



HEALTH

***Estimating the Incidence  
of Health Spending for Vermont***

**Christine Eibner**

# ***Project Goals***

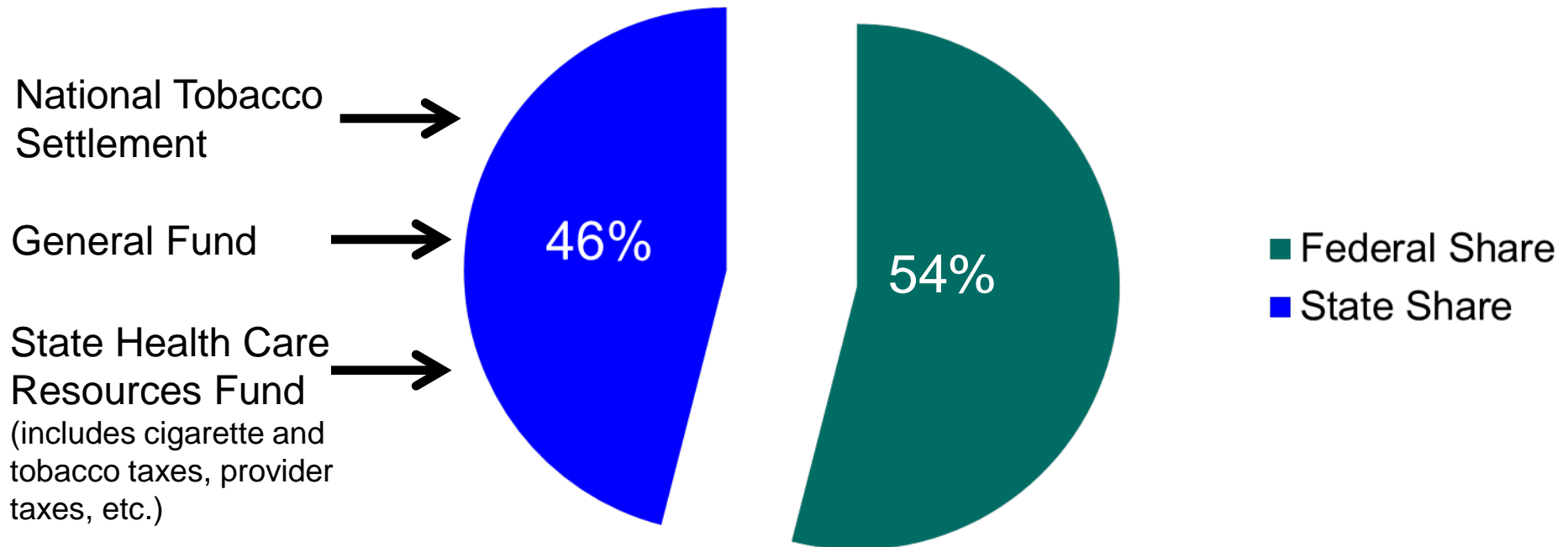
- **Estimate health spending for Vermont residents**
  - **Baseline in 2012 (pre-Affordable Care Act)**
  - **Estimate in 2017 (post-Affordable Care Act)**
- **Determine who pays for care**
  - **Nominal incidence: who is writing the check for the state's portion of Medicaid spending (e.g. the state treasury)**
  - **Economic incidence: who is really paying for the state's portion of Medicaid spending (e.g. the taxpayer)**
- **Assess whether the system is equitable**
  - **Vertical Equity: Do higher-income people pay more than lower-income people**
  - **Horizontal Equity: Do people with the same income pay the same amount?**

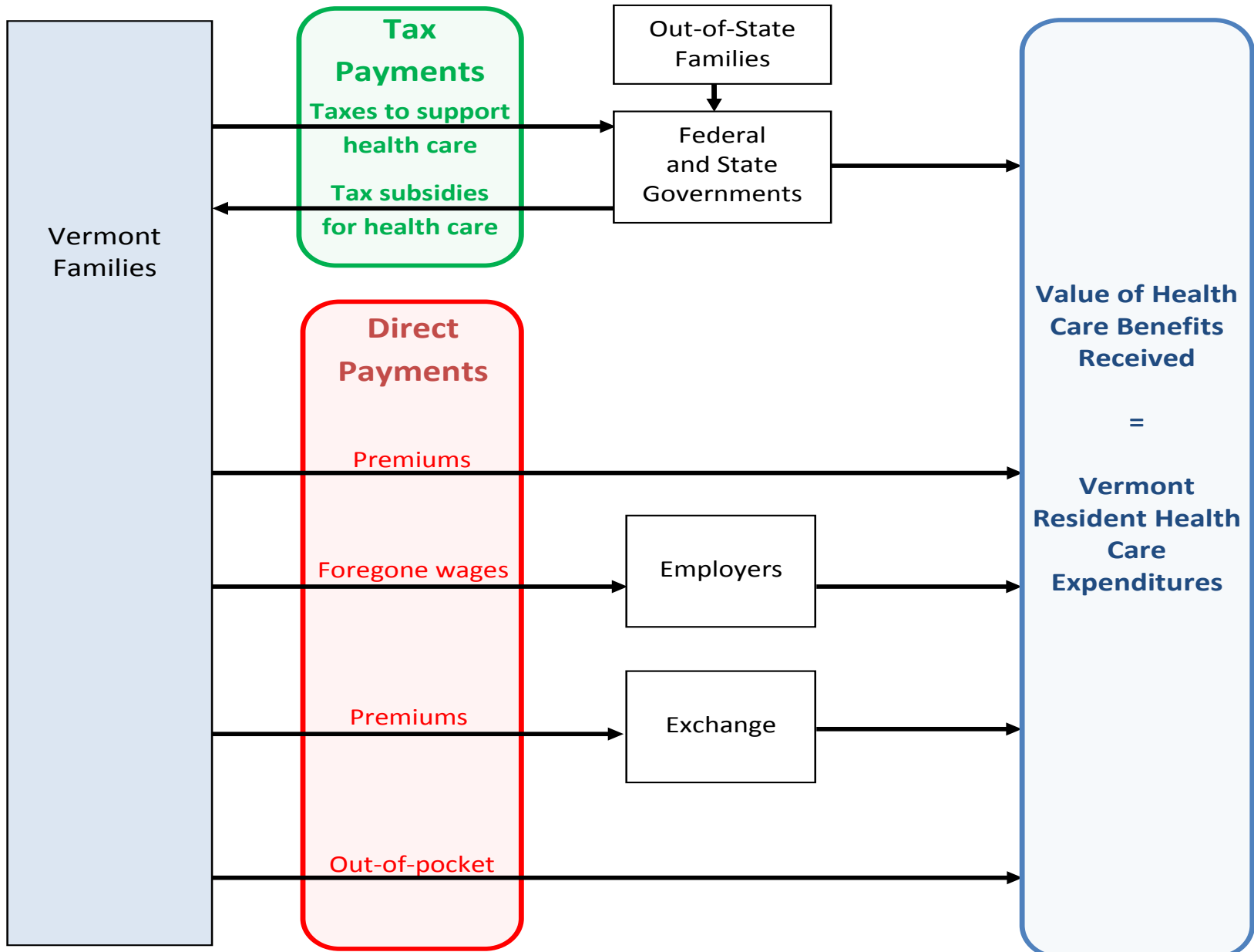
# ***Analytic Approach***

- **Use Vermont-specific data to estimate health insurance enrollment and health care spending among Vermont residents in 2012**
- **Use RAND's COMPARE microsimulation model to predict how health insurance enrollment and spending patterns will change in 2017 under current law, including any ACA effects**
- **Estimate the contributions from various financing sources for predicted expenditures**
  - **Premiums or premium contributions (including contributions made by employers)**
  - **Out-of-pocket spending**
  - **Federal and state subsidy spending (including ACA)**
  - **Medicaid**
  - **Medicare**
  - **Other public health programs**
- **Allocate spending across individuals, by income and other characteristics**

# *We Mapped Spending for Public Programs Back to Tax Sources*

## Example: Medicaid Spending





# *Some Terminology*

- **Payments:** Payments made by Vermont residents to support health care consumptions. This includes
  - Direct payments
  - Net tax payments (taxes paid minus tax benefits received)
  - Does not necessarily equal Vermont resident expenditure (because some spending is financed through net federal inflows)
- **The value of health benefits received:** Value of the health insurance policy (e.g. the premium), or the value of a public program (Medicare, Medicaid), plus the value of out-of-pocket medical spending, plus the value of any additional public health spending the individual may receive
  - Equals Vermont resident expenditure

# ***Data Sources***

- **Vermont Household Health Interview Survey (VHHIS)**
- **Vermont Health Claims Uniform Reporting and Evaluation System (VHCURES)**
- **State administrative data on taxes paid**
- **2013 Fringe Benefit Survey (from VT's Department of Labor)**
- **Vermont specific reports and analyses (e.g., Expenditure Analysis)**
- **Other state and federal data sources needed to fill gaps**

# ***Total Expenditure (Value of Health Benefits Received) In Vermont: Nominal Incidence, millions of dollars***

	<b>2012</b>	<b>2017</b>
Employer Insurance	\$1,690	\$2,034
Employee Contributions	\$407	\$496
Employer Contributions	\$1,283	\$1,538
Medicare	\$1,074	\$1,440
Medicaid/CHIP/VHAP	\$1,246	\$1,661
Non-group/Catamount/Exchange	\$85	\$359
Out of Pocket	\$720	\$944
Other State and Federal	\$270	\$373
<b>Total</b>	<b>\$5,084</b>	<b>\$6,810</b>

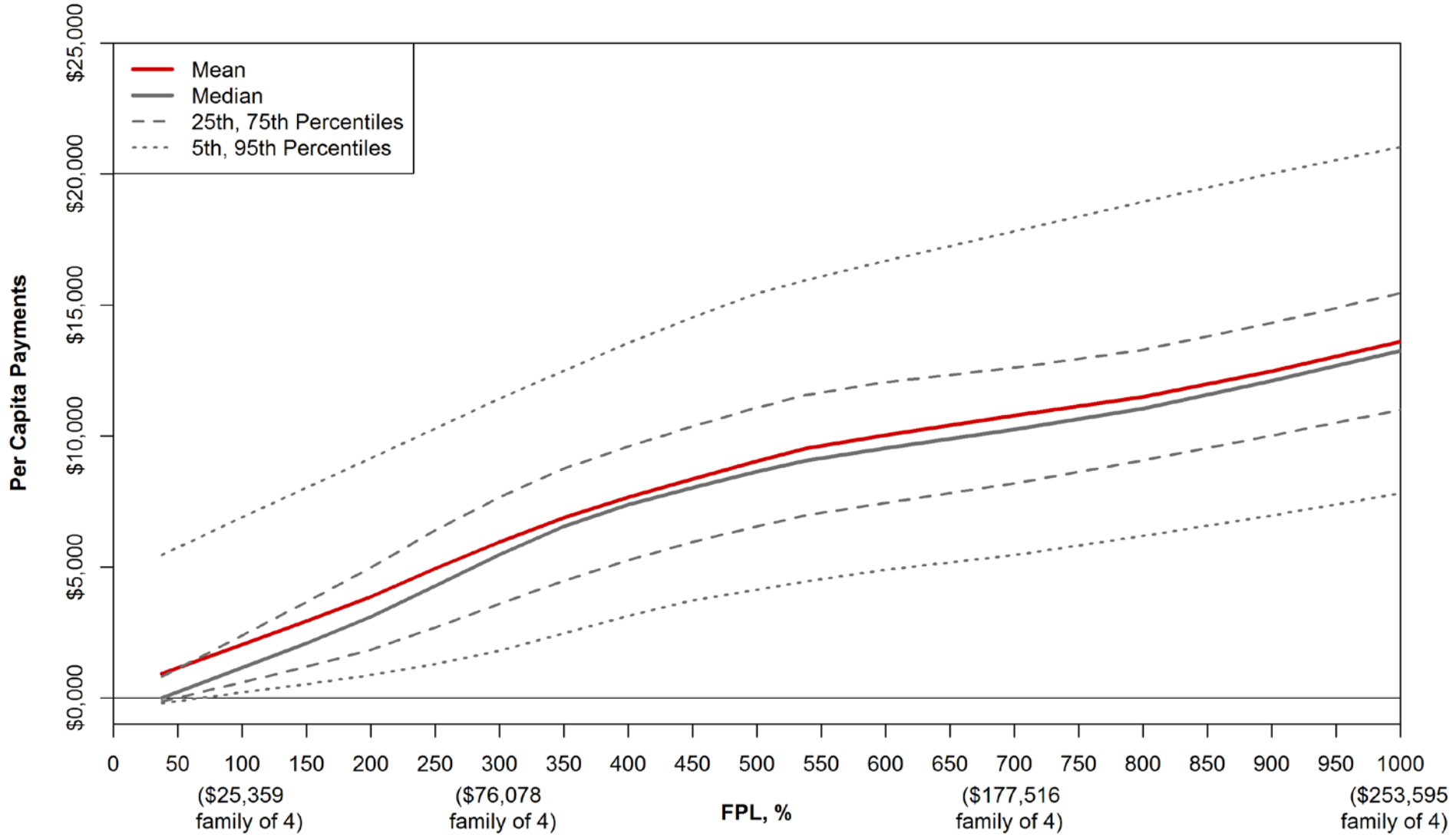
NOTES: Other state and Federal spending includes DVHA appropriations, disproportionate share hospital (DSH) payments, and non-Medicaid health-related appropriations.



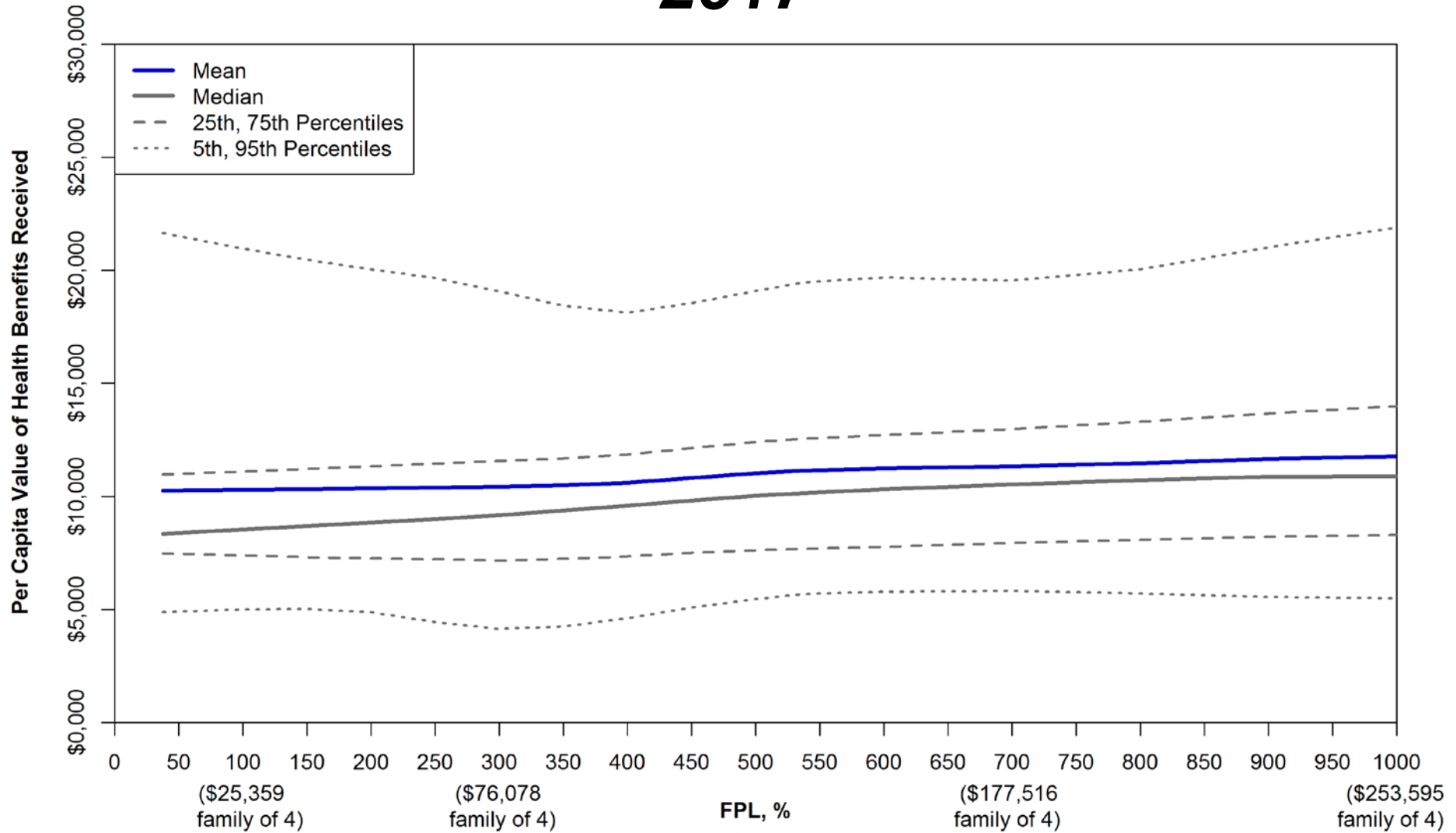
# ***Total Expenditure (Value of Health Benefits Received) in Vermont: Economic Incidence millions of dollars or percentage***

	2012		2017	
<b>Total payments by Vermont residents</b>	<b>\$3,602</b>	<b>71%</b>	<b>\$4,666</b>	<b>69%</b>
<b>Direct payments</b>	\$2,670	53%	\$3,592	53%
<b>Tax payments</b>	\$932	18%	\$1,073	16%
<b>Corporate income tax payments by Vermont businesses</b>	\$55	1%	\$79	1%
<b>Vermont state tax payments by out-of-state residents</b>	\$5	<1%	\$6	<1%
<b>Net federal government inflows</b>	<b>\$1,412</b>	<b>28%</b>	<b>\$2,044</b>	<b>30%</b>
<b>Retiree health incidence</b>	\$10	<1%	\$15	<1%
<b>TOTAL</b>	<b>\$5,084</b>	<b>100%</b>	<b>\$6,810</b>	<b>100%</b>

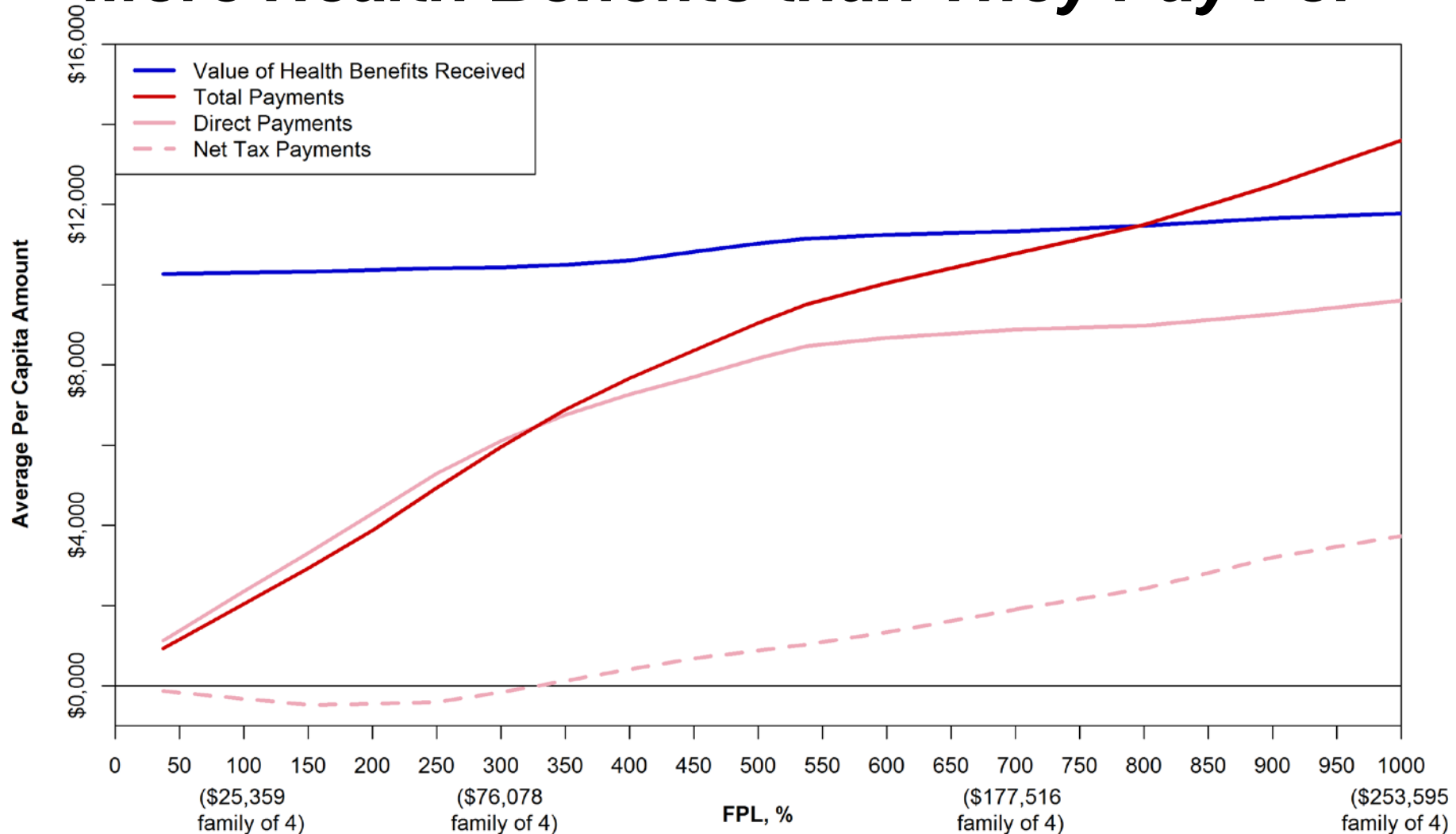
# Per Capita Payments, By Income, 2017



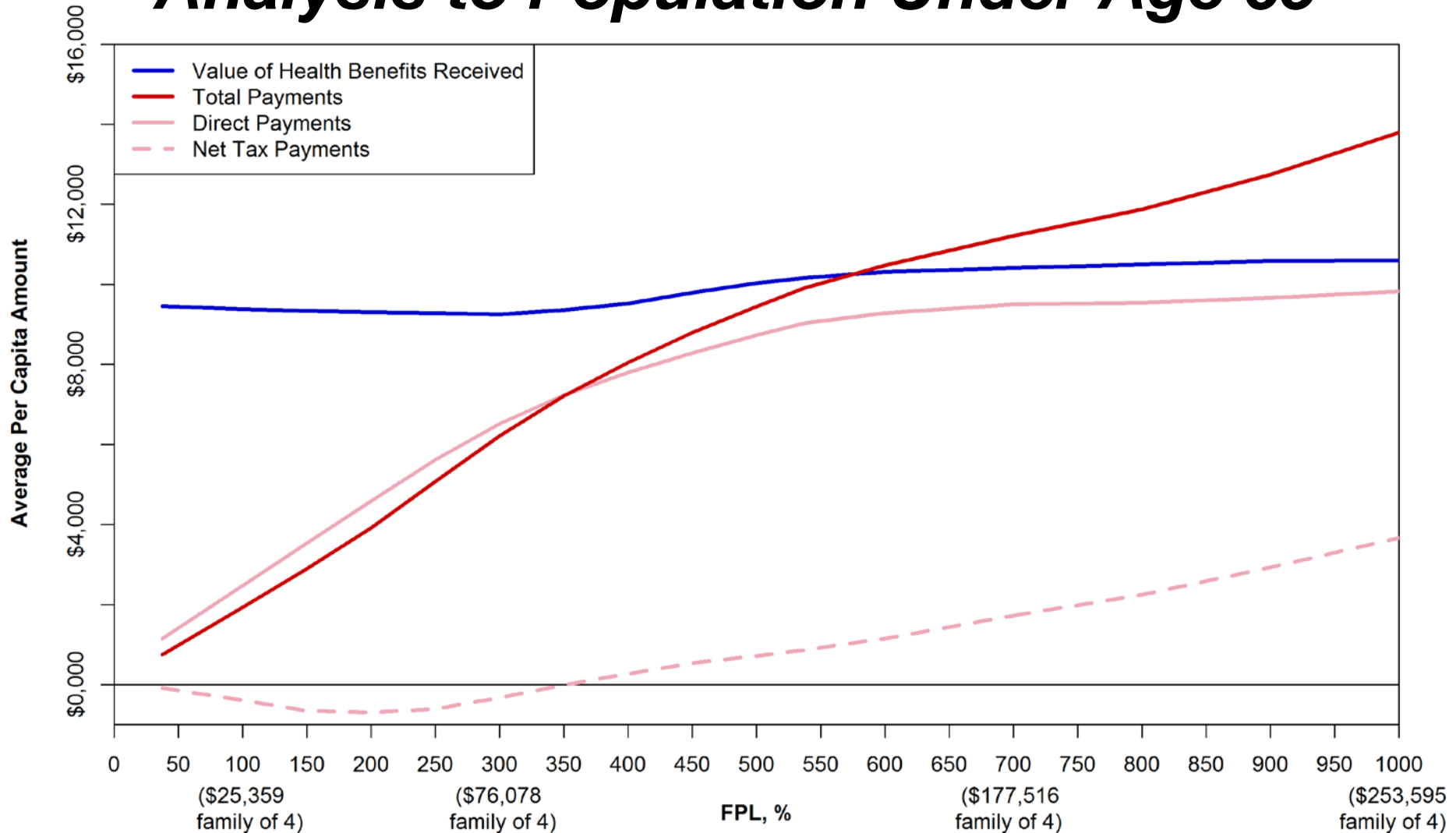
# Value of Health Benefits Received, by Income, 2017



# All But Highest Income Residents Receive More Health Benefits than They Pay For



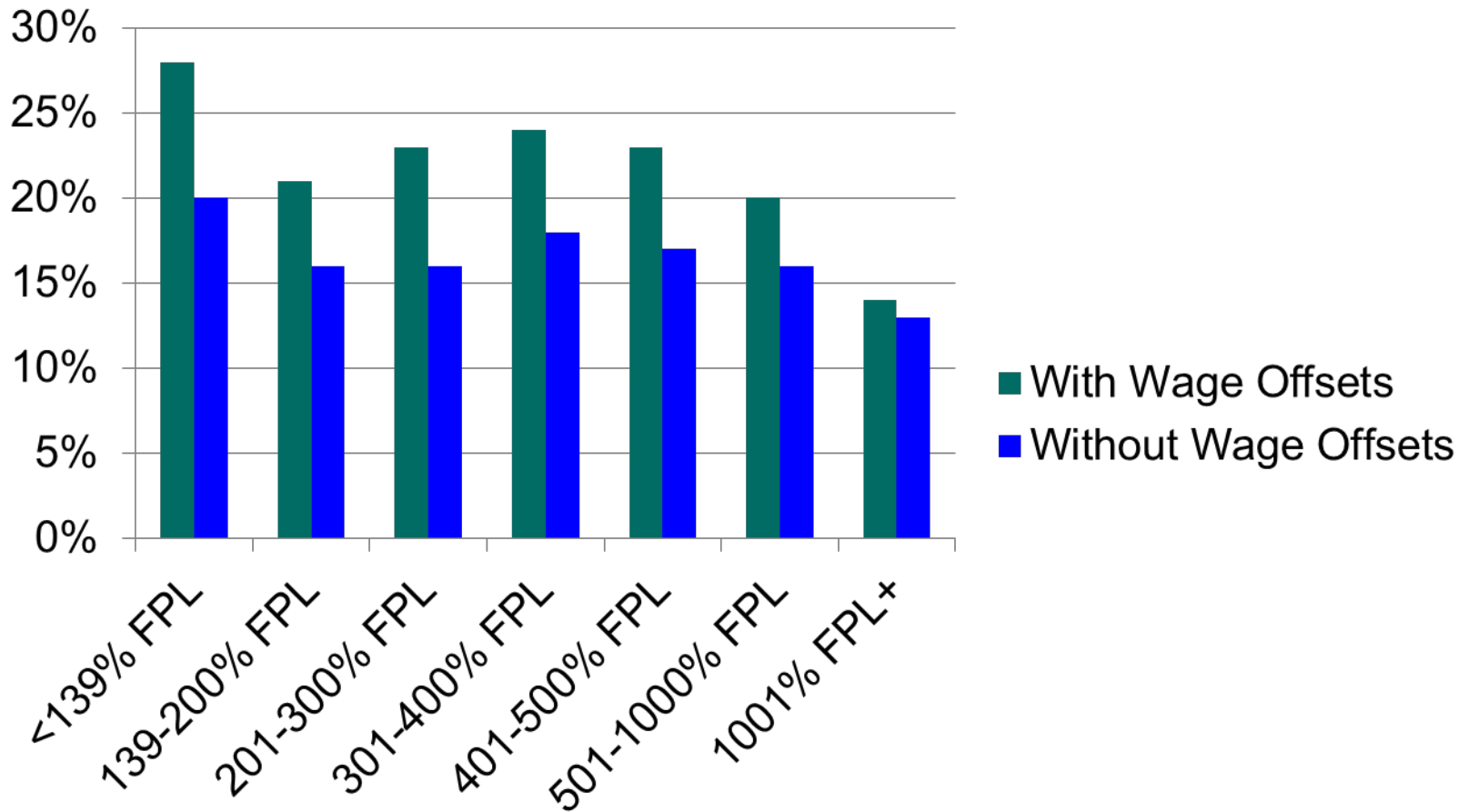
# Cross-Over Point is Lower When We Limit Analysis to Population Under Age 65



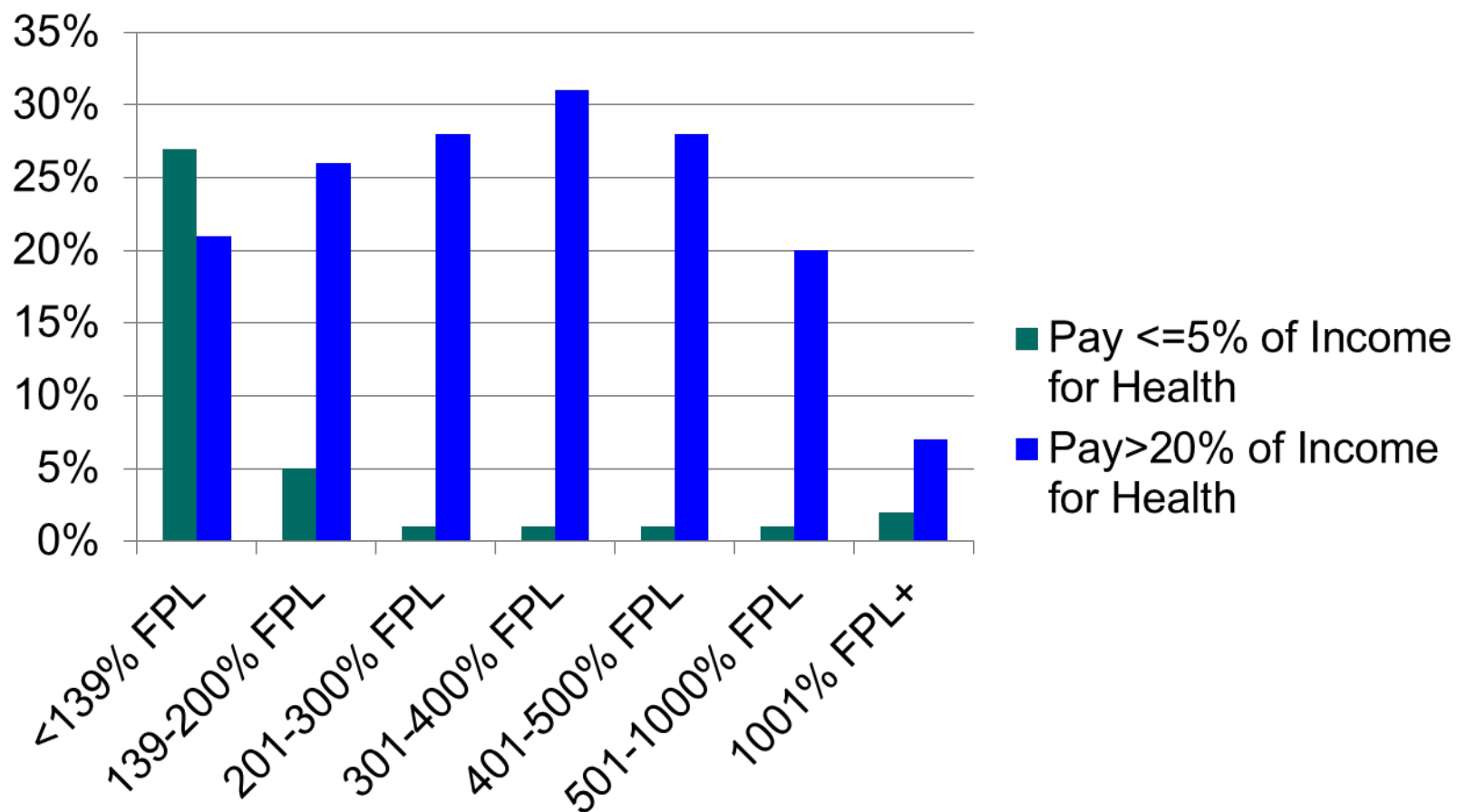
# ***Example Cases: Payments Compared to Health Benefits Received, Different Types of People, 2017***

	<b>Payment (P)</b>	<b>Benefit (B)</b>	<b>P/B</b>
Single Parent, 2 Kids, Medicaid	\$810	\$24,590	3%
Family of 4 (Both Parents Work)			
\$35K-65K Total Compensation, Exchange	\$7,730	\$25,280	31%
\$35K-65K Total Compensation, ESI	\$14,960	\$25,070	60%
\$65K-100K Total Compensation, Exchange	\$22,710	\$26,340	86%
\$65K-100K Total Compensation, ESI	\$19,440	\$24,900	78%
\$100K-125K Total Compensation, ESI	\$22,920	\$25,030	92%
\$125K-250K Total Compensation, ESI	\$26,250	\$25,890	101%
Young Adult, Medicaid	\$1,050	\$8,030	13%
Young Adult, \$15K to \$30K, Exchange	\$3690	\$8,660	43%
Young Adult, \$15K to \$30K, ESI	\$6,870	\$8,130	84%
Medicare Couple, \$85-170K	\$13,750	\$24,420	56%
Dual Eligible, 65+	\$2,740	\$30,500	9%

# Health-Related Payments as a Share of Income



# ***Fraction Paying Less than 5 Percent or More than 20 Percent of Income Towards Health***





# ***Conclusions***

- **A relatively large and growing share of health benefits received by VT residents is financed through net federal inflows**
  - **28 percent in 2012**
  - **30 percent projected in 2017**
- **Mixed findings on vertical equity**
  - **High income people pay more in actual dollars**
  - **Low and middle income people pay more as a share of income**
- **Limited evidence for horizontal equity**
  - **People with the same income can pay very different amounts**
  - **Partly relates to different types of insurance**