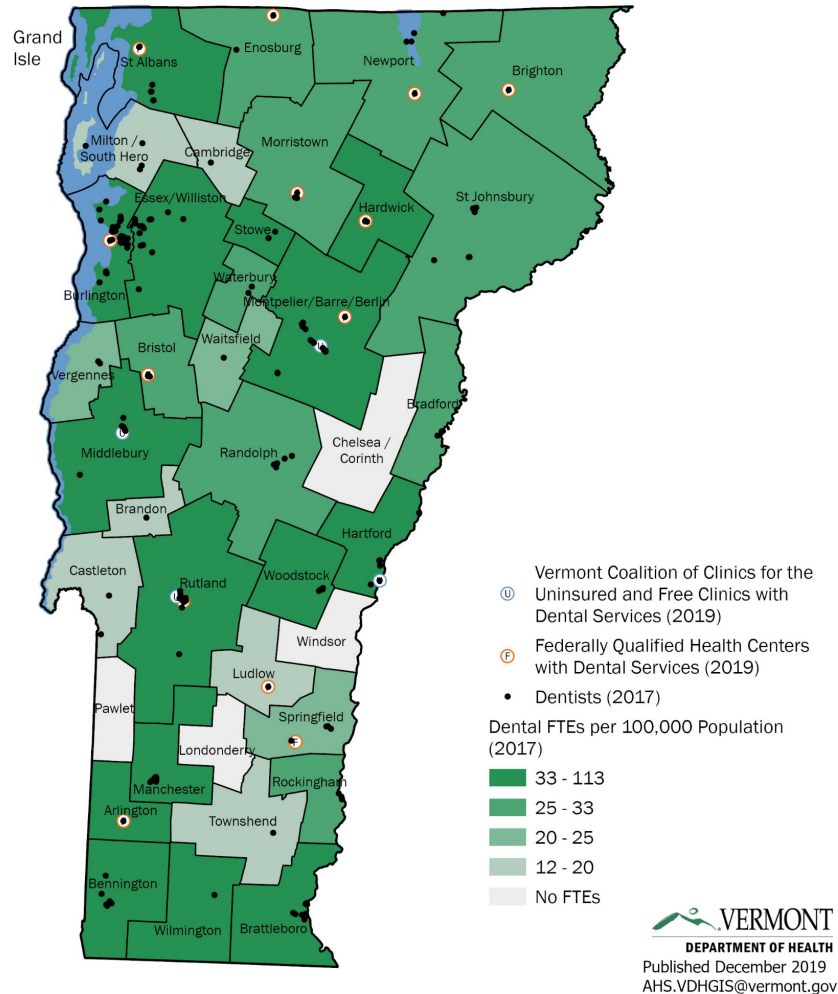
Primary Care Practices by Rational Service Area



Source: Vermont Department of Health; Health Care Provider Census (2017, 2018), BiState Association; Safety Net Provider List (2019)

Rational Service Areas (RSAs) are designed based on where people receive primary care and where they live, as determined from data from Medicare, Medicaid and the Vermont Behavioral Risk Factor Surveillance System. FTE ratios only includes providers in locations open to the public. Facilities that do not offer outpatient services, do not offer on-site services, or are urgent care clinics are excluded. Locum tenens providers are excluded. Locations include independent practices, hospital owned practices, and group practices.

**General Dental Care
by Rational Service Area**



Source: Vermont Department of Health; Health Care Provider Census (2017)

In Vermont, rational service areas (RSAs) for dental care are the same as those for primary care, which were delineated (in 2011) based on where people receive primary care and where they live, as determined from data from Medicare, Medicaid and the Vermont Behavioral Risk Factor Surveillance System.

FTE ratios only includes providers in locations open to the public. Facilities that do not offer outpatient services or do not offer on-site services are excluded.

General Dental Practices (2017) by Rational Service Area (RSA)

This map shows locations of independent dental practices as well as FQHCs and Free Clinic dental practices and the distribution of general dental FTEs among 38 Rational Service Areas (RSAs). Rational Service Areas (RSAs) for primary care are groupings of towns that reflect primary care seeking patterns for Medicare and Medicaid beneficiaries determined in 2001. These same 38 RSA boundaries were applied to dental care in 2011.

Of the 381 dentists working in Vermont, 82% are primary care dentists, including 299 general dentists and 14 pediatric dentists. Most dentists (67%) practiced at single site privately owned clinics, 20% practiced at multi-site privately owned clinics, 8% practiced at FQHCs and 1% at hospital-owned clinics.

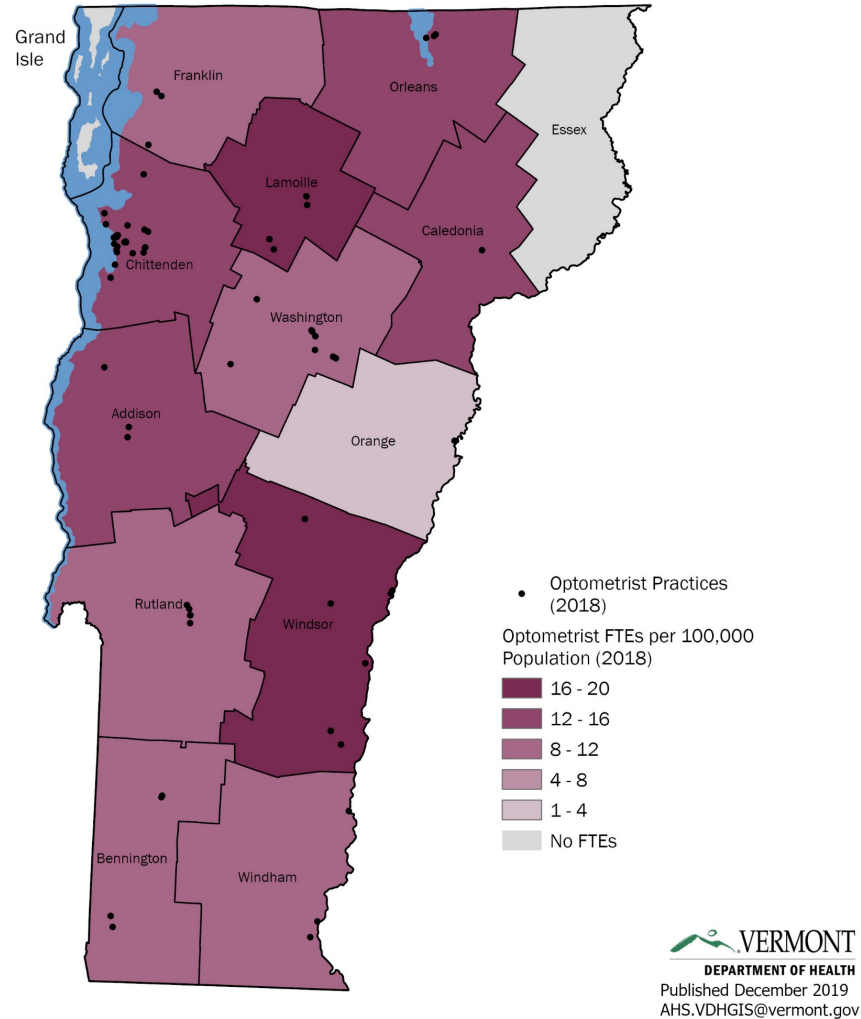
The dental workforce is aging along with other providers. 35% of dentists are 60 or older, 2.9% of dentists plan to retire or leave Vermont practice in the next year, and 3.7% plan to decrease their hours. In Rutland County, 58% of the primary care dentists are 60 or older; 100% in Grand Isle County.

While average wait time to primary care dental appointments has decreased from 2.6 to 2.0 weeks, statewide, 31% of primary care FTEs and 46% of specialist FTEs are in Chittenden County. However, the percentage of dentists accepting new Medicaid patients has declined since 2015. In 2017 only 60% reported accepting new Medicaid patients, and only 33% accept 5+ new Medicaid patients / month.

Data source:

<https://www.healthvermont.gov/sites/default/files/documents/pdf/DDS17ppt.pdf>

Optometric Care by County



Source: Vermont Department of Health; Health Care Provider Census (2018)

Optometric Care by County

An optometrist is an eye doctor who has earned the Doctor of Optometry (OD) degree. Optometrists examine eyes for both vision and health problems, and correct refractive errors by prescribing eyeglasses and contact lenses. Optometrists diagnose and treat some eye diseases with pharmaceutical agents.

In 2018, 107 optometrists renewed their Vermont license. 96 (90%) indicated that they were active and providing direct patient care (82.4 FTEs) in Vermont, and 36 (38%) worked 40 hours or more per week at their main work site, and 49 (51%) worked 40 hours or more per week at all their work sites combined. For optometrists' main practice location, the most common settings were private group practice (44%) and private solo practice (42%).

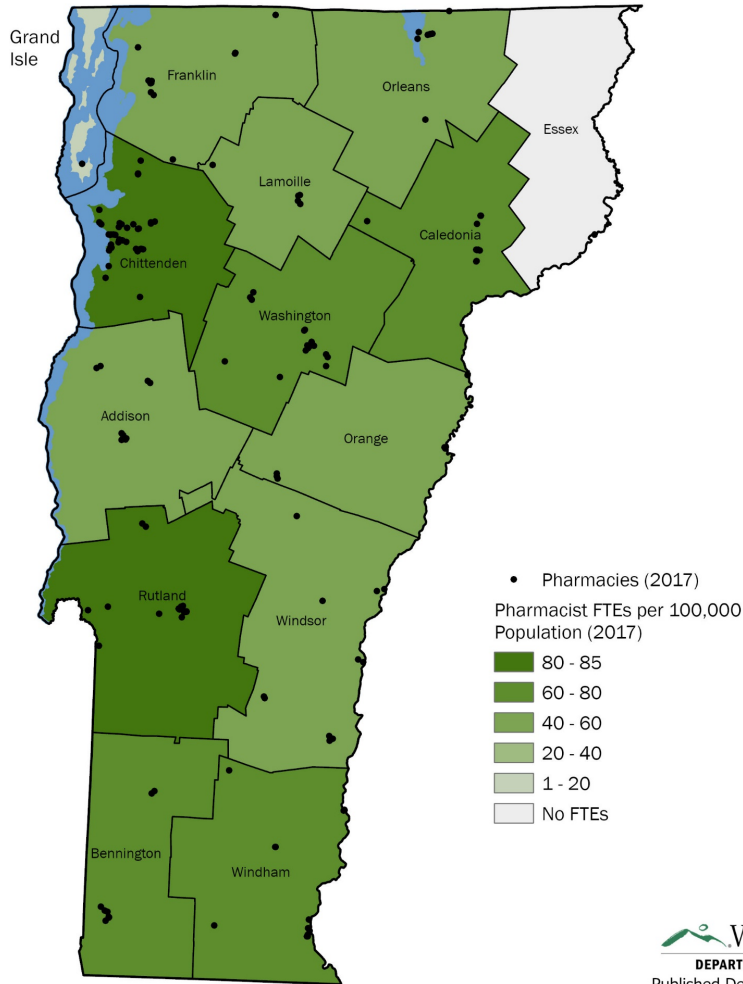
32 optometrists (34% of total FTEs) were age 60 and older, 84% accepted Medicaid patients (at their main practice site), 91% accepted Medicare patients (at their main practice site).

Optometrists are unevenly spread around the state but are not over-concentrated in Chittenden County. Lamoille County and Windsor Counties have the highest ratio of FTE: population.

Data source:

https://www.healthvermont.gov/sites/default/files/documents/pdf/optometrists_2018_report.pdf

Pharmacies by County



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

Source: Vermont Department of Health; Health Care Provider Census (2017)

FTE ratios only includes providers in locations open to the public.

Pharmacies by County

Pharmacists are important parts of the health care workforce and delivery system. By statute in Vermont the practice of pharmacy includes: the interpretation and evaluation of prescription orders; drug compounding, dispensing, and labeling; participation in drug selection and drug utilization reviews; proper and safe storage of drugs and the maintenance of their proper records; advising on the therapeutic values, content, hazards, and use of drugs; providing patient care within the pharmacist's authorized scope of practice; optimizing of drug therapy through the practice of clinical pharmacy; and offering and performing the acts, services, operations, and transactions necessary in the conduct, operation, management, and control of a pharmacy.

Workforce

In 2017, 1,055 pharmacists renewed their licenses and 609 (57.9%) indicated that they were active practicing pharmacists in Vermont. Of those, 63.1% (384) of pharmacists worked in a retail setting, while 25.6% (156) worked in a hospital. Another 61 non-active pharmacists indicated they were planning to start working as a pharmacist in Vermont within the next 12 months.

Since 2015, there was an increase in number of pharmacists and FTEs: 609 pharmacists compared to 552, and 475.7 FTEs increased from 457.1 FTEs. There was also an increase in the percentage of pharmacists under 35: 32.7% up from 30.1% in 2015 and the median age decreased from 43 to 42.

Half of pharmacists 50.9% (310) worked 40 or more hours per week at their main site, and only 120 pharmacists (16.1% of total FTEs), were age 60 and older.

The highest ratio of pharmacist FTEs to 100,000 population was in the Burlington Health Care Area, followed by Rutland and Bennington. Randolph and Upper Valley had the lowest FTE ratios, and there are no pharmacies in Essex County or Grand Isle County.

Data source:

<https://www.healthvermont.gov/sites/default/files/documents/pdf/Pharm2017.pdf>

Bibliography of Articles & other materials circulated

Bibliography of Articles & other materials circulated

American Hospital Association

- *Task Force on Ensuring Access in Vulnerable Communities (2016).*
- *Hospitals are Economic Anchors in their Communities (2018).*

American Psychological Association. (2019). *Model Education and Training Program in Psychopharmacology for Prescriptive Authority.*

Bailit Health Purchasing, LLC.

- *Care Management Inventory Survey Results: Report to CMCM Work Group. (2014)*
- *Care Management in Vermont: Gaps and Duplication. (2015)*

Bipartisan Policy Center. (2018). *Reinventing Rural Health Care: A Case Study of Seven Upper Midwest States.*

Davenport, Matthews, Melek, Norris, Paulus, Weaver. (2018). *Potential Economic Impact of Integrated Medical-Behavioral Healthcare: Updated Projections for 2017.*

Milliman.

Donelan, Barreto, Sossong, Michael, Estrada, Cohen, Wozniak, Schwamm. (2019). *Patient & Clinician Experiences with Telehealth for Patient Follow-Up Care.* American Journal of Managed Care

Enlund, Sydne. (2019). *Increasing Access to Health Care Through Telehealth.* National Conference of State Legislatures.

Finnegan, Joanne. (2018). *Costs up, revenues down for medical groups, survey finds.* FierceHealth.

Flex Monitoring Team. (2019).

- *Critical Access Hospital Measurement & Performance Assessment System Frequently Asked Questions. (2019)*
- *Characteristics of Communities Served by Critical Access Hospitals at High Risk of Financial Distress in 2019. (2019)*

Bibliography of Articles & other materials circulated

Germack, Hayley Drew; Ryan Kandrack; Grant Marstolf. (2019). *When Rural Hospitals Close, The Physician Workforce Goes*. Health Affairs.

Green Mountain Care Board

- *2017 Vermont Health Care Expenditure Analysis. (2017).*
- *Flex Monitoring Team: CAHMPAS: 2017 Results of Vermont's Hospitals. (2018).*
- *Vermont Clinician Landscape Study Report (2017).*

Lagasse, Jeff. (2017). *Financial pressures are changing independent physicians' decisions on practice operations, investments*. HealthCare Finance.

LaPointe, Jacqueline. (2019). *Medical Group Operating Margins Improved in 2018*. RevCycle Intelligence.

Stone, K. (2019). *OneCare Vermont: All Payer Model Payment & Delivery System Reform*. OneCare Vermont.

Schmitz, Schwartzer. (2016). *Mobile Integrated Healthcare / Community Paramedicine Program in Vermont*. All Clear Emergency Management Group.

Shell, E.K. (2019). *The New Future of Rural Healthcare Strategies for Success*. Stroudwater.

Stroudwater. (2019). *Financial and Operational Best Practice Checklist*.

Sullivan, R. (2019). *Declining Access to Health Care in Northern New England*. New England Public Policy Center.

Tieman, J. (2019). *Rural Hospitals and Health Care: Challenge & Opportunity*. Vermont Association of Hospitals and Health Systems.

University of North Carolina, Rural Health Research Program.

University of Vermont Health Network, Department of Telehealth Services.

Bibliography of Articles & other materials circulated

Vermont Agency of Human Services. (2019). *Nursing Home Oversight Working Group*.

Vermont Blueprint or Health

Vermont Department of Health

- *Rural Hospital Flexibility Grant Program: Project Narrative for September 1, 2019—August 31, 2024 (2019)*
- *Healthy Vermonters 2020 (2012)*
- *Vermont Household Health Insurance Survey (2018)*

Vermont Department of Financial Regulation. (2013). *Guidelines for Distinguishing Between Primary and Specialty Mental Health and Substance Abuse Services*.

Whelan Parento, E. (2019). *Supporting Rural Health: Practical Solutions for State Policymakers*. The Reforming States Group.

World Health Organization. (2016). *Integrated Care Models: An Overview*.

For additional references on the workforce section of this report, please see the Rural Health Task Force Workforce Subcommittee Report posted on the following webpage: <https://gmcbboard.vermont.gov/content/rural-health-services-task-force>

Public Comments

Public Comment Summary

- The Vermont Futures Project's recommendations on workforce align with many of the Task Forces' recommendations. The Project emphasized the importance of innovation and entrepreneurship, specifically: Establish a private sector center to boost innovations around the key Vermont sector strength of health care services for rural and aging in place populations. Focus on in-home support and health care for the aging in place Vermont population. The center will conduct cutting edge research to develop Intellectual Property and spin off new businesses to monetize the opportunities. Due to limited resources we recommend partnerships with existing groups such as the MIT and Hartford CT centers for aging support.
- The Task Force received one consumer comment on overall themes and content.
- The following organizations provided technical and clarifying comments:
 - Vermont Association of Hospitals and Health Systems (VAHHS)
 - The Vermont Program for Quality in Health Care, Inc. (VPQHC)

The Task Force received public input at every meeting. Comments from the Vermont Medical Society, Health First and Bi-State Primary Care were provided through the Task Force member representing the relevant health sector.

Full text of public comments is available on the Rural Health Services Task Force [website](#).

Rural Health Task Force Workforce Subcommittee Report

January 10, 2019

Problem Definition:

Vermont health care providers are currently faced with a workforce crisis. Providers highlight needs for nearly all professions from unlicensed personal care attendants and direct support professionals, to physicians. These individuals work in a variety of settings, across multiple levels of care including but not limited to hospitals, federally qualified health centers (FQHCs), independent physician practices, long-term care facilities, designated agencies, adult day providers and home health agencies.

The Vermont Talent Pipeline Management's (VTPM) 2018 survey predicts that there will be 3,900 nursing-related job vacancies between now and spring of 2020.¹ These estimates are not industry wide as VTPM's study captured nurses working in a hospital setting, three long-term care facilities, and one home health agency. With nearly 4,000 licensed nurses working in long-term care in over 140 facilities and 10 home health agencies, the actual number of nursing-related job vacancies is likely to be even higher.²

The Area Health Education Center's (AHEC) Primary Care Practitioner Workforce 2018 Snapshot identifies a shortage of 70.5 primary care physician (family medicine, internal medicine, obstetrics, pediatrics) full-time equivalents (FTEs).³

Dentistry workforce surveys conducted by the Department of Health indicate that the number of dentist FTEs has increased 8.4% since 2005. However, much of this growth has been driven by increases in Chittenden County. Outside of Chittenden County, the number of dentist FTEs has grown 5.8%. Practices also report challenges in recruiting dental support staff including dental hygienists and dental assistants.

Professional licensing data from the Office of Professional Regulation (OPR) and Department of Health (VDH) show significant decreases in the number of licensed health professionals. (Please note that licensing data does not reflect the employment status of individuals with a license)

Percentage Decreases in Licenses from 2010 to 2018	
License Type	Percentage Decrease
Licensed Nursing Assistant	6.1%
Licensed Practical Nurse	8.1%
Registered Nurse	24.5%
Primary Care Physician	9.1%

Data from specific providers correspond with the statewide trends. In a survey of 45 of over 140 long-term care facilities in Vermont, 571.1 vacant positions were reported. This data translated into vacancy rates of 17.1% for RNs, 29.3% for LPNs, 20.3% for LNAs and 9.7% for PCAs. Facilities also report challenges retaining staff, with an industry-wide 41% annual turnover rate for direct care workers. When broken out by position, these rates are: 31.4% for RNs, 34.5% for LPNs, 45.2% for LNAs, 52.1% for PCAs.⁴

¹ https://docs.wixstatic.com/ugd/e92786_17d7096537384be9bb117a264b2beb4f.pdf

² <http://www.med.uvm.edu/ahec/workforceresearchdevelopment/reports>

³ http://contentmanager.med.uvm.edu/docs/vermont_primary_care_practitioner_workforce_2018_snapshot_f3_19/ahec-documents/vermont_primary_care_practitioner_workforce_2018_snapshot_f3_19.pdf?sfvrsn=2

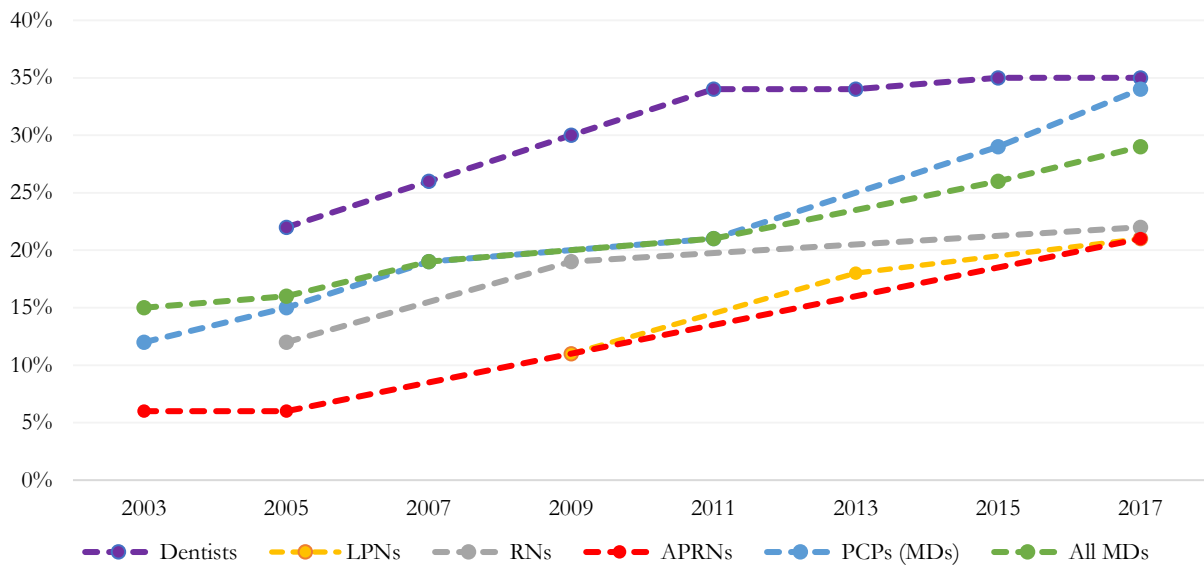
⁴ Vermont Health Care Association Workforce Survey, October 2019

In a survey of all 10 home health agencies, 386.5 vacant nursing FTEs were reported. This translated into vacancy rates of 23% for RNs, 23% for LPNs, 27% for LNAs, and 26% for PCAs. Home health agencies also struggle to retain staff with turnover rates of 22% for RNs, 20% for LPNs, 40% for LNAs, and 50% for PCAs.⁵

Mental health, substance use, and developmental disability providers report similar challenges. A survey of all 16 Designated and Specialized Service Agencies (DA/SSAs) found vacancy rates of 12% for bachelor’s level clinicians, 11.3% for master’s level non-licensed clinicians, and 18.6% for master’s level licensed clinicians. DAs and SSAs also reported turnover rates of 28% for developmental service positions, 26% for mental health positions, and 24% for administrative staff.⁶

These trends are expected to continue as a greater percentage of Vermont’s health care workforce nears retirement age. See the chart below to see the growing percentage of LPNs, RNs, APRNs, and Primary Care Physicians over the age of 60.^{2,7}

Percentage of Health Care Workforce over Age 60 (By Profession)



Unlike other industries, health care providers cannot reduce staffing levels, cut hours, or install self-checkout kiosks. Providers often have minimum staffing requirements they must meet, and they must provide quality care. Despite increased wages and other incentives to recruit and retain staff, workforce shortages persist.

Given these challenges, providers are increasingly reliant on third party agency and traveling health care providers. Data from the Vermont Department of Vermont Health Access (DVHA) Division of Rate Setting, the Vermont Department of Disabilities, Aging and Independent Living (DAAIL), and the Vermont Association of Hospitals and Health Systems illustrate this trend. In FY19, 11 of 15 Vermont hospitals reported spending \$55.6 million on traveling staff (nurses, technicians, locum tenens). This was a 111% increase from FY15. Vermont nursing homes spent \$12.2 million on traveling nurses in FY18. This was a 158% increase from FY14. In FY19, Vermont home health agencies spent \$10.5 million on contracted services (including labor). This was a 20.2% increase from FY14.

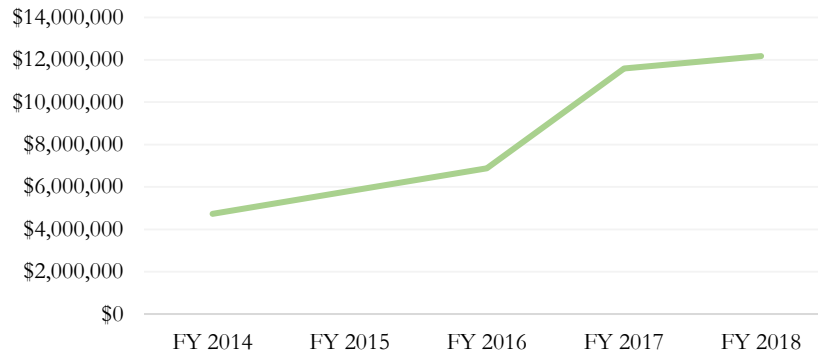
⁵ VNAs of Vermont, Bayada Workforce Survey, October 2019

⁶ Vermont Care Partners Workforce Survey – September 2019

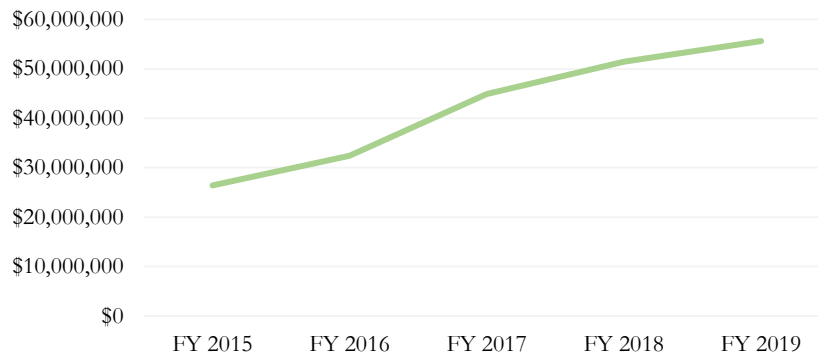
⁷ <https://www.healthvermont.gov/health-statistics-vital-records/health-care-systems-reporting/health-care-workforce>

With traveling staff costing an estimated twice the amount of employed staff, this is a significant expense to providers and ultimately payers (see charts below for traveling staff spend by year).^{8,9,10}

Vermont Nursing Home Spend on Traveling Nurses

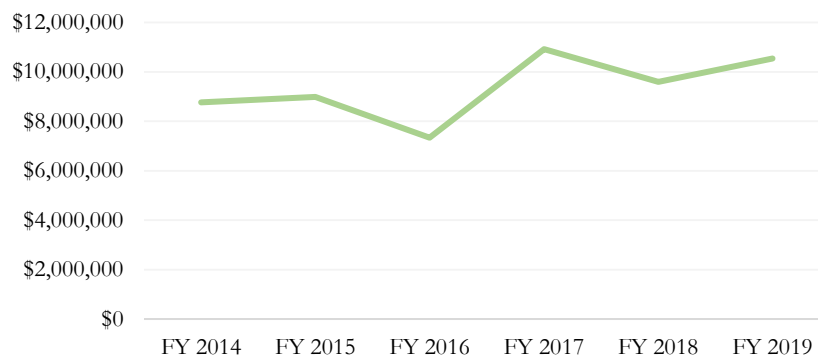


Vermont Hospital Spend on Traveling and Temporary Staff



*Includes data from 11 of 15 Vermont hospitals

Vermont Home Health Agency Spend on Contracted Services



⁸ Vermont Association of Hospitals and Health Systems Survey – October 2019

⁹ Division of Rate Setting, Vermont Agency of Human Services – November 2019

¹⁰ Department of Disabilities, Aging, and Independent Living – November 2019

Bottlenecks and Challenges:

Vermont's health care workforce crisis is driven by several immediate factors. These include:

- **Tight National and Local Labor Market** – The labor market for health professionals is a national market. Vermont providers are competing with high-paying major metropolitan areas for in-demand licensed professionals.

Vermont's unemployment rate is historically low at 2.2%. Providers are competing with each other, the State and other economic sectors, for a limited labor force.

- **Aging workforce** – Vermont's health care workforce is aging: 36% of primary care physicians are over age 60, as compared with 29% in 2014, 19% in 2008, and 9% in 2002¹¹; 25% of primary care ARPNs are over age 60; and 21% of LPNs are over age 60.
- **Provider burnout** – Provider's cite physician and nurse burnout as a major factor in retaining workforce.
- **Rising higher education costs** – Nationally, medical school tuition has risen 56% for in-state public school, and 47% for private schools since 2009. At the University of Vermont Larner College of Medicine, Vermont's only medical school, tuition is \$37,070 for in-state students and \$64,170 for out-of-state students. This is above the national average in-state/out-of-state tuition of \$31,905/\$55,291 for public medical schools.^{12,13}

The cost of nursing school has also risen significantly. At the University of Vermont, tuition for a BSN has risen 48% since 2009. At Castleton University, nursing school tuition has risen 85% for in-state students. This exceeds the national average of a 37% increase for in-state public schools, and 26% rise for private schools over the past decade.¹⁴

Dental school tuition has followed this trend as well, rising 77% for in-state public school, and 58.9% for private school since 2009. In 2019, the national average tuition for dental school is \$53,002 for in-state and \$69,905 for out-of-state.¹⁵

- **Limited educational capacity** – Vermont lacks the educational capacity to meet its health care workforce needs. In 2018, 168 BSN and 125 ADN students graduated from Vermont nursing programs. This number falls far below the needs highlighted in the VTPM survey and provider vacancy data. Education programs cite a lack of physician preceptors and clinical nurse educators as a barrier to increasing enrollment.

Vermont Technical College offers the state's only dental hygienist program. The most recently available data indicates that the program graduated 26 students in 2015.

Recent state college and program closures including Green Mountain College, Southern Vermont College, Marlboro College, College of St. Joseph and the University of Vermont's Psychiatric-Mental Health Nurse Practitioner program further shrink Vermont's educational capacity. Providers also cite a lack of online programming as a barrier to education, particularly for prospective students in rural areas.

¹¹ <https://www.healthvermont.gov/sites/default/files/documents/PDF/phys16bk.PDF>

¹² <https://www.aamc.org/>

¹³ https://www.uvm.edu/studentfinancialservices/uvm_robert_larner_md_college_medicine_tuition_and_fees

¹⁴ <https://www.cnbc.com/2017/11/29/how-much-college-tuition-has-increased-from-1988-to-2018.html>

¹⁵ <https://www.ada.org/en/science-research/health-policy-institute/dental-statistics/education>

- **Insufficient Medicaid rates** – Medicaid rate increases do not cover the cost of wage increases providers must pay to retain their staff.
- **Broader economic development challenges** – Beyond the immediate factors, broader economic development issues plague Vermont’s workforce development. Providers cite a number of barriers to recruiting prospective employees including:
 - A lack of affordable, high quality housing
 - A lack of affordable childcare
 - Limited transportation options
 - A lack of employment opportunity for spouses

Actions Taken To Date:

Provider Best Practices:

Under these pressures, Vermont providers have been innovative in improving their workforce recruitment and retention. The examples below illustrate the strategies providers have taken to combat Vermont’s workforce challenges.

- **Increased Wages**
 - To compete in this tight labor market, providers have increased wages. See the data below on the statewide average wages of Vermont nurses by license type.¹⁶

Mean Hourly Wage by License Type														
	2008		2010		2012		2014		2016		2018		% Inc. 2014	% Inc. 2008
	Mean	% Inc.	Mean	% Inc.	Mean	% Inc.	Mean	% Inc.	Mean	% Inc.	Mean	% Inc.		
RNs	\$29.14		\$30.39	4.29%	\$30.46	0.23%	\$30.92	1.51%	\$32.59	5.40%	\$33.25	2.03%	7.54%	14.10%
LPNs	\$19.38		\$20.09	3.66%	\$20.38	1.44%	\$21.36	4.81%	\$22.50	5.34%	\$23.91	6.27%	11.94%	23.37%
LNAs	\$12.41		\$12.07	-2.74%	\$12.51	3.65%	\$12.84	2.64%	\$13.76	7.17%	\$14.77	7.34%	15.03%	19.02%

- Non-nursing workforce have also seen increases in wages. Through state appropriations in Act 85 (2017), Act 11 (2018) and Act 72 (2019), the designated agencies have been able to increase starting pay for direct-care staff to \$14/hour.

- **Other Financial Incentives**
 - Sign-on bonuses to all types of professions
 - Matching funds for AHEC’s loan repayment program
 - Training costs for LNAs and tuition reimbursement for nurses
 - Paid time off offered to all nursing professions
 - Higher reimbursement for nighttime and weekend shifts
 - Internships opportunities for students enrolled in advance degree programs
 - Referral bonuses

¹⁶ <https://www.bls.gov/bls/blswage.htm>

- **Provider and Higher Education Collaboration**

- Northwestern Medical Center, Vermont Technical College, and the Community College of Vermont
 - Northwestern Medical Center, Vermont Technical College (VTC), and the Community College of Vermont (CCV) are establishing a new training program in St. Albans that will expand VTC's nursing program by 18 practical nursing and 27 associate degree seats.
- Central Vermont Medical Center (CVMC), VTC, and CCV
 - Central Vermont Medical Center, in partnership with the Community Colleges of Vermont and the Vermont Technical College is launching a new workforce development program aimed at addressing the shortage of nurses in Vermont. This initiative creates an LNA to LPN bridge program. LNAs employed at CVMC will be able to become LPNs.
- Brattleboro Memorial Hospital and CCV
 - Brattleboro Memorial Hospital developed a partnership with CCV by creating an accelerated Medical Assistant program that fast-tracks students interested in health care by providing an opportunity to become a Medical Assistant working in an outpatient practice.
- Lamoille County Partnership – Morrisville LPN program through Vermont Technical College and Northern Vermont University
 - A multi-faceted local workforce development group launched an Associate Degree in Nursing program Lamoille County. A Rural Utilities Service (RUS) grant funded the installation of interactive videoconferencing studios for distance education. The workforce development group included representatives from Vermont Technical College, Northern Vermont University/Johnson State College (JSC) Distance Education Programs, Copley Hospital, The Manor Nursing Home, Green Mountain Technical & Career Center, Lamoille Home Health & Hospice, VNAs of Vermont, Morrisville After School Program, and the Lamoille Region Chamber of Commerce

- **Unique Provider Examples**

- Southwestern Vermont Health Care – RN Tuition Reimbursement
 - Southwestern Vermont Health Care (SVHC) developed a partnership with Castleton University's Nursing Program. SVHC offers RN positions to students that commit to working at SVHC when they complete their program. In exchange for the commitment, SVHC offers up to full tuition reimbursement.
- Brattleboro Memorial Hospital – Shared Staffing Models
 - Brattleboro Memorial Hospital established a post-acute care service. Following a discharge from BMH, a clinician team addresses the care environment for patients from the time of discharge from acute care to the admission at a skilled nursing facility. The collaboration between hospitals and post-acute care providers improves efficiency and care quality.
- Brattleboro Memorial Hospital – Medical Scribes
 - Brattleboro Memorial Hospital offers onsite training to their medical assistants to become medical scribes. Scribes work with clinicians by transcribing a patient's visit, as well as placing orders for tests, referrals, and medications, at the clinician's direction. The program offers a promotional opportunity for medical assistants while also reducing clinician administrative burden.
- Birchwood Terrace Rehab and Healthcare Nursing Home – RN Tuition Paid Upfront
 - Birchwood Terrace Rehab and Healthcare offers to pay their existing staff's tuition to attend an RN program at VTC. In exchange for tuition, staff must commit to working two years at the facility after completing their degree.

- Bi-State Primary Care Association – Recruitment Center
 - The Recruitment Center at Bi-State Primary Care Association conducts national outreach to promote Vermont practice opportunities in primary care, oral health, mental health, and substance use disorder treatment. The Recruitment Center uses local advertising and national strategic marketing campaigns to reach clinicians who will thrive in Vermont’s rural communities. They provide technical assistance to providers on employee recruitment and onboarding, including assistance with National Health Service Corps and other loan repayment programs. The Center has recruited 529 providers to VT and NH, including family physicians, APRNs, psychiatrists, physician assistants, general internists, and dentists. Bi-State has additionally graduated 212 students from its leadership development program designed to support collaboration between health centers in fostering the next generation of health care leaders.
- Southwestern Vermont Health Care – Family Medicine Residency
 - SVHC is developing a family medicine residency. The three-year program will begin in 2022 with four residents. By 2025, SVHC plans to expand the program to 12 residents. Literature suggests residency programs increase physician retention rates.

Government and Non-Profit Organization Initiatives:

- **Area Health Education Centers (AHEC) and Loan Repayment**

- The Vermont Area Health Education Centers (AHEC) Program, in collaboration with many partners, hosts several initiatives focused on Vermont health care workforce development. These initiatives include: pipeline programs in health careers awareness and exploration for youth in communities across the state; support for and engagement of health professions students at the University of Vermont and residents at The University of Vermont Medical Center; physician placement services; and health care workforce research and data analysis. AHEC receives \$562,000 in program funding from the Department of Health.
- AHEC also administers the Vermont educational loan repayment program for health care professionals. The program receives both Federal and State funds. Public funds are matched by employers to offer health professionals loan repayment in exchange for a two-year commitment.
- AHEC’s loan repayment has proven to be an effective tool in retaining health care workforce. **AHEC reports that 94% of the 233 unique awardees are still working in Vermont today.**

- **Grants and Scholarships**

- The Vermont Student Assistance Corporation (VSAC) distributed \$17.5 million in need-based grants in FY19 to Vermont students through the Vermont State Grant program. Health professions are the second highest ranking category of college majors listed by students receiving this grant.
- VSAC pioneered the first nondegree grant program in the United States in 1982 (renamed the Advancement Grant in 2019), a need-based program to ensure that unemployed Vermonters had affordable access to training and education that would ultimately lead to employment. The program provides need-based grants to post-traditional students, who are trying to improve their employability by either gaining specific job skills through a training program or through higher education. In FY19, there were 1,511 Advancement Grants awarded, worth \$2.66 million, or an average of \$1,762 per student. Of the FY19 awards, 109 students pursued LNA training using the Advancement Grant. The Vermont Legislature approved a one-time increase of \$500,000 to the Advancement Grant program for FY20.

- VSAC annually administers \$50,000 in nursing and \$50,000 in dental scholarships on behalf of the Vermont Department of Health. Nine students received these scholarships in FY19.
- The new Credentials of Value scholarship program from The Curtis Fund, managed by VSAC, will provide an additional \$125,000 for career training in a promising careers field as identified by the McClure Foundation and the Vermont Department of Labor, including a dozen health care career positions. The Credentials of Value scholarship program anticipates funding 100 recipients each year.¹⁷
- In Act 72 (2019), Vermont allocated \$1.5 million to establish a loan repayment program for mental health and substance use disorder treatment professionals. The program is directed towards master’s-level clinicians, bachelor’s-level direct service staff, and nurses that are employed by a designated or specialized service agency in Vermont. There is ongoing discussion regarding program administration.¹⁸

- **Medication Nursing Assistants**

- In Act 38 of 2015, the Legislature established medication nursing assistant (MNAs) as a new type of nursing license.¹⁹
- MNAs are LNAs that can administer medication in a nursing home under the direction of a registered nurse.
- With the appropriate use of MNAs, nursing homes can more effectively utilize LPN and RN resources to provide care.

- **Dental Therapists**

- In Act 161 of 2016, the Legislature established Dental Therapists as a new professional license.²⁰
- Dental Therapists are between a Dentist and Dental Hygienist in the professional hierarchy and are able to perform a limited range of dental services.
- Vermont Technical College is in the process of developing a dental therapist program.

- **Interstate Medical Licensing Compact**

- Act 253 (2018) mandated that Vermont join the Interstate Medical Licensing Compact.
- The Compact is a multi-state agreement that establishes an additional pathway by which a qualifying physician can obtain a license more quickly and with much less effort than the standard process. Joining the compact allows physicians working in member states to easily transfer their license to Vermont. It also allows physicians to use telemedicine in several jurisdictions without having to obtain multiple licenses through individual state processes.
- The Office of Professional Regulation (for D.O.s) and the Board of Medical Practice (for M.D.s) will be implementing the Compact in early 2020.

- **Direct Pathway for Military Medics to become Licensed Nurse Assistants**

- Act 119 of 2018 established a direct pathway for military medics to become licensed nursing assistants (LNA). Military medics can now qualify as a Licensed Nursing Assistant (“LNA”) if they

¹⁷ <https://www.vsac.org/>

¹⁸ https://lifo.vermont.gov/assets/Uploads/d86df7d21e/FY20-Budget-Request-for-AHEC-Info-2019_03_07.pdf

¹⁹ <https://legislature.vermont.gov/Documents/2016/Docs/ACTS/ACT038/ACT038%20As%20Enacted.pdf>

²⁰ <https://legislature.vermont.gov/Documents/2016/Docs/ACTS/ACT161/ACT161%20As%20Enacted.pdf>

have proof of completing a hospital corpsman or medical service specialist training from the Air Force, Army, or Navy (certificate or DD 214).²¹

- **Data Collection**

- Several State agencies and a private entity collect statewide workforce data. These sources include:
 - Department of Labor: Economic & Labor Market Information Division
 - Department of Health: Health Statistics and Vital Records
 - UVM Larner College of Medicine: Area Health Education Center (AHEC)
 - Secretary of State: Office of Professional Regulation

- **Commissioned Studies**

- Act 48 (2011) Health Care Workforce Strategic Plan
- Act 82 (2017) Mental Health, Developmental Disabilities, and Substance Use Disorder Workforce Report

- **Department of Labor Recruitment Initiatives**

- The Vermont Department of Labor (DOL) has developed a comprehensive approach to expand Vermont's labor force. DOL's strategies include:
 - Increasing the labor participation rate of Vermonters through expanding youth and adult training opportunities.
 - Recruiting and retaining more workers to Vermont through targeted outreach, military base outreach, and relocation assistance.
 - Assisting employers in accessing and retaining qualified workers, by improving Vermont's online labor exchange.
- The Vermont Department of Labor also administers the Vermont Registered Apprenticeship Program.
 - The program is an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, classroom instruction, and a portable nationally recognized credential.
 - Act 80 (2019) appropriated an additional \$275,000 to expand this program.²²

²¹ <https://legislature.vermont.gov/bill/status/2018/H.906>

²² <https://labor.vermont.gov/apprenticeship>

Recommended Solutions:

Given the current crisis and anticipated future demand of health care workers, additional policy changes are needed. The following solutions include licensing and other regulatory changes, continued collaboration with higher education, financial incentives, and new state initiatives.

Occupational Licensing Reforms:

The most significant needs in Vermont's health care workforce are licensed positions including MDs, APRNs, RNs, LPNs, and LNAs, as well as unlicensed PCAs. The following proposals seek to appropriately reduce barriers that prevent individuals from obtaining licensure.

- **Enter the Interstate Nurse Licensure Compact**
 - Act 82's (2017) workforce report highlighted occupational license streamlining as a "highly effective" strategy to increase health care workforce recruitment and retention. The report specifically noted portability as an important policy consideration. Joining the Interstate Nurse Licensure Compact (NLC) would improve the portability of a registered nursing license, allowing more out-of-state nurses to move to and be employed in Vermont. The nurse compact requires states to conduct background checks of all RNs/LPNs.²³
 - 33 states have passed legislation to implement the NLC, including Maine and New Hampshire.
 - The Office of Professional Regulation's (OPR) conducted a survey of Vermont nurses to gauge interest in the NLC. The survey found that 59% of nurses were supportive of Vermont joining the NLC; 25% of nurses were opposed.²⁴

- **Change clinical faculty requirements**
 - Vermont has an insufficient number of nurse educators, which contributes to enrollment limits for nursing programs. In 2018, Vermont Technical College was able to accept only 62.5% of qualified applicants to their LPN program.²⁵
 - Current Board of Nursing rules require clinical nurse educators in RN programs to hold:
 - 1) a master's degree in nursing (MSN); or
 - 2) a bachelor's degree in nursing (BSN) and a graduate degree in a related field approved by the Board; or
 - 3) a bachelor's degree in nursing and be enrolled in a graduate program in nursing or a related field approved by the Board which must be completed within 3 years of initial faculty appointment; and
 - 4) have clinical experience relevant to the areas of instruction.²⁶
 - Due to the low supply of nurses that meet these criteria, nursing education programs struggle to find instructors. Without enough instructors that meet this requirement, education programs are unable to accept all qualified applicants.
 - Allowing nurses that possess a BSN and have relevant experience to serve as a clinical instructor could address this faculty shortage and expand the available pipeline of nursing talent.

²³ <https://legislature.vermont.gov/assets/Legislative-Reports/Act-82-Sec.9-Workforce-Report.pdf>

²⁴ <https://legislature.vermont.gov/assets/Legislative-Reports/Vermont-NLC-Survey-Report-Final.pdf>

²⁵ VTC 2018 Admissions Data, October 2019

²⁶ <https://www.sec.state.vt.us/media/656823/Adopted-Clean-Rules-Dec-23-2014.pdf>

- The Office of Professional Regulation’s Obstacles to Recruitment and Retention of Qualified Nurse Educators Report (2019) recommends relaxing Board of Nursing rules on faculty qualifications to facilitate recruitment and retention of nurse faculty.²⁷
 - Other New England states, including Massachusetts and Maine have created pathways for BSN level nurses to be instructors.^{28,29}
- **Create a pathway for Military Medics to become a Licensed Practical Nurse (LPN)**
 - Act 119 of 2018 established a direct pathway for military medics to become licensed nursing assistants (LNA). To expand upon this initiative, the Legislature should create a similar direct pathway for military medics to become Licensed Practical Nurses (LPN).
 - Other states, such as Illinois, have developed a Medical Corpsman to Practical Nurse bridge program (2013). Students who complete the Medical Corpsman to Practical Nurse Program are eligible to sit for the national Practical Nurse Licensing Exam. Approved bridge programs are now offered at three colleges in Illinois.³⁰
- **Remove statutory barriers to physician assistant employment**
 - Amend state law to replace the current requirement for physician assistants (PAs) to have a delegation agreement with a licensed physician with a requirement for PAs to enter practice agreements with participating physicians in all settings in which they provide services in order to practice; and
 - Eliminate a physician’s legal liability for the conduct of the PA based solely on the existence of a practice agreement.
- **Mental health clinician licensing requirements**
 - Several DAs and SSAs use the Relias online program to train staff. Aligning licensing and credential requirements with the content of this national education program would reduce barriers to licensure.
- **Accept PGY-1 Licenses as an immediate pathway to licensure of dentists**
 - In lieu of a clinical licensure examination, some states allow dentists to become licensed through a post-graduate residency (PGY-1) at an accredited postdoctoral program. The PGY-1 is the only path to licensure in Delaware and New York. It is an optional pathway in Minnesota, California, Colorado, and Ohio.
 - Current Vermont Board of Dental Examiners rules require that a dentist that obtained their license via PGY-1 may only attain a Vermont license if they have practiced full-time for a minimum of five years in another state.
 - Removing the 5-year requirement on dentists who have successfully completed PGY-1 would open the door for dentists who are licensed in other PGY-1 states, including neighboring New York, without compromising standards for clinical preparation.³¹

²⁷ <https://legislature.vermont.gov/assets/Legislative-Reports/Nurse-Educator-Report-2019-12-15-corrected.pdf>

²⁸ <https://www.mass.gov/files/documents/2016/07/vv/244cmr604-2b.pdf>

²⁹ <https://www.maine.gov/boardofnursing/docs/Chapter%207%20Regulations%20for%20Approval%20of%20Prelicensure%20Nursing%20Program-Revised.pdf>

³⁰ <https://www.illinois.gov/veterans/xxprograms/Pages/StateLicensesMilitaryTraining.aspx>

³¹ <https://www.ada.org/en/education-careers/licensure/licensure-dental-students/licensure-pathways>

- **Explore licensing pathways for Foreign Dentists**
 - Other states including Massachusetts and New York have created a limited license pathway for foreign-trained dentists. Limited licensure requires that an individual works under supervision of a fully licensed dentist for a set amount of time before that individual can be eligible for an unrestricted license.
- **Explore licensing pathways for Foreign Physicians**
 - Providers cite the difficulty in obtaining licensure as a barrier to recruiting foreign physicians. Vermont should explore creating pathways to licensure to utilize this potential labor force.
- **Explore joining the Psychology Interjurisdictional Compact (PSYPACT)**
 - The Psychology Interjurisdictional Compact is a professional licensing compact for psychologists. There are currently eleven states that have joined. New Hampshire joined the compact in 2019.

Higher Education Reforms:

- **Lower the minimum age of admission for an LPN program**
 - Vermont Technical College is the only LPN program in Vermont. Admittance to the program requires LPN students to be at least 18 years old. Lowering this age requirement to 17 years old will allow future Vermont nurses to enter the workforce soon after graduating high school.
 - Other states, including Massachusetts and New York, offer “secondary” and “secondary extended” programs for high school students.
 - Lowering the age will allow high school students to access VTC’s LPN program through dual enrollment, significantly reducing the cost burden on these students.
 - This proposal does not require legislation or rule change.
- **Re-open the University of Vermont’s Psychiatric-Mental Health Nurse Practitioner (PMHNP) Program**
 - Psychiatric Mental Health Nurse Practitioners (PMHNPs) are an advanced practice registered nurse (APRN) who has an advanced education and board certification to assess the mental health needs of communities, individuals, and groups.
 - The University of Vermont College of Nursing and Health Sciences proposed re-opening their Psychiatric-Mental Health Nurse Practitioner (PMHNP) Program using \$2.2 million in state funds. The State set aside \$5 million in funds to make strategic investments to expand Vermont’s substance use disorder treatment and mental health professionals. To date, the Legislature has appropriated only \$1.5 million of this funding.
 - The appropriation would fund tuition scholarships, student stipends, program staffing, and faculty oversight. This funding would train 20 new PMHNPs. Graduates of the program would be required to provide at least three years of service in Vermont. There are currently 57 recognized PMHNPs in Vermont.
 - Re-opening this program would increase Vermont’s prescribing mental health workforce.

- **Expand Apprenticeship programs for non-degree allied health careers**
 - Allied health careers include non-degree professions including medical assistants, dental assistants, and phlebotomists. These non-degree professions typically require completion of a certificate program, followed by on-the-job training.
 - While these professionals cannot replace licensed staff, they fulfill critical administrative and clinical tasks, allowing other co-workers to perform at the top of their license.
 - In Act 80 (2019), \$275,000 was appropriated to the Vermont Department of Labor to expand the Registered Apprenticeship program. Further expansion of the DOL apprenticeship program, with an emphasis on these non-degree health care careers would allow more providers to access the program.³²

Financial Incentives:

In addition to reducing regulatory barriers to address bottlenecks in Vermont's health care workforce pipeline, financial incentives are needed to both encourage licensed professionals to come to Vermont and to retain our current workforce. Many states have implemented generous financial incentives to address their respective workforce and demographic challenges. To remain competitive, Vermont needs to be bold in attracting this highly indebted, and in-demand workforce.

- **Increase scholarship funding**
 - Whereas loan repayment is an effective tool for recruiting graduates of medical, dental, and nursing programs, scholarships are an incentive for prospective students, as they prevent individuals that are considering entering these careers from incurring loans in the first place.
 - VSAC's nursing and dental scholarship is funded through a \$100,000 grant by the Department of Health. In 2019, this funding provided scholarships to nine students.
 - Vermont Incentive Grant – VSAC's Vermont Incentive Grant is a \$1000 - \$12,300 annual award for Vermont residents enrolled in an undergraduate degree or the MD program at the Larner College of Medicine at the University of Vermont. In FY20, 95 awards were made to students at the Larner College of Medicine.
 - Increasing the funding for these programs will allow more prospective physicians, dentists and nurses to access these incentives.
 - Collaborate with UVM Larner College of Medicine to provide financial support to preceptors and a scholarship program for medical students in return for a commitment to work in primary care in Vermont.

³² <https://legislature.vermont.gov/bill/status/2020/H.533>

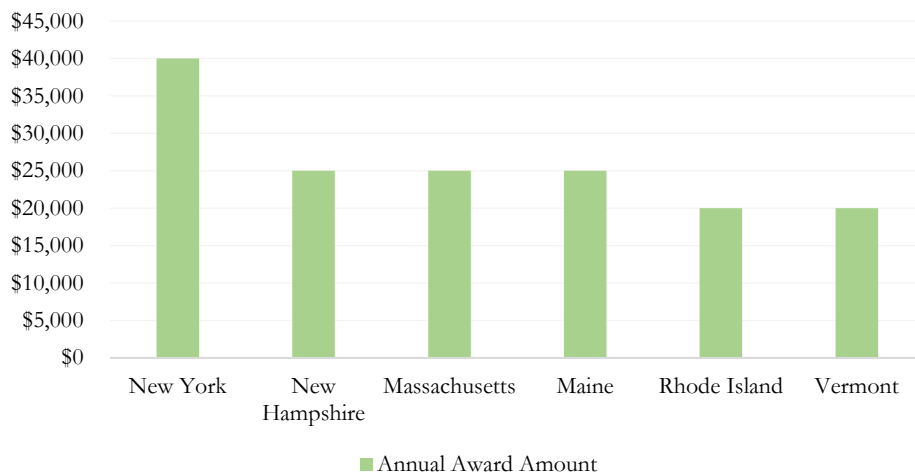
- **Increase loan repayment funding**

- As educational debt rises for future health professionals including MDs, APRNs, RNs, LPNs, Dentists, and licensed mental health professionals, so does the need for a substantial loan repayment program. Vermont’s funding of the loan repayment program has been level-funded since 2012. Despite an increase in Federal grant dollars in FY15, total funding has remained stagnant. See the table below for detail.

AHEC Loan Repayment Funding									
	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19 (P)	FY20 (B)
Fed				\$426,033	\$250,000	\$250,000	\$220,000	\$212,500	\$212,500
GC	\$870,000	\$870,000	\$970,000	\$970,000	\$667,141	\$667,111	\$667,111	\$667,111	\$667,111
Total	\$870,000	\$870,000	\$970,000	\$1,396,033	\$917,111	\$917,111	\$887,611	\$879,711	\$879,111

- AHEC’s administrative funding has been level funded since FY06 (\$562,000/year). This funding supports the administration of the loan repayment program in addition to AHEC’s other workforce programs.
- AHEC loan repayment has proven to be a successful tool in retaining staff. 94% of awardees still work in Vermont today.
- Stagnant funding limits the size of loan repayment awards, and the number of unique awards granted each year.
 - AHEC’s Loan Repayment program is highly competitive and limited. In 2019, only 59% of applicants received awards. Loan repayment dollars have largely been allocated to MDs and APRNs. While there is certainly a tremendous need for these professions, limited funding is available to RNs and LPNs. Between FY15-18, only \$400,000 was awarded (\$100,000 each fiscal year), assisting 57 nurses (with 88 total awards) in that time period.
 - Vermont’s total maximum award to physician’s is \$20,000/year for up to two years. This ranks near the bottom when compared to other Northeastern states. State awards vary in the length of contract commitments from two to four years. Most states allow awardees to reapply for additional awards. Vermont’s award is a two-year commitment and awardees can reapply up to two additional times. See chart below for a comparison of the maximum annual award amounts by state.

Maximum Annual Award Amounts by State



- Other New England states have made large investments into their loan repayment programs. In their FY20-21 budget, New Hampshire appropriated \$6.5 million into their health professional loan repayment program.³³
- Increasing the AHEC Loan Repayment program and AHEC administrative support will allow more health care professionals to access this effective program.³⁴

- **Implement tax incentives**

- Increase the Earned Income Tax Credit (EITC) for eligible Vermonters employed in the health care sector. This will incentivize entry into lower level, essential positions, including but not limited to PCAs, LNAs, designated mental health agency direct support professionals, and others.
- Implement tax incentives to attract and retain all other workforce, as several states have already done:
 - Opportunity Maine Tax Credit:
 - Maine implemented the Opportunity Maine Tax Credit began in 2008. Maine graduates that recently graduated college can claim a tax credit based on the amount they owe in loans each month. Since the program's inception, tens of thousands of young Maine residents have utilized the tax credit. In 2017 alone, 9,000 residents claimed over \$17 million in tax savings.³⁵
 - Maine Tax Credit for Primary Care Professionals
 - The Maine Primary Care Professional Tax Credit program allows up to ten eligible primary care physicians, physician's assistants, and nurse practitioners to receive a tax credit for practicing in an eligible underserved area. Successful applicants may participate in this program for a maximum of five years depending on continued eligibility. The income tax credit claimed may not exceed \$6,000 in the first year of certification; \$9,000 in the second year; \$12,000 in the third year; \$15,000 in the fourth year; and \$18,000 in the fifth year. DHHS will submit the names of the certified individuals to the Maine Revenue Services that manages the income tax credit through the certified professional's annual income tax return.³⁶
 - Oregon Rural Health Tax Credit:
 - In 1989, Oregon implemented a non-refundable tax credit of up to \$5,000 to physicians, physician's assistants, and nurse practitioners that practice in a rural setting.
 - Oregon's Legislative Revenue Office evaluated the tax credit in 2015. Their review found that the number of rural providers per 1000 people increased from 1.2 in 2001, to 1.7 in 2014. From 2005 to 2012, the number of claimants grew 16%.
 - A survey conducted by the Oregon Office of Rural Health found that 78% of respondents indicated that the tax credit was "important" or "very important" in their decision to practice in rural Oregon.³⁷

³³ http://gencourt.state.nh.us/bill_status/billText.aspx?sy=2019&id=1336&txtFormat=pdf&v=current

³⁴ https://ljfo.vermont.gov/assets/Uploads/d86df7d21e/FY20-Budget-Request-for-AHEC-Info-2019_03_07.pdf

³⁵ <https://www.liveandworkinmaine.com/opportunity-maine/>

³⁶ <https://www.maine.gov/dhhs/mecdc/public-health-systems/rhpc/>

³⁷ <https://www.oregonlegislature.gov/lro/Documents/RR%202-15%202016%20Expiring%20Tax%20Credits%202.pdf>

Maximize Existing Workforce:

- **Remove telehealth barriers**

Telehealth has the potential to improve patient access and overcome Vermont's workforce shortage. By increasing the efficiency and extending the reach of existing providers, telehealth can maximize the ability of providers to meet Vermonters' needs. Several regulatory barriers limit telehealth's current usage in Vermont. The following proposals seek to remove these barriers where appropriate.

- Remote patient monitoring
 - Current Agency of Human Services rules limit telemonitoring coverage to congestive heart failure. AHS should expand coverage of telemonitoring to include other diseases and conditions, such as chronic obstructive pulmonary disease (COPD), asthma, and diabetes. Another option is to allow monitoring whenever clinically appropriate. The State of New York recently adopted rules to expand telemonitoring to cover diabetes, chronic obstructive pulmonary disease, wound care, polypharmacy, mental or behavioral problems, and technology-dependent care such as continuous oxygen, ventilator care, total parenteral nutrition, or enteral feeding.
- Store and forward e-consults
 - Current AHS rules limit store and forward coverage to teledermatology and teleophthalmology. AHS and commercial payers should expand coverage of Store and Forward telemedicine and align their rules with Medicare. Other options include expanding to teledentistry or to cover consultations or other services between primary care and specialty care providers.
 - California, Georgia, and Minnesota have all expanded store and forward coverage to teledentistry.
 - Alaska reimburses diagnostic, therapeutic, and interpretive services along with psychotherapy or pharmacological management services.
- Accountable Care Organization (ACO) waiver
 - Currently, the All Payer ACO Model allows for expanded use of telemedicine, similar to how Medicare's Next Generation ACO program does. Through the APM or future negotiated agreements, this waiver could be expanded to support primary care and mental health at skilled nursing facilities.
- Maintain VPQHC funding
 - Current efforts to plan for telehealth are funded through section 9416 statutory funding through a contract with the Vermont Program for Quality in Health Care (VPQHC). Continued funding is necessary to support these efforts into the future.

- **Reduce administrative burden**

- Streamline quality measures and create additional administrative uniformity
 - Provider performance is measured by several metrics, and often differ by each payer. The large number of quality measures, with reporting requirements that may vary by payer, can create substantial administrative burden and make it difficult for providers to focus on improvement efforts.
 - A number of steps can be taken reduce this burden on providers, including:
 - Continuing steps to standardize the definitions and calculations for quality metrics used by the federal and state government entities, insurance payers, accountable care

- organizations and others with the goal of ultimately adopting uniform statewide or national standards for quality data.
 - Eliminating reporting requirements where there is a lack of documented evidence supporting their benefit to improve quality and/or reduce costs.
 - Shifting to the use of quality data reported through accurate claims data rather than clinician submission.
 - Create administrative uniformity by payers, for example, with respect to treatment and management of the same condition and the payment by payers of adequate case management fees to clinicians for services relating to coordinating and managing the care of patients with chronic conditions.
- Reduce/eliminate prior authorizations
 - Eliminating prior authorization requirements where there is a lack of documented evidence supporting their benefits to improve quality and/or reduce costs.
 - Continue expanding the ACO prior authorization pilot, including expanding to additional payers, so that clinicians can take advantage in practice of reduced administrative tasks.
 - Expand and align between payers “Gold Card” programs, through which clinicians who routinely have prior authorizations approved are exempt from the prior authorization process, thresholds must be meaningful and include both primary care clinicians as well as specialists.

Increase State Recruitment Efforts:

- **Immigration**

Providers can recruit foreign born physicians through the J-1 visa waiver. Each state is allotted 30 J-1 visa waivers each year. Vermont’s J-1 visa program has been underutilized, successfully placing only 39 applicants over the last eight years. Providers also cite challenges with processing visa paperwork for Canadian nurses interested in working in Vermont.³⁸

- Establish a state-led immigration and New American initiative
 - To help employers broaden their workforce search, Vermont should create a centralized immigration service to assist employers and prospective employees navigate Federal immigration law and the employment-based visa process.
 - Ensure New Americans are made aware of job opportunities within the health care system and connect them with potential provider employers. Act 80 of 2019 required that the Department of Labor take several steps to provide support to employers and New Americans in the workforce. Vermont should expand upon these efforts, with a specific focus on health care.³⁹

- **Establish statewide marketing campaign**

- Programs such as tax incentives or loan repayment for health care professionals need advertising to be fully effective. Vermont should, in collaboration with existing recruitment centers and initiatives, market these careers, and the incentives offered by the state, to keep newly licensed professionals in

³⁸ Department of Health, October 2019

³⁹ <https://legislature.vermont.gov/Documents/2020/Docs/ACTS/ACT080/ACT080%20As%20Enacted.pdf>

the state, attract out-of-state healthcare professionals to work in Vermont, and encourage younger residents to pursue these rewarding careers.

- **Make health care workforce a priority**

- Prioritize health care workforce on the Vermont Workforce Development Board
 - The Vermont State Workforce Development Board is established by the federal Workforce Innovation and Opportunity Act. The Board is charged with advising the Governor on the development and implementation of a comprehensive, coordinated, and responsive statewide workforce education and training system.
 - The Board's composition is largely representatives from the manufacturing, construction, and tourism business. Greater representation from the health care providers, higher education, and AHEC could help inform policy focused on the needs of Vermont's health care sector.

Federal Issues:

- **Medicare waiver requests**

Vermont's Medicaid plan credentials several types of master's prepared professionals and covers services from those providers that Medicare does not cover. These include Licensed Alcohol and Drug Counselors, Licensed Clinical Mental Health Counselors, Licensed Psychologists, and Licensed Marriage and Family Counselors. Given the challenges of recruiting a behavioral health workforce and the prevalence of mental health and SU conditions, the Medicare restriction of credentialing only LICSWs and PhD Psychologists limits access to care for Medicare beneficiaries.

- **National Health Service Corps and Nurse Corps programs**

- The National Health Service Corps and Nurse Corps are Federal loan repayment and scholarship programs for health professionals that work in designated Health Professional Shortage Areas (HPSAs), Federally Qualified Health Centers (FQHCs) and Rural Health Clinics.
- Both programs prioritize areas with the highest HPSA scores. HPSA scores are based on a number of factors including physician to population ratio, travel time to the nearest source of care, and poverty level.
- Only one nurse is a Nurse Corps member in Vermont (out of 2034 nationally)
- Only 16.71 FTEs are National Health Service Corps members in Vermont (out of 10,341 nationally)
- Further research should be conducted to determine why Vermont is unable to utilize these existing Federal programs.⁴⁰

- **Public Service Loan Forgiveness Program**

- The Public Service Loan Forgiveness Program began in 2007. The program discharges borrowers' remaining federal student loan balance after they make 10 years' worth of payments while working for a government or a nonprofit organization. The first batch of borrowers became eligible for the program in 2017.

⁴⁰ <https://bhw.hrsa.gov/>

- Implementation of the program has been challenging. Less than 1% of borrowers who applied for PSLF have had their loans discharged. 66.7% of applicants were denied for not meeting the program requirements, and 22.4% were denied for missing information on their application.
- Vermont's non-profit providers are eligible employers for the PSLF program. The Department of Education should clarify eligibility requirements so borrowers can better access the program.

- **Increasing the State Loan Repayment Grant**

- The Federal State Loan Repayment Grant Program awards \$18.9 million to 41 states and two US territories. Increasing this federal appropriation to the Vermont State Loan Repayment Program could create a more robust loan repayment system that helps rural providers meet their workforce demands.⁴⁰

- **Federal immigration reforms**

- Raising the H-2B Cap
 - Under the H-2B program, guest workers can enter the United States for up to 10 months and their stay can be extended up to 3 consecutive years. An employer petitioning for guest workers must certify that domestic workers are unavailable and demonstrate that the hiring of foreign workers will not harm the wages and employment of Americans.
 - Permanently increasing the annual cap specifically for nurses, physical therapists, licensed practical or vocational nurses, and certified nurse aides could help alleviate workforce shortages.