



WILLIAM & MARY

SCHROEDER CENTER FOR HEALTH POLICY

Health Data Available for Student Research

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Types of health data

- Health outcomes
- Healthcare spending
- Healthcare utilization
- Healthcare access (insurance coverage)
- Healthcare quality
- Health risk behaviors

For Econ 308 projects

- Aggregate data is often recommended
 - Unit of observation is a state, county, or country
 - Frequency:
 - single year (cross-sectional analysis)
 - several years combined (panel data analysis)

State-level data:

Health outcomes

Type of data	Source	Years available
Mortality rate (underlying cause of death)	CDC Wonder Click “I agree”	1999-2019
Infant mortality rate	CDC Wonder - Click years of interest - Click “I agree”	1995-2018
Medicare mortality rate	Dartmouth Atlas of Health Care (locate “Mortality”)	1999-2017
Diagnosed diabetes	Interactive Diabetes Data - Click “State” tab - Click “All States” - Download data on right	1994-2016
Adult obesity rate	BRFSS Prevalence & Trends - Pick topic of interest - Click wheel figure on right to download data	2001-2019
Syphilis cases	Kaiser Family Foundation - Click “Select All” states - Click “Trend Graph”	2006-2018



State-level data:

Spending

Type of data	Source	Years available
Health expenditures by state of residence	Centers for Medicare & Medicaid Services (locate file "Health expenditures by state of residence, 1991-2014")	1991-2014
Health expenditures by state of provider	Centers for Medicare & Medicaid Services (locate file "Health expenditures by state of provider, 1980-2014")	1980-2014
Medicare spending	Dartmouth Atlas of Health Care (locate "Medicare Reimbursements")	2003-2017
Hospital inpatient day expenses	Kaiser Family Foundation • Click on "Hospital inpatient day expenses" • Click indicator of interest • Click "Select All" states • Click "Trend Graph" tab	1999-2018



State-level data:

Medicare Utilization

Type of data	Source	Years available
Prescription drug use	Dartmouth Atlas of Health Care (locate "Prescription Drug Use")	2010 or 2008-2010
Care of chronically ill patients during the last two years of life	Dartmouth Atlas of Health Care (locate "End-of-Life Chronic Disease")	2001-2017
Hospital discharges	Dartmouth Atlas of Health Care (locate "Hospital and Post-Acute Care"; find "Selected Surgical Discharge Rates")	1992-2015
Primary care access	Dartmouth Atlas of Health Care (locate "Primary Care Access and Quality Measures;"; find "Selected primary care access and quality measures")	2003-2015
Medicare service use	Kaiser Family Foundation • Click on "Medicare Service Use" • Select indicator of interest • Click "Select All" states • Click "Trend Graph" tab	2000-2018



State-level data: Insurance Coverage

Type of data	Source	Years available
% Uninsured	BRFSS Prevalence and Trends • Pick class: "Health Care Access/Coverage" • Pick topic: "Health Care Coverage" • Click response: No • Click wheel figure on right side of page to download data	2001-2019
% Covered by type of insurance, by demographic	Kaiser Family Foundation • Pick indicator of interest • Click "Trend Graph" • Select "Timeframe" years	2008-2019



State-level data: Healthcare Quality

Type of data	Source	Years available
Hospital quality by state, by hospital	Hospitals Click on appropriate dataset	Years vary by quality measure
Nursing home quality, state average	Nursing Homes Including Rehab Services Locate dataset called "State US Averages"	Usually single year of data, most recent available



State-level data: Risky Behaviors

Type of data	Source	Years available
Smoking, drinking, seatbelt use, nutrition (fruits and vegetables), physical activity	BRFSS Prevalence & Trends • Pick topic of interest • Click wheel figure on right to download data	Years vary by measure

Other state-level data

- Many analyses require other state data to control for differences in:
 - Median income
 - Age distribution
 - Sex, Race composition
- Some of these variables are available for download from the [Schroeder Center](#) website

County-level Data

- [County Health Rankings](#)
 - “State Rankings Data & Reports” on bottom of page

Microdata

- Usually data on small units in a population
 - Observation is a person, or a firm
- Large files
- ASCII or SAS Transport
- Require data dictionary or other documentation
- More time-intensive
 - Fit honors projects, summer research, independent studies

Types of Microdata

- [Virginia Health Information's Patient Level Data](#)
 - In a given quarter, each record pertains to a hospital discharge.
 - ~850,000 discharges per year in Virginia
- Can be used to model:
 - Hospital provision of care
 - Inpatient and outpatient quality
 - Treatment for specific diseases
 - Rates of treatment in a county
 - Likelihood specific treatment is used for admitted patient

Types of Microdata

- BRFSS
 - [Behavioral Risk Factor Surveillance System](#)
 - 418,268 records, 342 variables in 2019
 - Annual data back to 1984 for some states
- YRBS
 - [Youth Risk Behavior Survey](#)



Types of Microdata

- [MEPS](#) - Medical Expenditure Panel Survey
 - set of large-scale surveys of families and individuals, their medical providers, and employers
 - Data on specific health services used, frequency of use, cost, payment
 - Data on the cost, scope, and breadth of health insurance held by/available to U.S. workers



Example of Studies

Data Used	Study
BRFSS	<u>“An economic analysis of adult obesity: results from the Behavioral Risk Factor Surveillance System”</u>
County Health Rankings	<u>“What determines health: a causal analysis using county level data”</u>
Dartmouth Atlas	<u>“Medicare Spending, The Physician Workforce, and Beneficiaries' Quality of Care”</u>
VHI PLD	<u>“Effects of the ACA Dependent Coverage Expansion on Virginia's Young Adults”</u>
CMS NHE Accounts	<u>“State Unemployment In Recessions During 1991–2009 Was Linked To Faster Growth In Medicare Spending”</u>



Questions?

The Schroeder Center for Health Policy has compiled a list of downloadable health-related datasets available for student research. Interested students may [click here](#) to view the list. If you should have any questions about these or any other health-related datasets, including those prepared by Virginia Health Information (VHI), please feel free to contact the Schroeder Center.

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