

2017 Vermont Health Care Expenditure Analysis

Resident and Provider Perspectives

Presented by

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Introduction

The *Vermont Health Care Expenditure Analysis (VHCEA)* is required under 18 V.S.A. § 9383.

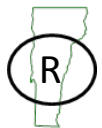
Since 1991, the Board has been tasked with developing an annual expenditure analysis, as well as estimates of future health care spending covering a period of at least two years.

This report:

- Examines trends in spending and sources of funds;
- Compares Vermont data to national data reflected in the National Health Accounts published by the Centers for Medicare & Medicaid Services (CMS); and
- Quantifies total spending for all health care services provided in Vermont for residents and non-residents, and for services provided to Vermonters regardless of site of service.

Notes:

- This symbol is used when a slide is prepared from Vermont resident analysis data. Spending on services provided to Vermont residents, whether for in-state or out-of-state services, is reported from payer data.*
- This symbol is used when a slide is prepared from Vermont provider analysis data. Provider revenues, whether for in-state or out-of-state patients, are reported from provider data.*



Summary

Vermont residents health care spending:

- † Total spending for Vermont residents receiving health care services both in- and out-of-state **increased 1.7% in 2017**. This was lower than the 3.7% increase in 2016 and the average annual increase of 3.2% for the period 2012 through 2017.
- † Commercial insurance spending increased 2.5%, mainly due to increases in Administration & Net Cost of Insurance, Other Professionals, Other Unclassified, and Dentists.
- † Medicare spending increased 0.8% as a result of increases in utilization for Hospitals, Other Professionals, and Administration & Net Cost of Insurance.
- † Medicaid spending decreased 0.2%, mainly due to a decrease in Drugs & Supplies due to higher rebate percentages for specialty drugs, but offset by increases for Mental Health and Other Government Activities.

Vermont has seen a payer shift over time for health care services:

- † For the period 2009 through 2017, the percentage of total resident costs paid by commercial insurers decreased from 38% to 34%, and out-of-pocket spending decreased from 15% to 14%. In contrast, Medicaid grew from 25% to 27%, and Medicare increased from 19% to 21%.



Summary (continued)

Vermont compared to United States:

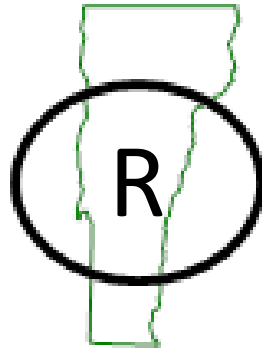
- ✔ Vermont expenditures are compared to U.S. health consumption spending.
- ✔ For 2017, Vermont increased 1.7% from 2016, U.S. health consumption spending increased 3.8%. Vermont was lower than the 3.7% increase in 2016. U.S. spending was lower than the 5.0% increase in 2016.
- ✔ Per person spending (per capita) in Vermont was \$9,667 an increase of 1.8% over 2016. This is lower than the U.S. per person amount of \$10,229.
- ✔ Vermont's health share of Gross Domestic Product is 18.5% compared to the U.S. of 17.1%.

Vermont providers health care revenues received:

- ✔ Health care service revenues received by Vermont providers for in- and out-of-state patients increased 3.3% in 2017. This was slightly higher than the 3.2% increase in 2016 but lower than the average annual increase of 3.8% for the period 2012 through 2017.
- ✔ Growth reported in revenues for Hospitals increased 3.2%; this category includes revenues for hospital-employed physicians.
- ✔ Revenues increased 24.1% for Vision & DME, 7.2% for Home Health Care, 5.5% for Physicians, 3.9% for Dentists, 3.8% for Other Professionals, and 2.8% for Nursing Homes. These increases were offset by a decline of 0.9% for Drugs & Supplies.



2017 Vermont Resident Analysis



Vermont Resident Health Care Expenditures

Summary of Spending Growth by Payer Type and Provider Category

All dollar amounts are reported in millions.

Payers	2012	2013	2014	2015	2016	2017	2016-2017 Annual Change	2012-2017 Average Annual Change
Out-of-Pocket	\$716	\$722	\$722	\$735	\$762	\$776	1.8%	1.6%
Commercial	\$1,857	\$1,892	\$1,920	\$1,846	\$1,971	\$2,021	2.5%	1.7%
Medicare	\$1,081	\$1,120	\$1,195	\$1,280	\$1,301	\$1,311	0.8%	3.9%
Medicaid	\$1,304	\$1,379	\$1,490	\$1,631	\$1,661	\$1,657	-0.2%	4.9%
Other Government	\$181	\$183	\$216	\$223	\$233	\$264	13.0%	7.8%
Total Resident Expenditures	\$5,138	\$5,297	\$5,543	\$5,716	\$5,928	\$6,029	1.7%	3.2%
Annual Percent Change	3.1%	3.1%	4.7%	3.1%	3.7%	1.7%		

Providers & Facilities	2012	2013	2014	2015	2016	2017	2016-2017 Annual Change	2012-2017 Average Annual Change
Hospitals	\$1,963	\$2,005	\$2,050	\$2,161	\$2,075	\$2,100	1.2%	1.4%
Physicians	\$689	\$711	\$739	\$765	\$882	\$877	-0.6%	5.0%
Dentists	\$213	\$222	\$233	\$237	\$244	\$206	-15.5%	-0.7%
Other Professionals	\$165	\$168	\$195	\$210	\$196	\$231	18.1%	6.9%
Home Health Care	\$96	\$104	\$111	\$122	\$142	\$116	-18.5%	3.8%
Drugs & Supplies	\$637	\$638	\$683	\$788	\$773	\$756	-2.1%	3.5%
Vision & DME	\$111	\$119	\$121	\$123	\$119	\$160	34.0%	7.6%
Nursing Homes	\$285	\$285	\$283	\$276	\$292	\$302	3.2%	1.1%
Other Unclassified	\$44	\$50	\$67	\$78	\$72	\$76	5.0%	11.5%
Admin & Net Cost of Health Insurance	\$354	\$354	\$356	\$206	\$366	\$408	11.6%	2.9%
Mental Health & Other Govt Activities	\$581	\$641	\$705	\$751	\$766	\$797	4.0%	6.5%
Total Resident Expenditures	\$5,138	\$5,297	\$5,543	\$5,716	\$5,928	\$6,029	1.7%	3.2%
Annual Percent Change	3.1%	3.1%	4.7%	3.1%	3.7%	1.7%		

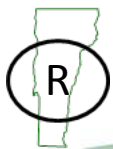
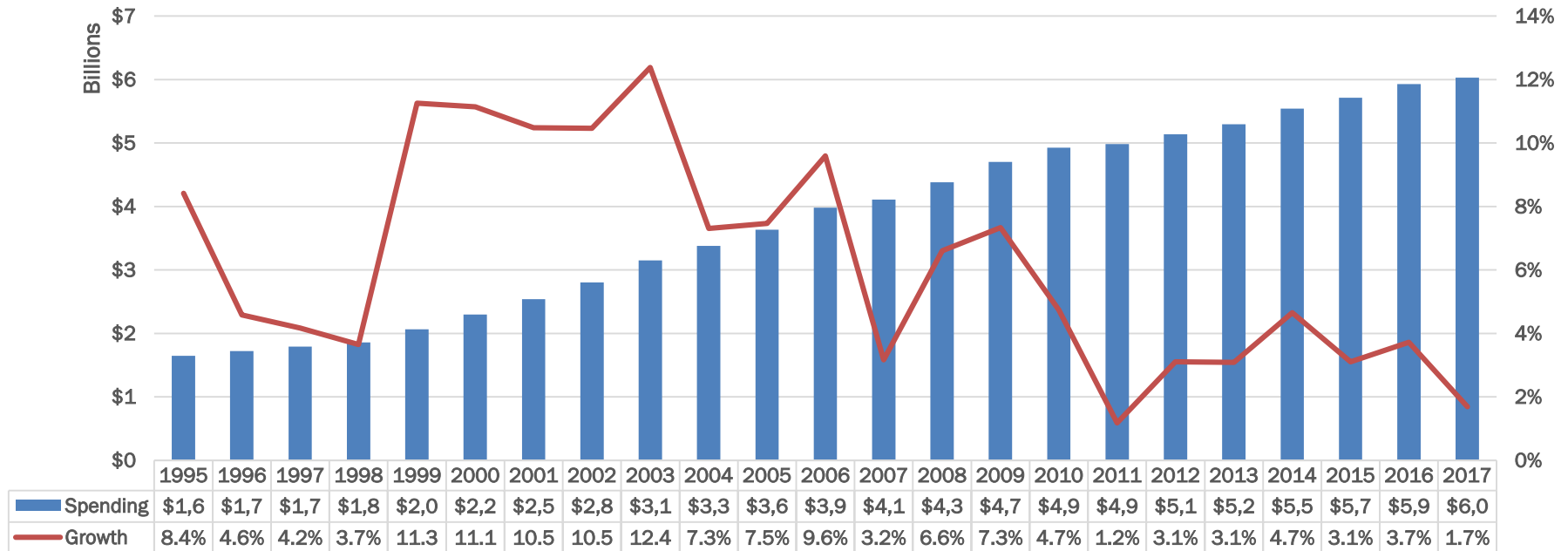


Spending on services for Vermont residents is reported from payer data.

2017 Vermont Resident Analysis

Spending Growth Over Time

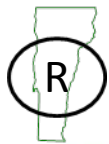
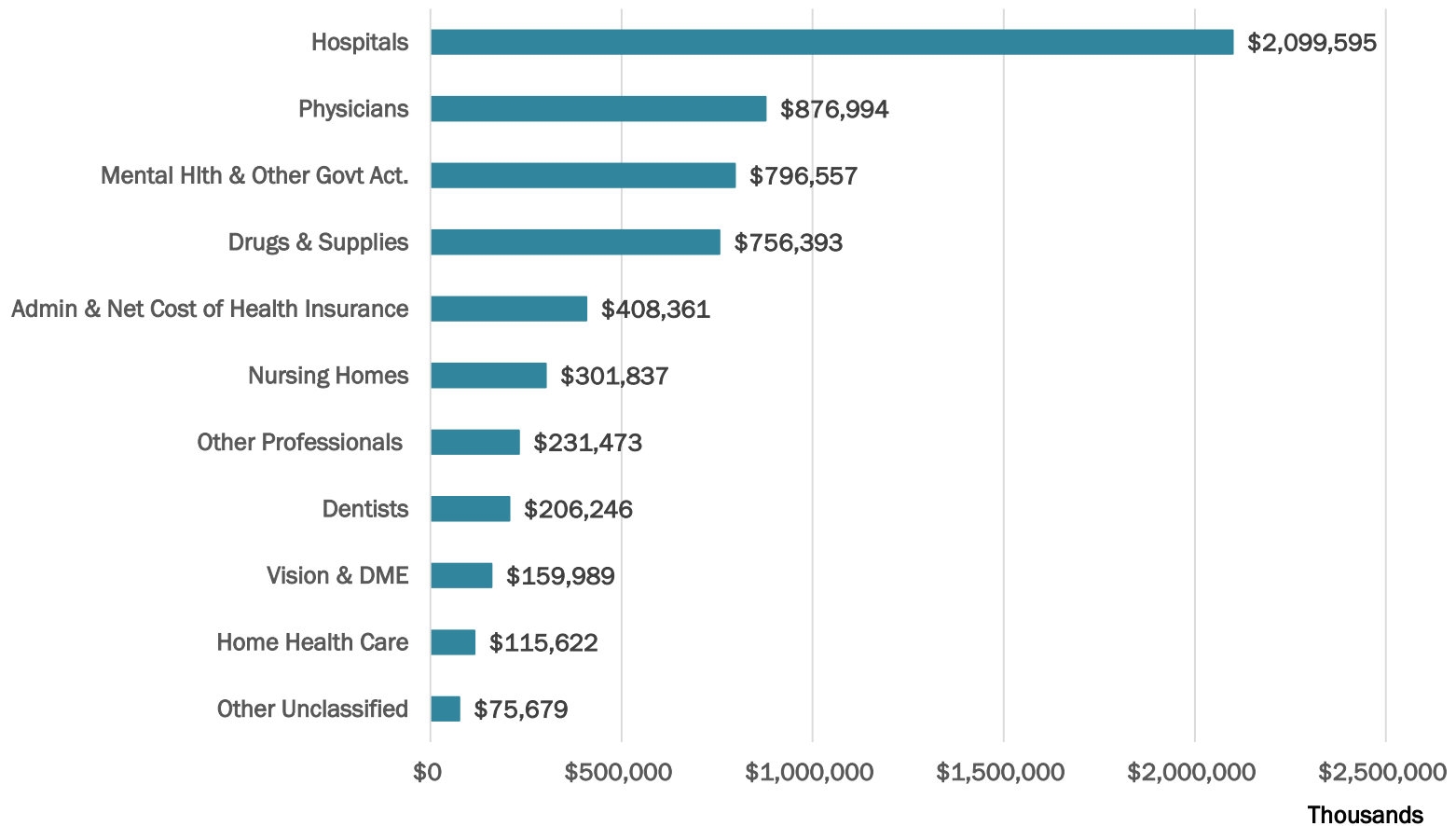
Spending increased from \$1.6 billion in 1995 to \$6.0 billion in 2017, an average annual increase of 3.2%. The increase from 2016 to 2017 was 1.7%.



Spending on services for Vermont residents is reported from payer data.

2017 Vermont Resident Analysis

Spending on Services by Provider Category: In- and Out-of-State (\$6.0 billion)

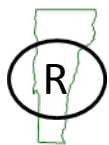
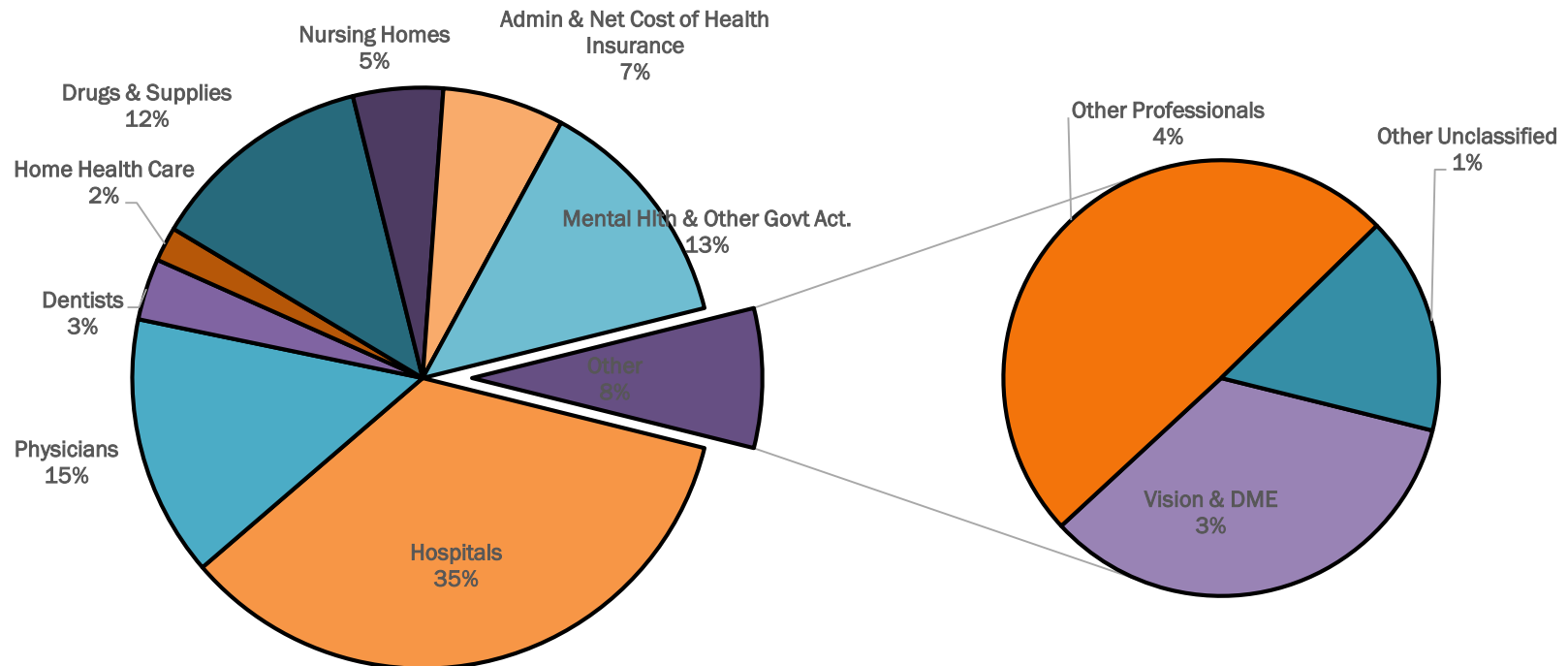


Spending on services for Vermont residents is reported from payer data.

2017 Vermont Resident Analysis

Spending for Services by Provider Category: In- and Out-of-State Spending (\$6.0 billion)

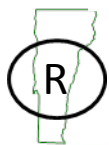
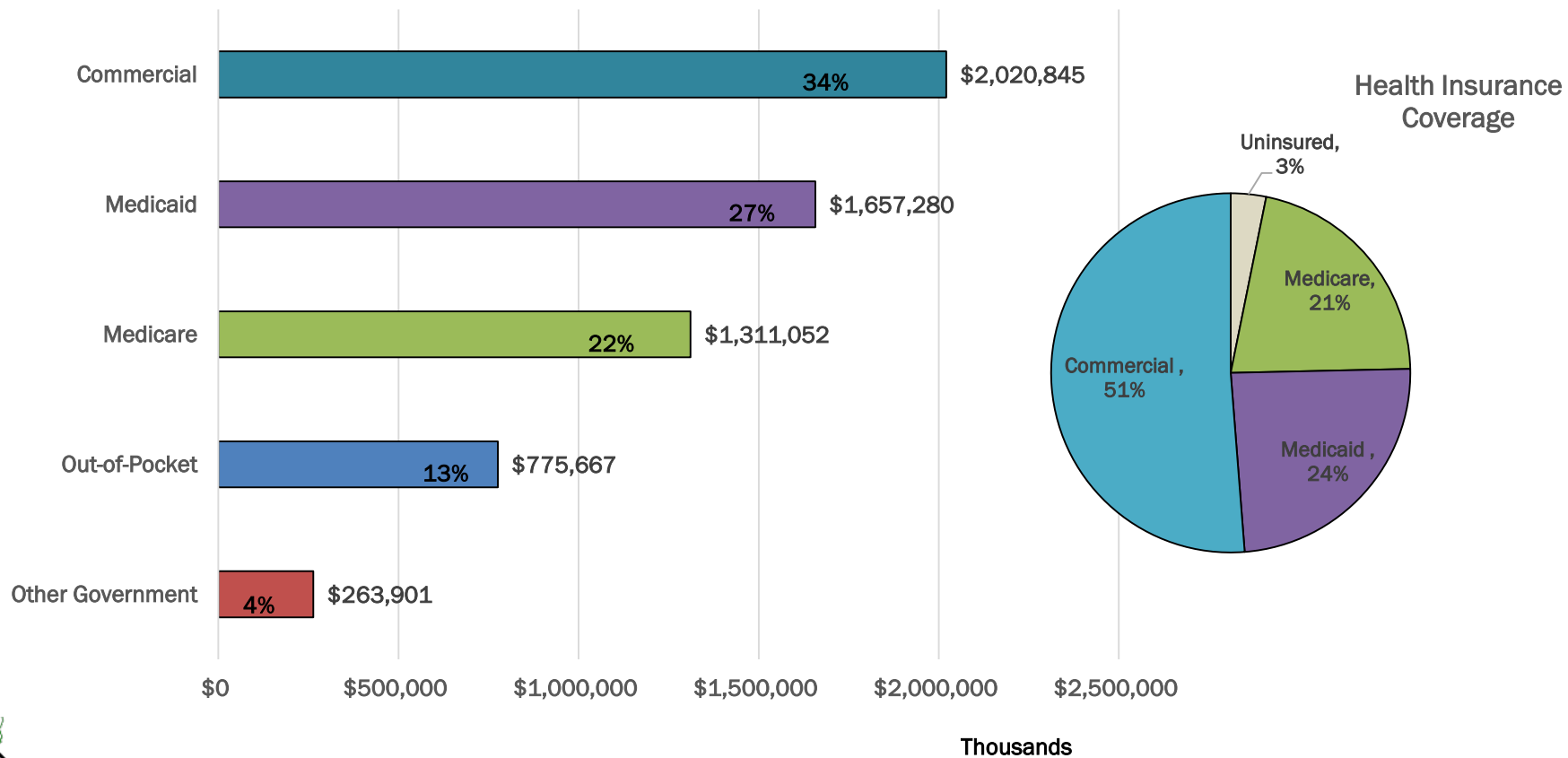
Where It Went



Spending on services for Vermont residents is reported from payer data.

2017 Vermont Resident Analysis

Spending for Services by Payer Type: In- and Out-of-State (\$6.0 billion)

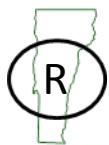
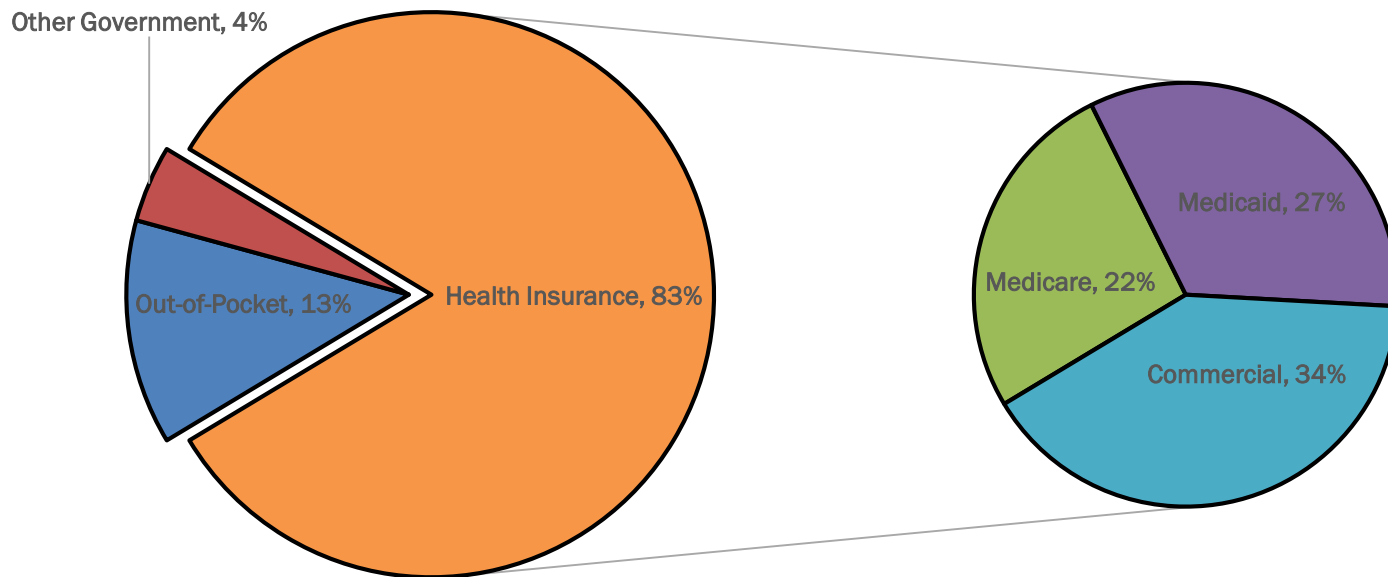


Spending on services for Vermont residents is reported from payer data.

2017 Vermont Resident Analysis

Spending for Services by Payer Type: In- and Out-of-State (\$6.0 billion)

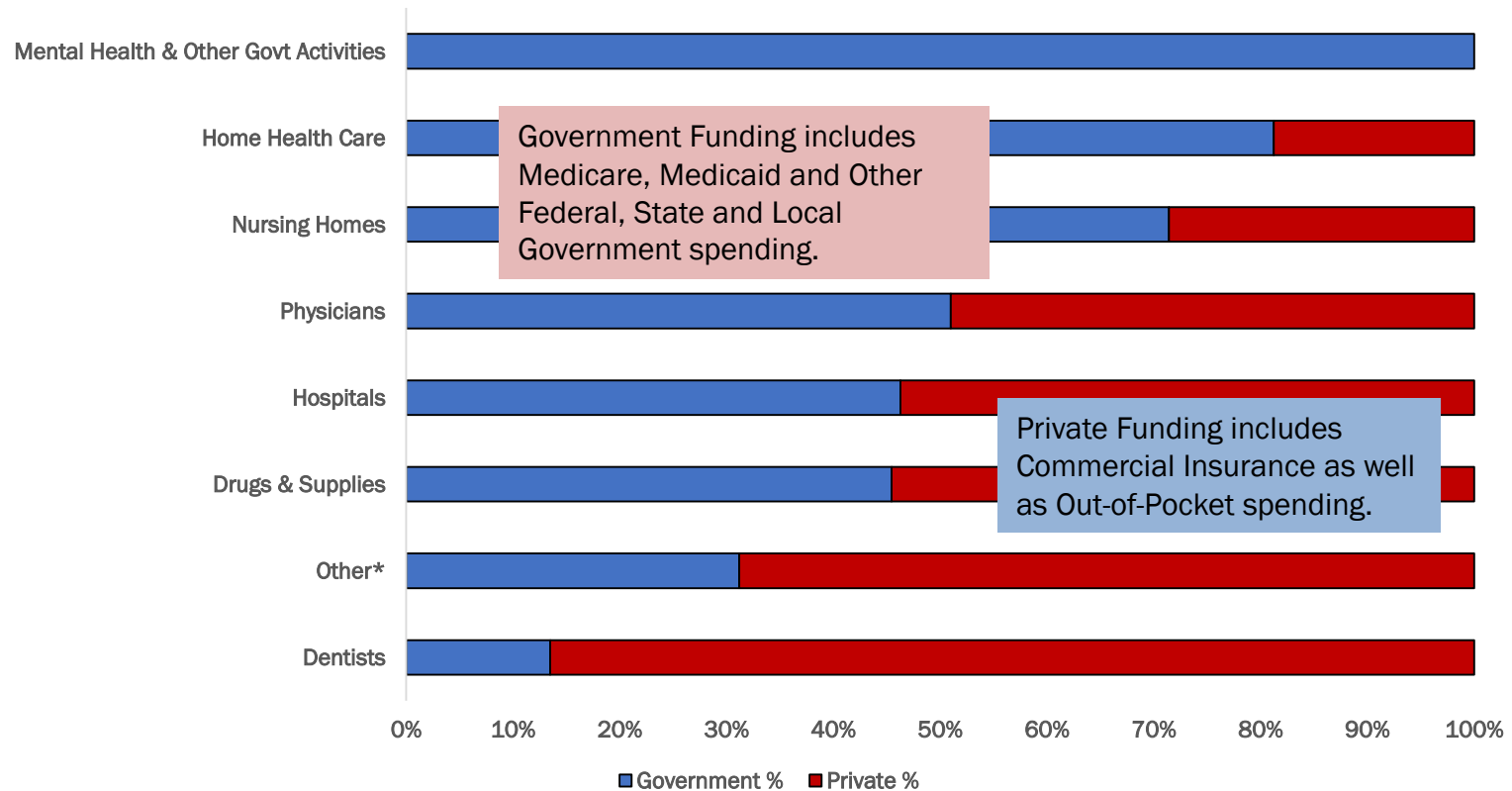
Where It Came From



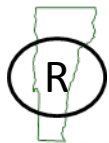
Spending on services for Vermont residents is reported from payer data.

2017 Vermont Resident Analysis

Government vs. Private Funding by Provider Category



*"Other" includes services rendered by other professionals, durable medical equipment suppliers, vision providers, and other miscellaneous providers.



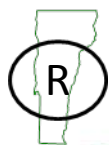
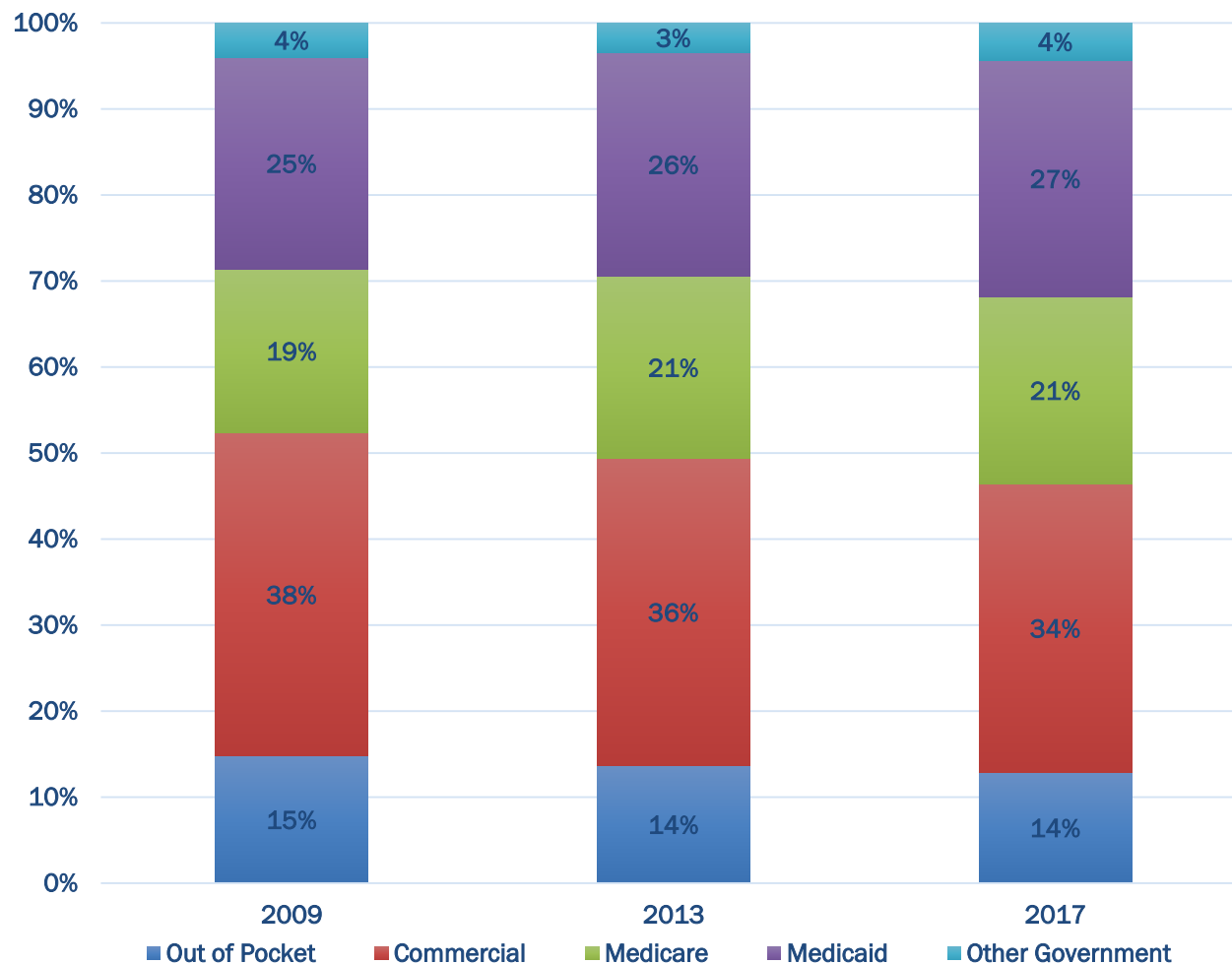
Spending on services for Vermont residents is reported from payer data.

2017 Vermont Resident Analysis

Spending Comparison by Payer Type

In 2017:

- Commercial Payers accounted for 34% of Vermont resident spending even though they covered 51% of the insured population.
- Medicare accounted for 21% of Vermont resident spending and covered 21% of insured,
- Medicaid accounted for 27% of Vermont resident spending and covered 24% of the insured population.
- Out-of-pocket spending as a percentage of total spending has remained fairly steady over time.



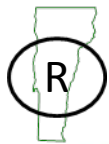
Spending on services for Vermont residents is reported from payer data.

2017 Vermont Resident Analysis

National Health Expenditures

CMS has prepared the National Health Expenditure (NHE) accounts since 1960. The accounts report:

- Measures for annual expenditures of health care goods and services, public health activities, government administrations, net cost of health insurance, and health care investments.
- Data is presented by type of expenditure, source of funding, and type of sponsor (private businesses, governments and households, which include contributions to health insurance premiums and out-of-pocket costs).
- Every 5 years, CMS also prepares the NHE “State Health Expenditures” to estimate provider and resident expenditures. The primary source of data for this report is the Economic Census. In 2017, CMS updated “State Health Expenditures” to include data from 2014. This data is reported by state, including Vermont.
- Health Consumption Expenditures (HCE) is a subset of the NHE report, and has the array of service categories that is most comparable to the VHCEA.
- Personal Health Care (PHC) is a subset of the HCE. It does not include government administration, net cost of health insurance, and public health activities.



2017 Vermont Resident Analysis

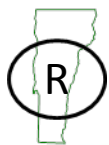
VHCEA Results Compared to CMS NHC Results

	CMS NHE	CMS HCE	CMS PHC	VHCEA
Total Spend (millions)	\$3,492,075	\$3,324,454	\$2,961,004	\$6,029
Total Spend Annual % Change 2016-2017	3.9%	3.8%	3.8%	1.7%
Per Capita Spend	\$10,745	\$10,229	\$9,111	\$9,667
Per Capita Spend Annual % Chg 2016 - 2017	3.3%	3.2%	3.2%	1.8%
Share of Gross State/Domestic Product	17.9%	17.1%	15.2%	18.5%

National Health Expenditures (NHE) includes categories of spending that Vermont does not record. These include Research, Structures and Equipment.

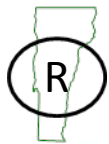
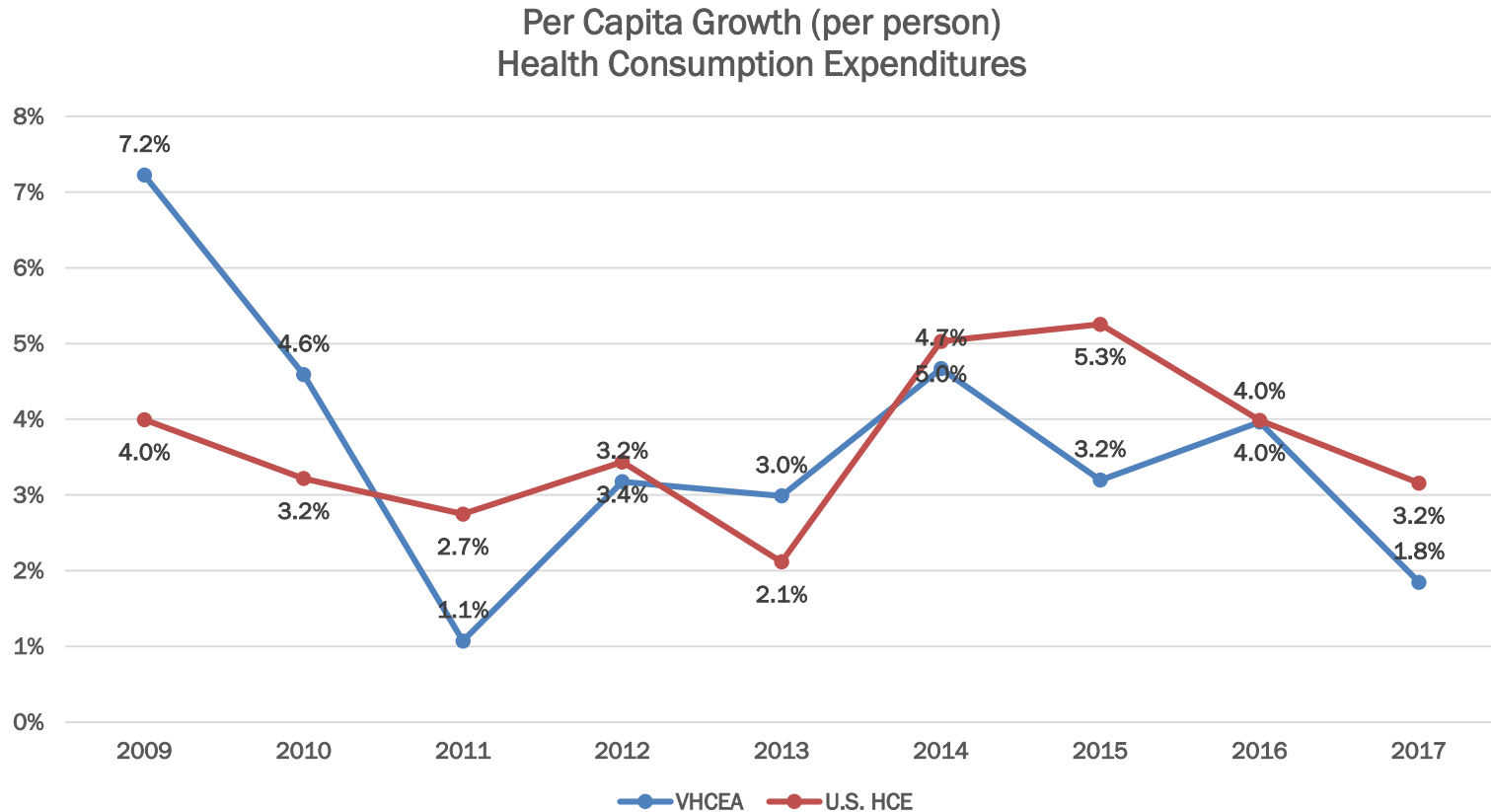
Health Consumption Expenditures (HCE) is a subset of the NHE and has the array of categories of service most comparable to Vermont Expenditure Analysis.

Personal Health Care (PHC) is a subset of the HCE spending as it does not include Government Administration, Net Cost of Health Insurance and Government Public Health Activities.



2017 Vermont Resident Analysis

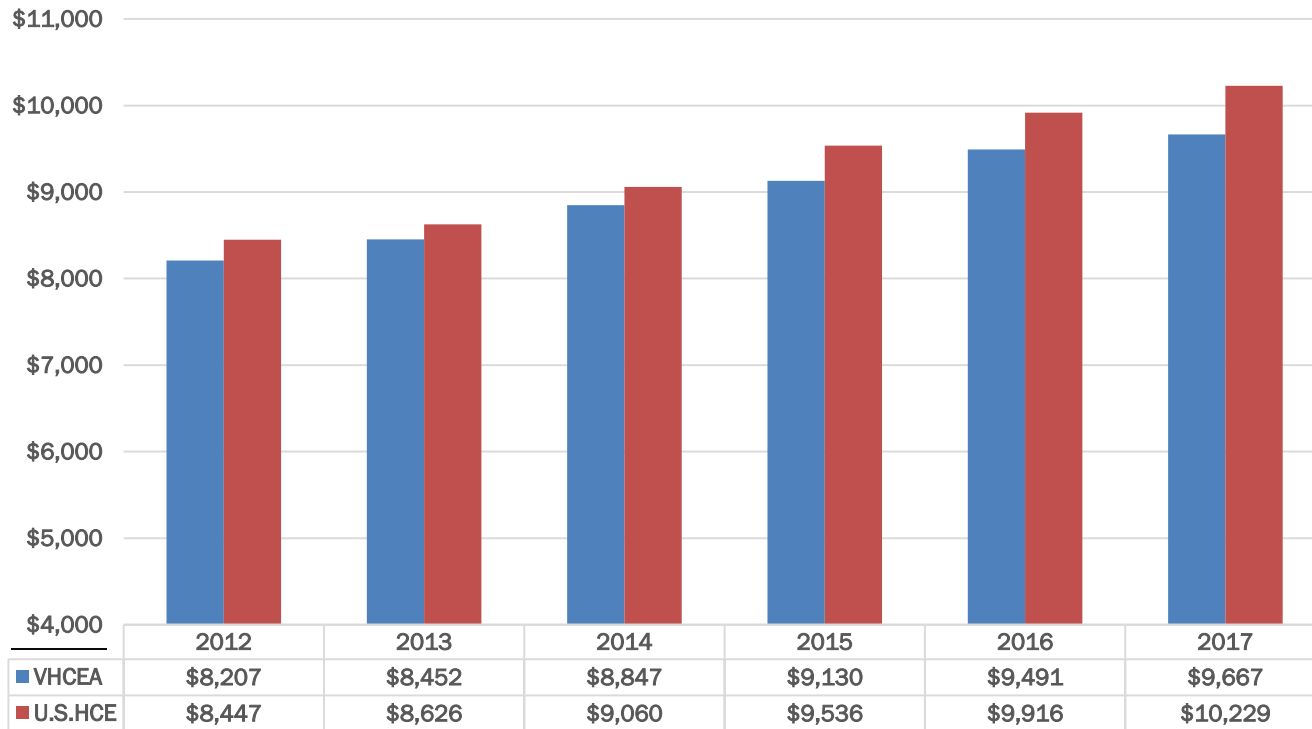
VHCEA Results Compared to U.S. HCE Results: Per Capita Growth



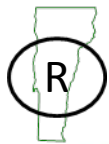
2017 Vermont Resident Analysis

VHCEA Results Compared to U.S. HCE Results: Per Capita Costs

Per Capita (per person)
Health Consumption Expenditures

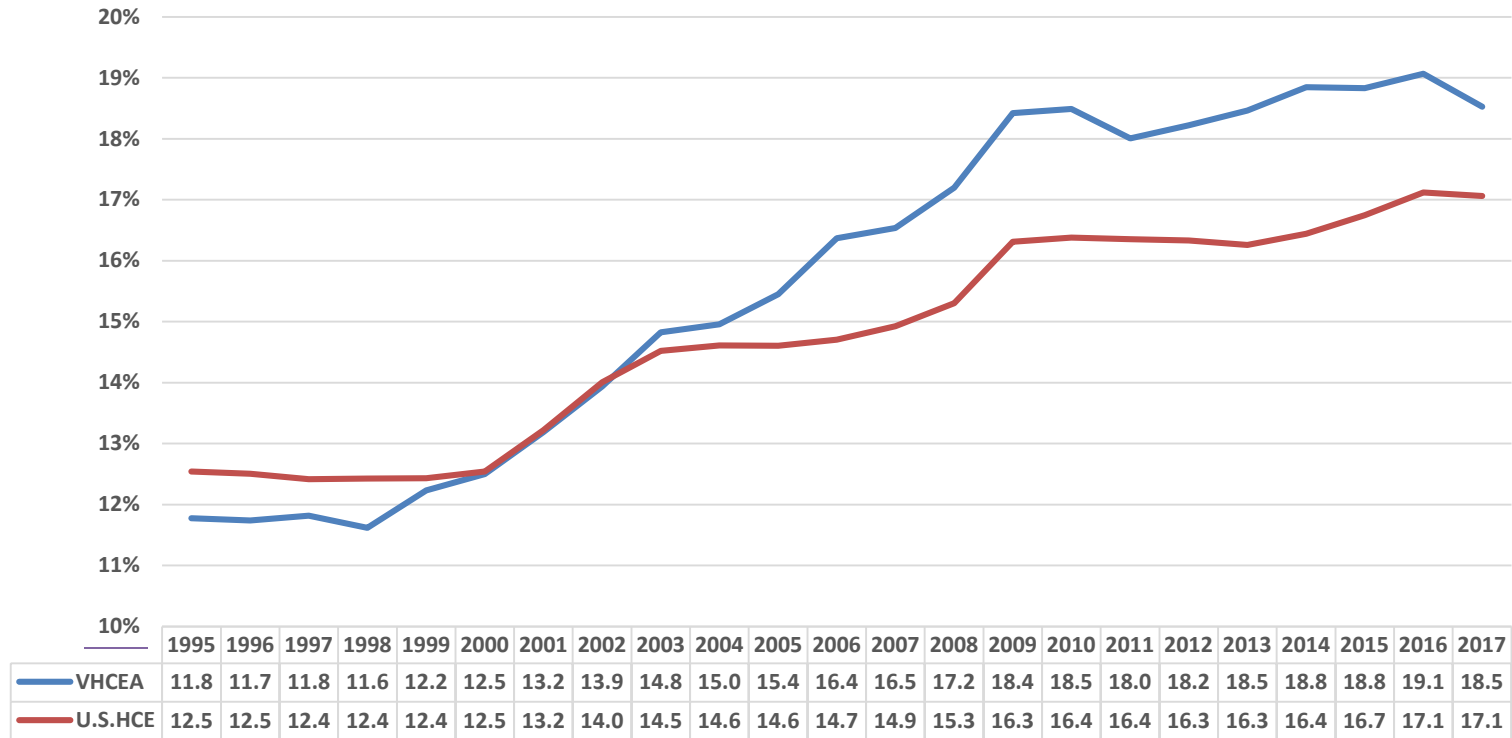


Source: US data from CMS: Health Consumption Expenditures

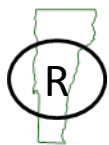


2017 Vermont Resident Analysis

VHCEA Results Compared to U.S. HCE Results: Health Care Share of Gross Product



Note: Gross State Product (GSP) is a measurement of the economic output of a state. It is the sum of all value added by industries within the state and serves as a counterpart to the Gross Domestic Product (GDP), which measures national economic output.



Vermont Provider Analysis



Vermont Provider Health Care Revenues

Summary of Revenue Growth by Payer Type and Provider Category

All dollar amounts are reported in millions

Payers	2012	2013	2014	2015	2016	2017	2016-2017 Annual Change	2012-2017 Average Annual Change
Out-of-Pocket	\$738	\$765	\$734	\$731	\$768	\$774	0.8%	1.0%
Commercial	\$1,803	\$1,838	\$1,819	\$1,979	\$2,001	\$2,101	5.0%	3.1%
Medicare	\$1,201	\$1,229	\$1,324	\$1,384	\$1,454	\$1,529	5.1%	4.9%
Medicaid	\$1,181	\$1,361	\$1,389	\$1,462	\$1,508	\$1,490	-1.2%	4.8%
Other Government	\$246	\$248	\$281	\$297	\$309	\$345	11.4%	7.0%
Total Provider Revenues	\$5,169	\$5,441	\$5,546	\$5,853	\$6,041	\$6,238	3.3%	3.8%
Annual Percent Change	2.8%	5.3%	1.9%	5.5%	3.2%	3.3%		

Providers & Facilities	2012	2013	2014	2015	2016	2017	2016-2017 Annual Change	2012-2017 Average Annual Change
Hospitals	\$2,289	\$2,456	\$2,547	\$2,698	\$2,819	\$2,909	3.2%	4.9%
Physicians	\$573	\$527	\$414	\$434	\$422	\$446	5.5%	-4.9%
Dentists	\$261	\$261	\$262	\$272	\$285	\$296	3.9%	2.6%
Other Professionals	\$229	\$244	\$251	\$305	\$319	\$331	3.8%	7.6%
Home Health Care	\$113	\$119	\$128	\$135	\$141	\$152	7.2%	6.0%
Drugs & Supplies	\$714	\$761	\$817	\$880	\$896	\$888	-0.9%	4.5%
Vision & DME	\$110	\$135	\$117	\$85	\$88	\$110	24.1%	-0.1%
Nursing Home	\$265	\$264	\$271	\$259	\$270	\$277	2.8%	0.9%
Other Unclassified	\$34	\$34	\$34	\$34	\$34	\$34	0.0%	0.1%
Mental Health & Other Govt Activities	\$581	\$641	\$705	\$751	\$766	\$797	4.0%	6.5%
Total Provider Revenues	\$5,169	\$5,441	\$5,546	\$5,853	\$6,041	\$6,238	3.3%	3.8%
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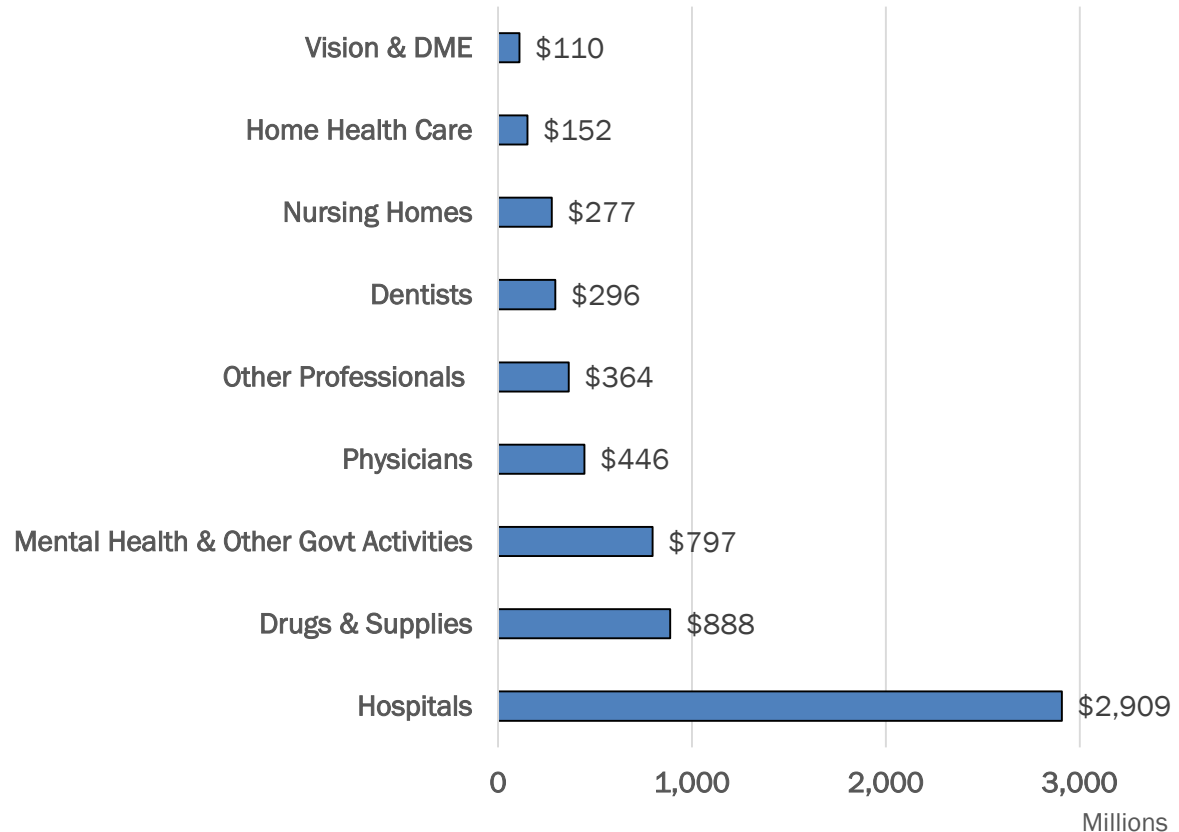
Revenue for Vermont providers is reported from provider data.

2017 Vermont Provider Analysis

Provider Revenues by Provider Category (\$6.2 Billion)

In 2017:

- Provider revenues increased \$197 million, or 3.3%, in 2017.
- Medicare and Commercial payers accounted for most of the increase in revenues for Hospitals.*



***Note:** Hospitals include the 14 community hospitals, Vermont Psychiatric Care Hospital, Brattleboro Retreat, and the VA Hospital. Hospital revenue consists of Operating Revenues (Net Patient Revenue and Other Operating Revenue).

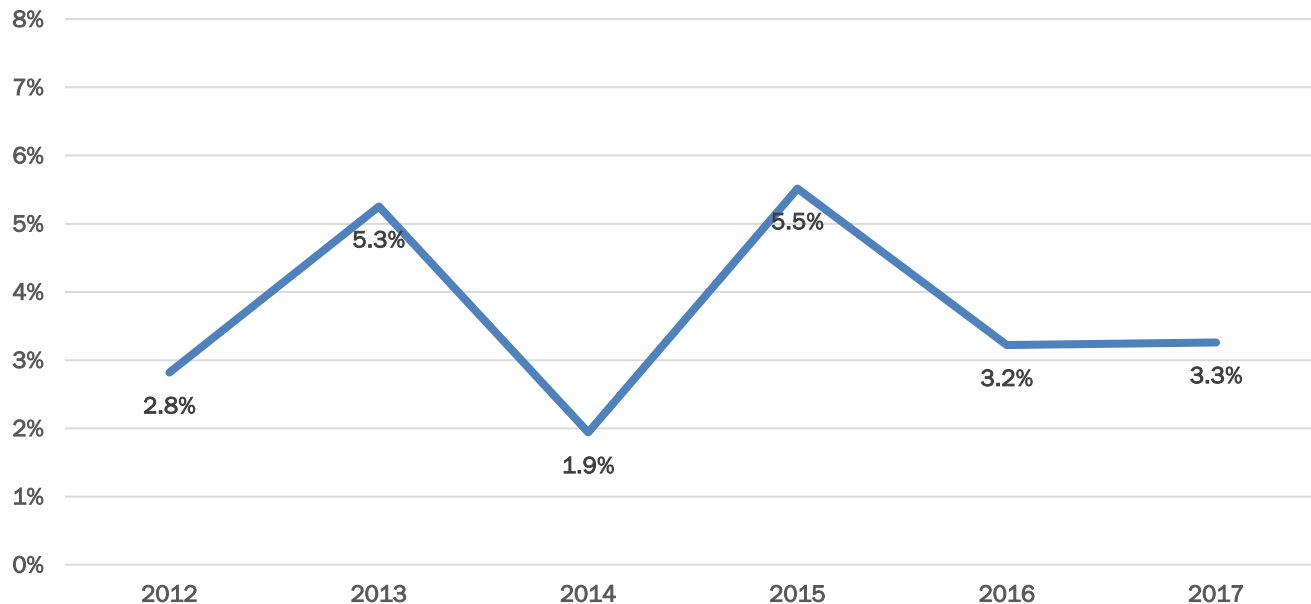


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2017 Vermont Provider Analysis

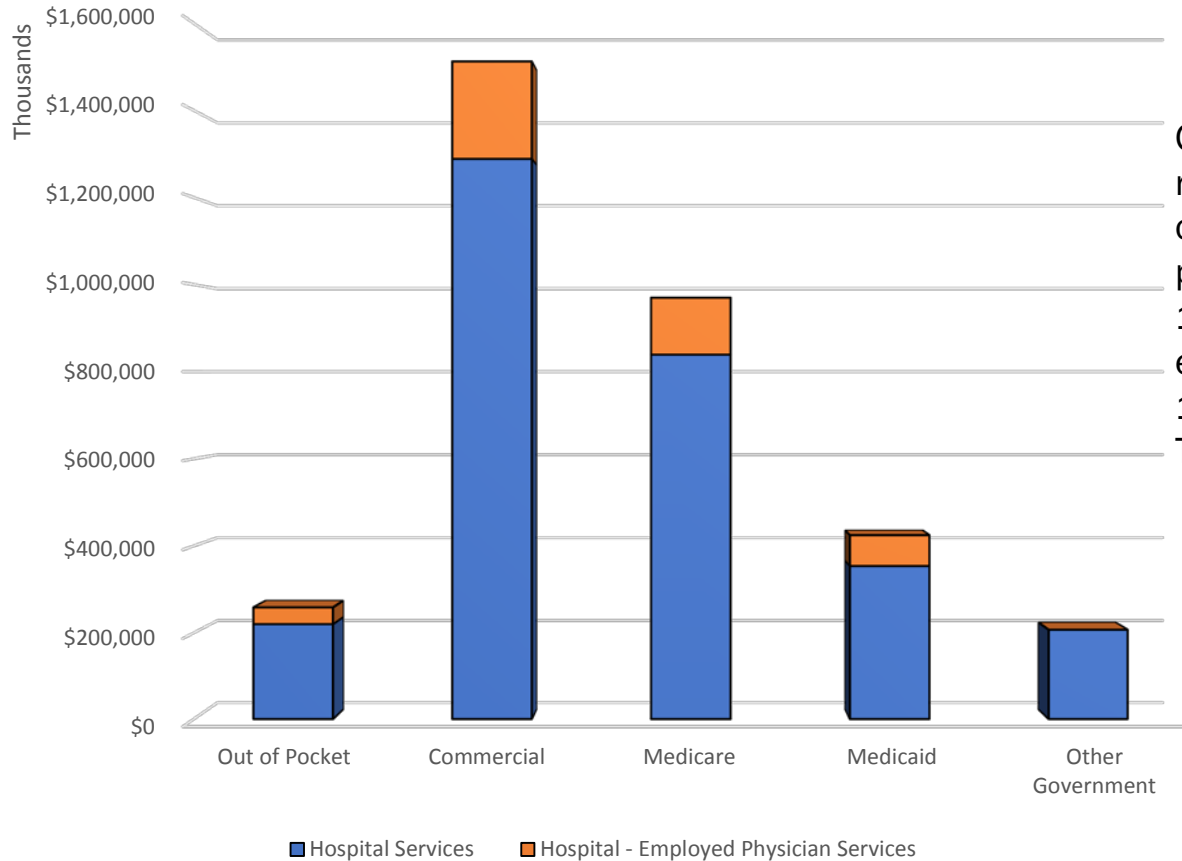
Revenue Growth Over Time

Revenues increased from \$5.2 billion in 2012 to \$6.2 billion in 2017, an average annual increase of 3.8% for the period. The increase from 2016 to 2017 was 3.3%.



2017 Vermont Provider Analysis

Community Hospital Revenues by Payer Type and Physician vs. Hospital Services (\$2.6 billion)



Of the total community hospital revenues, approximately 16% or \$464 million is reported as physician revenue. Vermont's 14 community hospitals employed 1,080 MD FTEs, 13,111 Non-MD FTEs and 231 Travelers as of 2017.

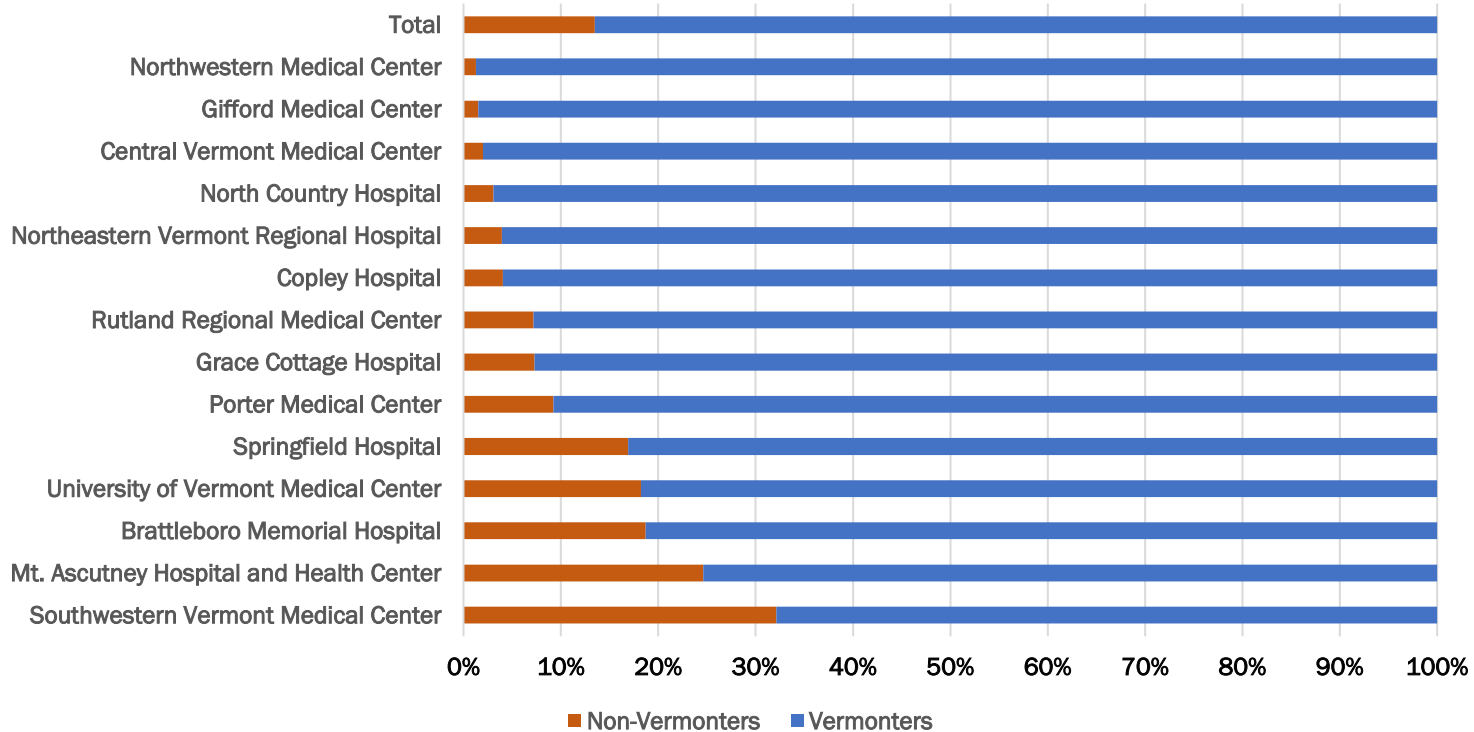


Revenue for Vermont providers is reported from provider data.

2017 Vermont Provider Analysis

Hospital Inpatient Discharges In-Migration

2017 In-migration of Out of State Residents



Source: 2017 Vermont Uniform Hospital Discharge Data Set. Does not include newborns.

Notes: All figures exclude discharges from the VA hospital and records with missing charges.

Vermont residents use hospitals in other states, but reporting on those discharges is currently unavailable.



Comparative Summary of 2017 Expenditure Analyses

Resident and Provider Analyses by Payer Type and Provider Category

	Resident*	Provider**
All dollar amounts are reported in thousands		
Payers	(Reported by Payers)	(Reported by Providers)
Out-of-Pocket	\$ 775,667	\$ 773,921
Commercial	\$ 2,020,845	\$ 2,100,726
Medicare	\$ 1,311,052	\$ 1,529,127
Medicaid	\$ 1,657,280	\$ 1,489,557
Other Government - Federal	\$ 263,901	\$ 344,727
Total	\$ 6,028,745	\$ 6,238,059

Providers & Facilities		
Hospitals	\$ 2,099,595	\$ 2,908,805
Hospitals-Only	\$ 2,099,595	\$ 2,444,690
Hospital-Physicians	\$ 0	\$ 464,115
Physicians	\$ 876,994	\$ 445,598
Dentists	\$ 206,246	\$ 296,065
Other Professionals	\$ 231,473	\$ 330,732
Home Health Care	\$ 115,622	\$ 151,692
Drugs & Supplies	\$ 756,393	\$ 888,012
Vision & DME	\$ 159,989	\$ 109,620
Nursing Homes	\$ 301,837	\$ 277,320
Other Unclassified	\$ 75,679	\$ 33,659
Admin & Net Cost of Health Insurance	\$ 408,361	\$ 0
Mental Health & Other Govt Activities	\$ 796,557	\$ 796,557
Total	\$ 6,028,745	\$ 6,238,059

Annual percent change 2016-2017	1.7%	3.3%
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Note: *In/Out migration-Resident includes out of state care by residents.
 **Provider includes out of state patients treated.



Vermont Resident Analysis: Projections

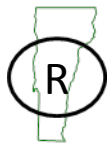
Vermont
Health Care
Expenditure
Analysis Projection Projection

All dollar amounts are reported in thousands

Payers ²				2017-2018	2018-2019
	2017	2018	2019	% change	% change
Out of Pocket	\$775,667	\$794,295	\$811,004	2.4%	2.1%
Commercial	\$2,020,845	\$2,048,249	\$2,091,067	1.4%	2.1%
Medicare	\$1,311,052	\$1,326,835	\$1,340,043	1.2%	1.0%
Medicaid	\$1,657,280	\$1,677,388	\$1,704,354	1.2%	1.6%
Other Government	\$263,901	\$282,043	\$310,019	6.9%	9.9%
Total	\$6,028,745	\$6,128,810	\$6,256,487	1.7%	2.1%
Providers & Facilities ¹				2017-2018	2018-2019
	2017	2018	2019	% change	% change
Hospitals	\$2,099,595	\$2,116,459	\$2,137,299	0.8%	1.0%
Physicians	\$876,994	\$939,303	\$969,279	7.1%	3.2%
Dentists	\$206,246	\$197,934	\$182,303	-4.0%	-7.9%
Other Professionals	\$231,473	\$242,785	\$254,650	4.9%	4.9%
Home Health Care	\$115,622	\$117,082	\$115,357	1.3%	-1.5%
Drugs & Supplies	\$756,393	\$741,207	\$725,862	-2.0%	-2.1%
Vision & DME	\$159,989	\$175,413	\$212,611	9.6%	21.2%
Nursing Homes	\$301,837	\$315,641	\$327,931	4.6%	3.9%
Other Unclassified	\$75,679	\$74,706	\$76,063	-1.3%	1.8%
Admin & Net Cost of Health Insurance	\$408,361	\$439,850	\$474,348	7.7%	7.8%
Mental Health & Other Govt Activities	\$796,557	\$768,430	\$780,783	-3.5%	1.6%
Total	\$6,028,745	\$6,128,810	\$6,256,487	1.7%	2.1%

Notes:

1. Expenditures represent the amount of spending and expected spending by each Provider sector.
2. Projections are primarily based on Vermont Payer trends when available.



Vermont Provider Analysis: Projections

Vermont
Health Care
Expenditure
Analysis Projection Projection

All dollar amounts are reported in thousands

Payers	2017	2018 ²	2019 ²	2017-2018	2018-2019
				% change ²	% change ²
Out of Pocket	\$773,921	\$803,289	\$825,828	3.8%	2.8%
Commercial	\$2,100,726	\$2,178,868	\$2,240,400	3.7%	2.8%
Medicare	\$1,529,127	\$1,586,007	\$1,630,796	3.7%	2.8%
Medicaid	\$1,489,557	\$1,492,843	\$1,520,207	0.2%	1.8%
Other Government	\$344,727	\$319,433	\$333,800	-7.3%	4.5%
Total	\$6,238,059	\$6,380,440	\$6,551,031	2.3%	2.7%

Providers & Facilities ¹	2017	2018 ²	2019 ²	2017-2018	2018-2019
				% change ²	% change ²
Hospitals^{3,4}	\$2,908,805	\$3,019,186	\$3,103,899	3.8%	2.8%
Physicians⁴	\$445,598	\$451,451	\$466,753	1.3%	3.4%
Dentists	\$296,065	\$308,222	\$321,981	4.1%	4.5%
Other Professionals	\$330,732	\$347,728	\$368,606	5.1%	6.0%
Home Health Care	\$151,692	\$160,621	\$171,156	5.9%	6.6%
Drugs & Supplies	\$888,012	\$892,092	\$889,950	0.5%	-0.2%
Vision & DME	\$109,620	\$112,207	\$118,452	2.4%	5.6%
Nursing Homes	\$277,320	\$286,795	\$295,717	3.4%	3.1%
Other Unclassified	\$33,659	\$33,708	\$33,733	0.1%	0.1%
Mental Health & Other Govt Activities	\$796,557	\$768,430	\$780,783	-3.5%	1.6%
Total	\$6,238,059	\$6,380,440	\$6,551,031	2.3%	2.7%

Notes:

1. The amount of revenues earned and expected to be collected by each Provider sector.
2. Except for community hospitals, projections are primarily based on National Health Expenditure (NHE), and Vermont trends when available.
3. Projected 2018 and approved 2019 community hospital budgets are included in the forecast.
4. The community hospital amounts include physician practice expenditures reflective of any hospital's physician practice acquisitions.



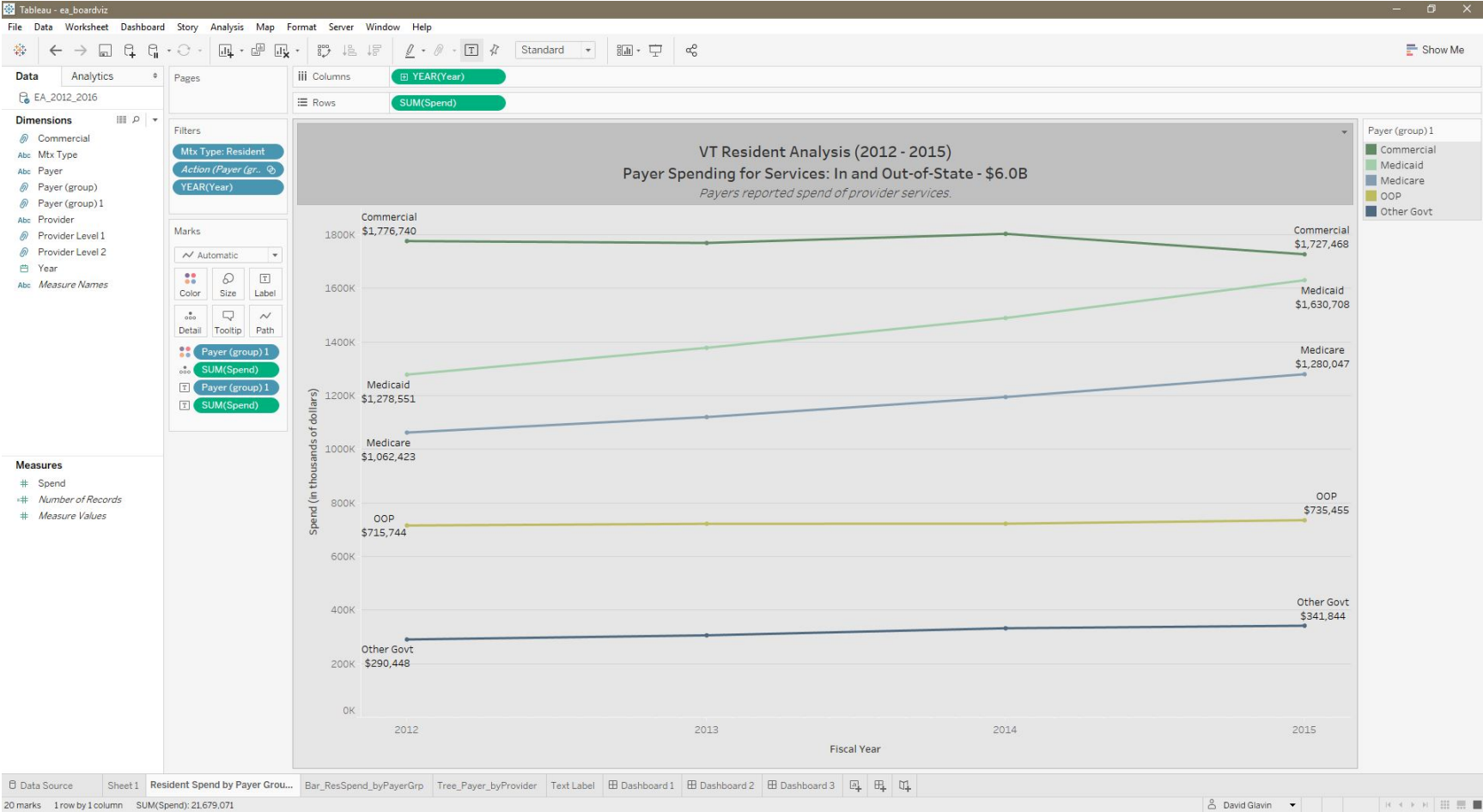
Relationship to Total Cost of Care

The VHCEA measures expenditures at a broader and more comprehensive level than the Total Cost of Care (TCOC) measure that is described in the All-Payer Accountable Care Organization (ACO) Model Agreement between Vermont and the federal Centers for Medicare and Medicaid Services (CMS).

The All-Payer ACO Model TCOC can be thought of as a subset of the VHCEA resident analysis in two ways:

- ▼ The VHCEA Resident Analysis estimate includes all Vermont residents
 - The All-Payer ACO Model TCOC excludes certain populations, such as Vermont residents without insurance or those covered by the Federal Employee Health Benefits Plan.
- ▼ The VHCEA Provider Analysis estimates include all people receiving services in Vermont, whether or not they live in Vermont
 - The All-Payer ACO Model TCOC focuses on Vermont residents.
- ▼ The VHCEA Resident and Provider Analyses estimate total expenditures
 - The All-Payer ACO Model TCOC is limited to claim payments for the types of services covered by traditional Medicare or non-claims payments related to direct medical care (e.g., care management, capitation).
 - The All-Payer ACO Model TCOC does not include retail pharmacy.

Tableau Interactive



[Link to Interactive data visualization](#)