



Building Capacity for Patient-Centered Research: State-Level Data and Data Collaborations

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State Perspective - how to make the patient-centered outcomes research data infrastructure more useful.

- Large federal data projects using EHR and linked data are critical to patient outcomes research but the time lag makes the results less actionable for state health policy
 - Time lag between submission of data, harmonization and release of data
 - State analysts are dependent on federal agency for data access
 - Congressional objectives may trump state needs
- Local data collaborative informed by communities of patients, providers and payers are key to informing state health policy.
 - Policy makers like to based their decisions on local data
 - Potential for more timely and targeted data projects
 - Based on state needs and priorities

Examples of State Initiatives

1. All Payer Claims Data Bases (APCDs)
2. Local voluntary collaborative effort between health systems and health department on surveillance of COVID-19 vaccines
3. Medicaid Outcomes Distributed Research Network
4. Minnesota's Community Measurement

1. All Payer Claims Data (APCD)

- State APCDs collect and harmonize claims data from public and private payers - medical, pharmacy (some dental) and include patient demographics, provider codes, clinical, financial, and utilization
- The mechanisms and purposes vary across states
- **Primary objectives:** to better understand the public/private financing of health care at the state level, to inform state health reform activities, and to evaluate the outcomes of state reform strategies.
- The APCD Council was initiated in 2009 to provide a forum for states implementing APCDs to share information, expertise, and insight on their development and use.
 - Coordinated by the Institute for Health Policy and Practice at the University of New Hampshire (UNH) and the National Association of Health Data Organizations (NAHDO).



2021
23 States with
APCDs
(6 in process of implementation)

Source: APCD Council, <https://www.apcdcouncil.org/>

Spending

The total spend for the 48 services measured was:

\$1.3B

Of the total, **\$140M**

...was for **low value care**
(identified as likely wasteful or wasteful).

The top 3 services accounted for **44%** of total low value service **spending**.

Use of two or more antipsychotics **\$25.1M**

Opioids for back pain **\$18.6M**

Gen. catheters in stage III-V CKD patients **\$18M**

For more information or to view the full **Low Value Care in Colorado Report**, visit us at: www.civhc.org

Trends

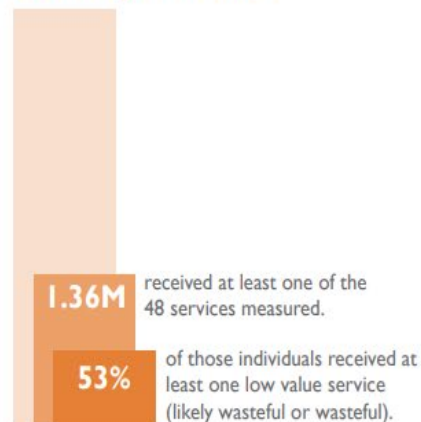
Between 2015-2017....

- there was an **11%** increase for individuals who received at least one low value care service.
- there was a **9%** decrease in spending, **but** low value service utilization remained stable.
- there was an **18%** increase in the patient paid portion of the cost of low value care.

Members w/Low Value Care

Of the eligible individuals in the CO APCD:

4.1M Eligible Lives



Payer Type

The highest proportion of spending for low value services varied by payer type:

Medications
(prescriptions, concurrent medication use, etc.)



Medicare and Medicaid

Procedures and Imaging Tests
(X-rays, screenings and tests, surgical procedures, etc.)



Commercial

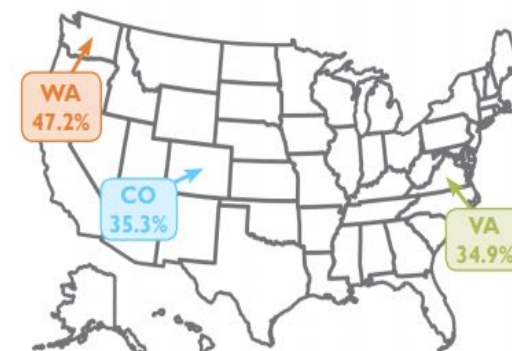
Procedures
(screenings and tests, surgical procedures, etc.)



Medicare Advantage

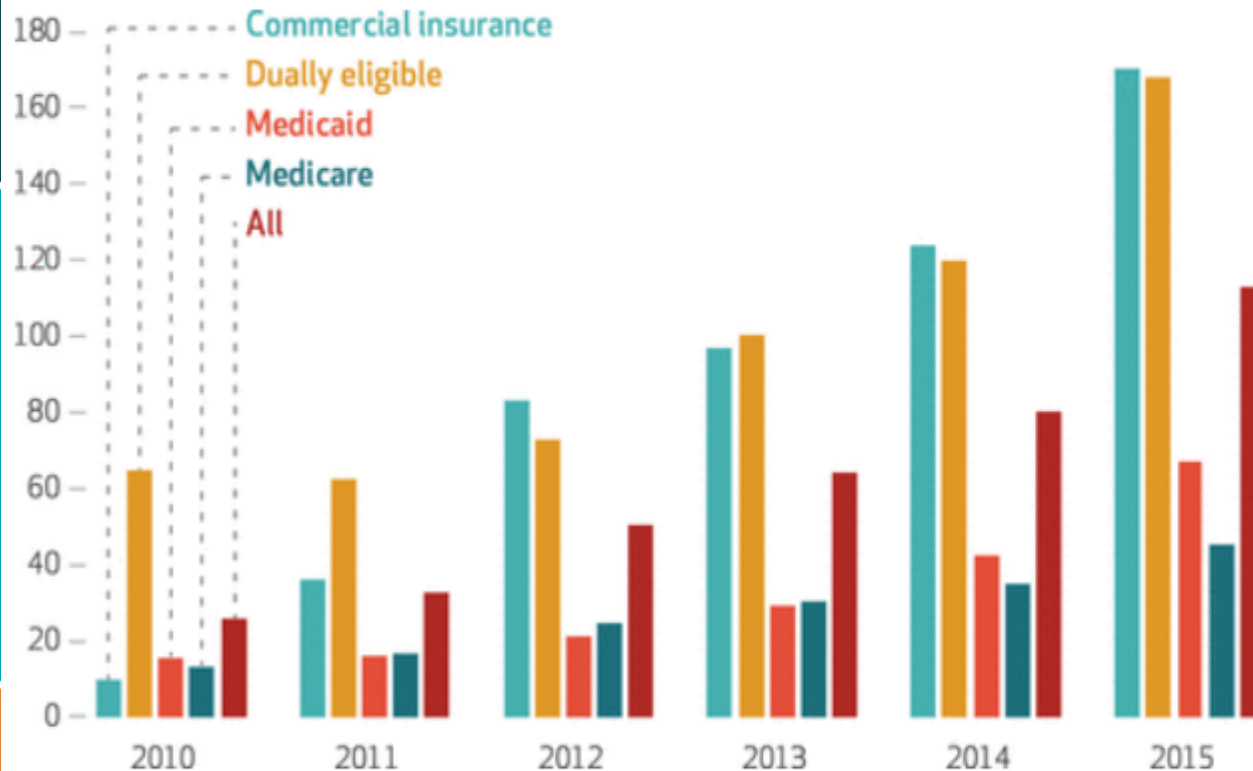
Geography

Two other states (Washington and Virginia*) have used the MedInsight Low Value Care tool to evaluate claims data. The results for utilization of low value services in Virginia were similar, while Washington state's were significantly higher:



*Costs for low value services should not be compared across states. The analysis conducted by Washington and Virginia accounted for all costs included in the claim, whereas the Colorado analysis only included the cost for the low value services identified. Percentages reflected in the map above display utilization of the low value services measured.

Exhibit 1 Numbers of telemedicine users per 10,000 enrollees in Minnesota, by coverage type, 2010–15



SOURCE Authors' analysis of data from the Minnesota All Payer Claims Database. NOTE Enrollees must have had at least one professional claim during the calendar year to be included in the numerator and denominator.

What works

- Covers the majority of residents in each state, includes geographic representation, and capture of longitudinal information on a wide range of individual patients, providers and payers.
- Comprehensive utilization and spending data available at state level
- State legislative mandated participation
- Federal funding through various initiatives

Challenges

- Data access for researchers varies by state
 - Colorado ease of access
 - MN more difficult and no data on payer/provider identities
 - Race/ethnicity data lacking
- No data on use of services by uninsured
- Gobeille v. Liberty Mutual Insurance Co. (2015) ruled that a federal ERISA law takes precedence over Vermont state law, shielding the self-funded insurer and its third-party administrator from having to share claims data with state APCD.
- Lack of standardization of encounter level claims from capitated health plans

Federal APCD Advisory Committee

- Consolidated Appropriations Act of 2021 requires the Secretary of Labor to convene the ***State All Payer Claims Databases Advisory Committee***
- Advice on standardized voluntary reporting system by ***group health plans*** to State APCDs and guidance to States on the process by which States may collect such data
- Report due June 25, 2021.

The legislation includes grant funding of \$125 million for states to establish all-payer claims databases (APCDs) about \$2.5 million for states over three year period

2. Voluntary local health system collaboration



- Voluntary, locally organized project to provide public health surveillance data in close to real-time for decision makers
- Distributed Data Network
 - No patient level data shared between systems
 - Vaccines reported by the MN Immunization Information Connection (MIIC) are linked to participating health systems EHR
 - Summary data are aggregated at a Central Site
- The results capture about 89% of the initial 1.5 million first and second doses administered in the state

Minnesota EHR Consortium Dashboard

Category

- ☐ Total
- ☒ Race/Ethnicity
- ☐ Gender
- ☐ Language
- ☐ Interpreter
- ☐ Income
- ☐ Urban/Rural
- ☐ Physical health

Attribute

- ☒ Select all
- ☒ American Indian
- ☒ Asian
- ☒ Black
- ☒ Hispanic
- ☒ Multirace
- ☒ White

Reset page

Completed vaccine series		At least one vaccine dose		Cumulative	Weekly	Percent	Disparities
Total	Total, adj.*	Ages 75+	Ages 65-74	Ages 45-64	Ages 25-44	Ages 15-24	Ages 0-14

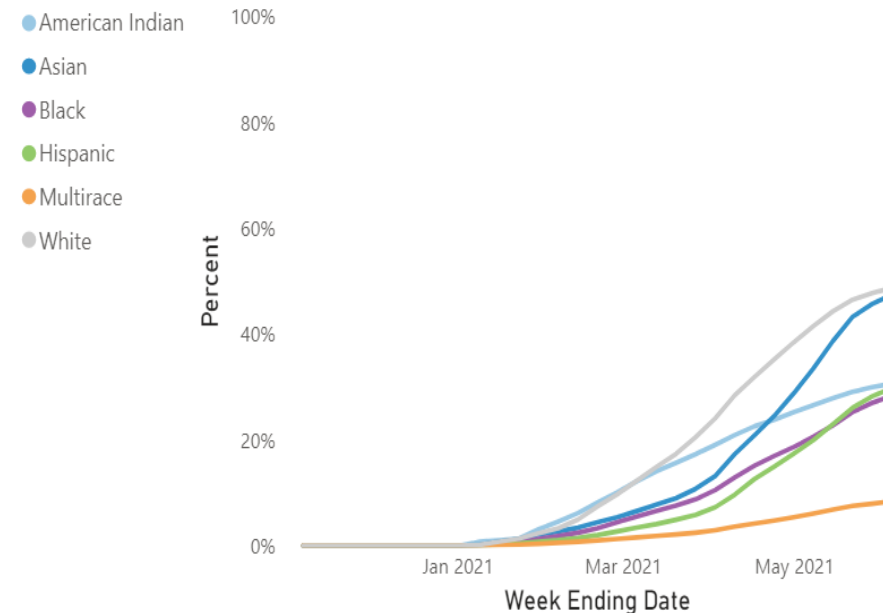
Hold CTRL while selecting to group multiple age categories together.

*Adjusted so results are age-neutral. All denominators are for the entire population, including those under age 15.

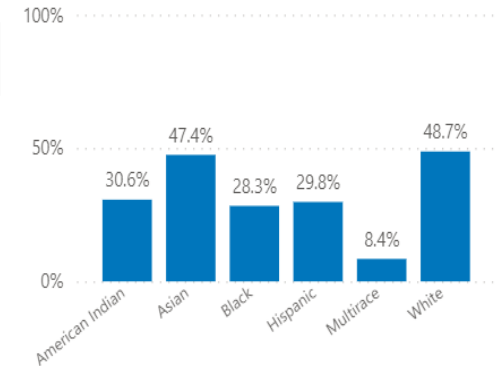
For disparities, values greater than 0 = over-represented, values less than 0 = under-represented compared to MN population

^Weekly percents are the number vaccinated in a given week divided by the number of people not already vaccinated in a given group

Percent Vaccinated, by Week

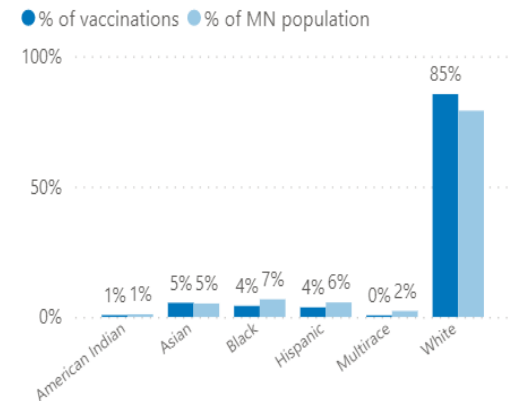


Percent MN population vaccinated to date



Note: Due to differences in tabulation between health systems and the U.S. Census Bureau, multirace is likely under-reported

Vaccinated population vs MN population



What worked

- Embedding skilled and innovative researchers in health systems
 - Systems/researchers committed to improving population health
 - Immediate demonstrated usefulness of data/information (*actionable*)
 - Health informatics component added technical capacity
- Distributive data network model
 - Avoids concerns about data privacy
 - Avoids months of negotiating DUA
 - DUA still exist but mostly straight forward

Challenges

- Interest in adding smaller independent clinics and FQHCs – more difficult/costly to build up infrastructure for data submissions
- Better race/ethnicity data
- Sustainable funding
- Communications, engagement and dissemination
 - How to engage public and local communities for outreach, vaccination and other targeted education/interventions
 - Different skill set than data analytics

3. Medicaid Outcomes Distributed Research Network (MODRN)

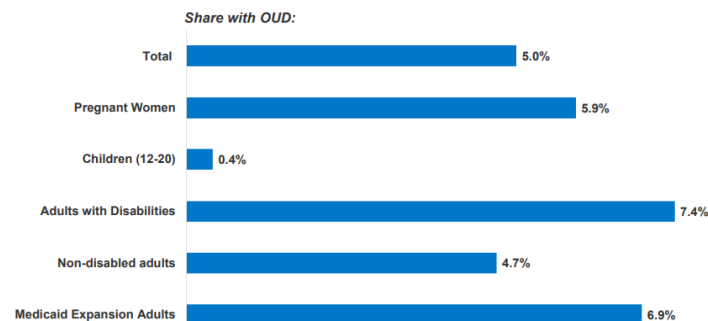
- Collaboration across to analyze Medicaid data across multiple states to facilitate learning among Medicaid agencies
- Participants from AcademyHealth's State-University Partnership Learning Network (SUPLN) and the Medicaid Medical Director Network (MMDN)
- Data distributed network allows states to retain their own data and analytic capacity but compare to other state outcomes.
 - Common data definitions, statistical code, outcome measures
- Eleven university-state partnerships now participate in an effort to provide a comprehensive assessment of opioid use disorder treatment quality in Medicaid

Opioid Use Disorder among Medicaid Enrollees: Snapshot of the Epidemic and State Responses

Julie Donohue, Peter Cunningham, Lauryn Walker, Rachel Garfield

Figure 4

Prevalence of Opioid Use Disorder Among Medicaid Population in Study States by Eligibility Category, 2016

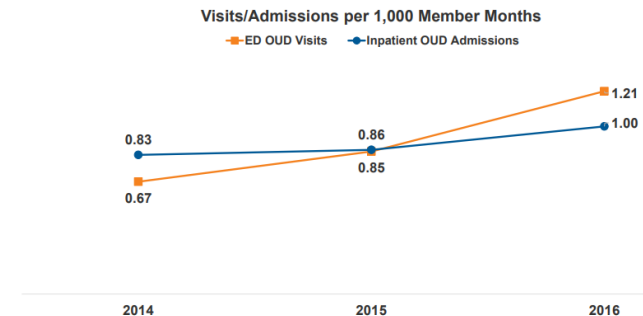


Notes: Includes enrollees age 12-64. Study states include Kentucky, Maryland, Ohio, Pennsylvania, Virginia, and West Virginia.
Source: Medicaid Outcomes Distributed Research Network.



Figure 5

Emergency and Inpatient Visits for Opioid Use Disorder Among Medicaid Population in Study States, 2014-2016



Notes: Includes enrollees age 12-64. Study states include Kentucky, Maryland, Ohio, Pennsylvania, Virginia, and West Virginia.
Source: Medicaid Outcomes Distributed Research Network.

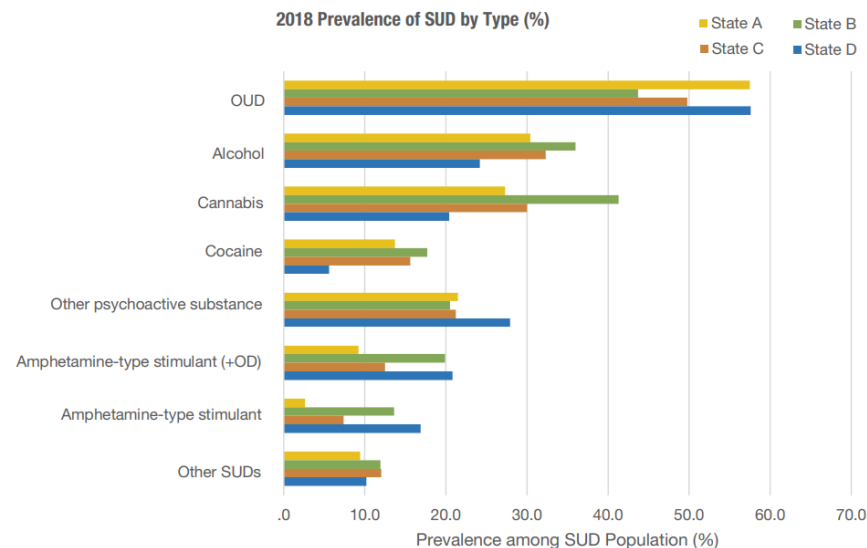


All six states cover evidence-based medication-assisted treatment (MAT). Despite these efforts, less than half of Medicaid enrollees with opioid use disorder in the six states receive any MAT. Among those receiving pharmacotherapy, 52% received at least six months of treatment.

Polysubstance Use Disorders in Four State Medicaid Programs

Authors: Julie M. Donohue, PhD; Susan Kennedy, MPP, MSW; Logan Sheets

Figure 2 - Prevalence of specific substance use disorders varies by type and state



Pooled characteristics of Medicaid enrollees with one, two, or three or more SUDs, 2018

	Number of SUDs	1 SUD	2 SUDs	3 or more SUDs
	Overall, row %	59.1	21.5	19.4
Comorbidities	Anxiety disorder, column (%)	36.2	45.3	59.0
	Mood disorder	39.9	51.3	66.4
	Schizophrenia and other psychotic disorders	6.7	10.8	19.3
	Post Traumatic Stress Disorder (PTSD)	7.9	11.9	19.4
	Hepatitis C (HCV)	7.1	13.3	24.5
	Human Immunodeficiency Virus (HIV)	1.3	1.9	2.9
	Hepatitis B (HBV)	0.6	1.1	2.3
	Abscess	0.1	0.2	0.7
	Osteomyelitis	0.5	1.1	2.0
	Endocarditis	0.2	0.6	1.8
	Soft skin tissue infections	10.9	15.0	22.1

What worked

- Distributed data network model
 - Avoids concerns about data privacy
 - Avoids months of negotiating DUA
 - DUA still exist but straight forward around aggregate data
- Engaging local Universities with analytic expertise with state Medicaid analysts
- Collaboration around policy topics/priorities and closer to real-time analysis

Challenges

- Limited state participation
 - Requires analytic expertise and political/leadership support
 - State-University relationships mixed across states
 - State Medicaid agency capacity
- Data sharing agreements and DUAs still required for University-based research access to data files unless all of the analysis run at the state
- Financing to support sustainability of network/models

4.



- Collection and reporting of statewide performance data on health care quality and cost measures.
 - Builds on regulatory need for health system reporting and supports health care operations
 - Based on **Minnesota Statewide Quality Reporting and Measurement System**.
 - Physician clinics and hospitals have been reporting standardized quality measures since 2010.
- The clinical data are used by health systems to identify characteristics of providers or care delivery methods that result in better outcomes.
- New entrance into research area with a large-scale research collaborative between Minnesota Community Measurement, Minnesota Department of Health, and HealthPartners Institute, MDH (funded by PCORI)
 - Minnesota Care Coordination Effectiveness Study to study the effect of care coordination on patient outcomes
 - Community Measurement provides the clinical data and serves as the data aggregator of clinical EHR data, claims data from payers, and survey data from individual patients.

TABLE 1: MHCP Managed Care Statewide Performance Rates for 2019 Compared to Previous Years

Table 1 displays MHCP statewide results for nine quality measures and compares them to the previous year.

QUALITY MEASURE	2019 MHCP Managed Care Statewide Rate	MHCP Statewide Percentage Point Change (2019 Report Year–2018 Report Year)	MHCP Statewide Percentage Point Change Over Time (2019 Report Year–First Report Year)
PREVENTIVE HEALTH MEASURES			
Breast Cancer Screening	60.0%	-0.4%	-2.8%** (6 years)
Colorectal Cancer Screening*	56.6%	0.8%**	9.2%** (9 years)
Childhood Immunization Status (Combo 10)*	42.7%	-1.0%	6.7%** (3 years)
CHRONIC CONDITION MEASURES			
Optimal Diabetes Care*	34.5%	1.8%**	0.9% (4 years)
Optimal Vascular Care*	47.5%	1.8%**	-4.8%** (4 years)
Optimal Asthma Control – Adults*	44.2%	3.1%**	2.5%** (5 years)
Optimal Asthma Control – Children*	54.0%	2.0%**	1.0% (5 years)
DEPRESSION MEASURES			
Adolescent Mental Health and/or Depression Screening	86.2%	10.6%**	10.6%** (2 years)
Adult Depression: Remission at Six Months	5.3%	-0.1%	0.5% (4 years)

*These statewide rates are weighted samples (see Methodology)

**Statistically significant difference

What worked?

- Central organization provides comparative data needed to meet regulatory requirements
 - Clinical quality (HEDIS)
 - But also cost of care comparisons
- Collaborative spirit across providers/health systems
- Provider-led governance structure
- State funding
- Local research capacity to inform care provided across the country

Challenges

- New entrance to large-scale collaborative research projects
 - Transition to hosting clinical data infrastructure for research
 - Balancing need for health system reporting and new interest in clinical research
- Need for dedicated resources to specifically support making the data more available and accessible to researcher

Summary

- Local-based collaborations that are close to policy makers and decision makers are more feasible and more actionable for state health policy
- Leveraging state regulatory requirements to facilitate data collection and then wrap around infrastructure for research capacity.
 - e.g. provider HEDIS measures, total cost of care requirements or cost of care reporting
- Collaborative distributive networks with motivated and interested researchers embedded within health systems and public agencies can lead efforts to support targeted data/analytic needs
 - Targeting COVID-19 vaccination strategies
 - Medicaid policy priorities such as Substance Use Disorders
- Federal financing of local models can be used to inform other activities across the states

About the State Health Data Assistant Center - SHADAC

SHADAC is SHADAC is a multidisciplinary health policy research center with a focus on state policy. For 20 years, SHADAC has produced rigorous, policy-driven analyses, translating complex research findings into actionable information that is accessible to a broad audience. SHADAC faculty and staff are nationally recognized experts on collecting and applying health policy data to inform or evaluate policy decisions, with expertise in both federal and state survey data sources. We provide unbiased technical assistance and in-depth analysis to states and other organizations and collaborate with a wide range of partners including foundations, state and federal agencies, academic institutions, other research organizations, and nonprofits.

Thank you!

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