



Recommendation Report for Expanded Access to the Minnesota All Payer Claims Database: Initial Findings

REPORT TO THE MINNESOTA LEGISLATURE

February 2022

Recommendation Report for Expanded Access to the Minnesota All Payer Claims Database: Initial Findings

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February 4, 2022

To the Honorable Chairs and Ranking Members:

In recognizing the value that data-driven health policy initiatives can bring to delivery system improvement, the 2021 Minnesota Legislature directed MDH to develop recommendations for how to expand access to, and use of, the Minnesota All Payer Claims Database (MN APCD), a large repository of health insurance claims, enrollment information, and costs for services provided to Minnesota residents.

In developing the enclosed *initial* report – a final report is due by December 15, 2022 – MDH performed a high-level environmental scan of data release practices employed by other APCD states and identified opportunities for broader use of these data from examples across the country.

Our initial early findings, described in more detail in the report, are as follows:

- Most states currently have data use policies in place to share granular data with a set of authorized users for a range of applications. However, not all states produce Public Use Files like Minnesota does.
- Oversight of data and data users' compliance with data use provisions are critical elements to successful data use policies.
- Data release committees are key components of successful oversight processes.
- Policies for expanded access to, and use of, APCD data can coexist with patient privacy and data protections when developed through a thoughtful, transparent process.
- To serve a broad set of data users, many states have enhanced their data by collecting additional information, including dental claims and non-claims-based payments.
- State-university partnerships can be effective tools to maximize effectiveness of data for policy applications.
- Expanded use of the MN APCD will require new funding to cover costs associated with the collection, management, and sharing of these data.

These findings represent only a starting point for developing the final report. To produce final, actionable recommendations for consideration by the Minnesota Legislature, MDH, in collaboration with our partner, HSRI, will be pursuing the following components: (1) a comprehensive environmental scan of data access and release practices by APCD states and the federal government; (2) stakeholder engagement in Minnesota with local partners to consider a broad cross-section of perspectives and expertise; (3) engagement with participants in state-university (data and research) partnerships; and (4) the development of a robust data sharing framework.

This report and additional publications developed based on the MN APCD are available online on the [MN APCD Website \(www.health.state.mn.us/data/apcd/index.html\)](http://www.health.state.mn.us/data/apcd/index.html). Questions or comments on the report may be directed to Stefan Gildemeister, the State Health Economist at (651) 201-4520 or stefan.gildemeister@state.mn.us.

Sincerely,



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Enclosure:

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Abbreviations

APCD – All-Payer Claims Database

CFR – Code of Federal Regulations

CMS – Centers for Medicare and Medicaid Services

DUA – Data Use Agreement

ERISA – Employee Retirement Income Securities Act of 1974

FFS – Fee for Service

HHS – United States Department of Health and Human Services

HSRI – Health Services Research Institute

MCO – Medicaid Managed Care

MDH – Minnesota Department of Health

MME – Morphine Milligram Equivalents

NAHDO – National Association of Health Data Organizations

PUF – Public Use File

SAPCDAC – State All-Payer Claims Databases Advisory Committee

TPA – Third Party Administrator

Executive Summary

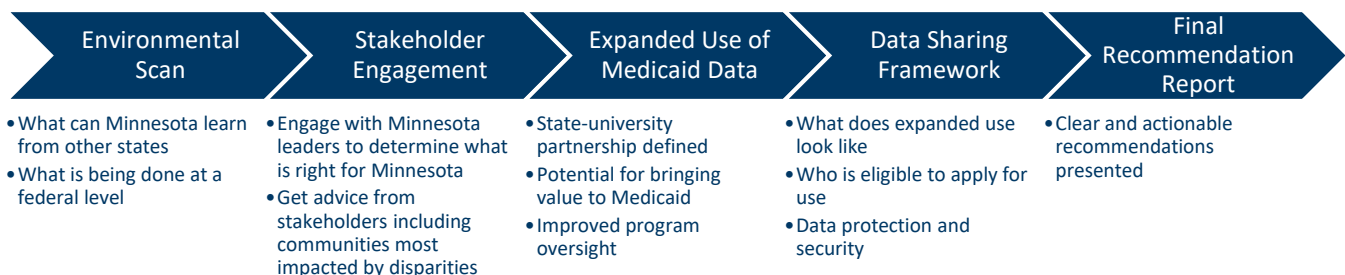
The passage of [Minnesota Laws of 2021, 1st Special Session, Chapter 7, article 3, section 42](#), signaled an interest in considering expanded access to the Minnesota All Payer Claims Database (MN APCD). This happens at an advantageous time with renewed interest in health care reform at the federal level and a focus on data driven decision making across stakeholders and industries. Minnesota is fortunate to be able to consider the details of expanded access to these data ahead of potential federal funding opportunities and anticipated guidance that will be associated with potentially available grant funds. This gives the state the ability to take an intentional approach with its consideration for expanded use and collection of APCD data.

In developing recommendations for expanded access to the MN APCD, the Minnesota Department of Health (MDH) will work with national experts, leaders in other states, and Minnesota’s own stakeholders to propose a thoughtfully designed approach. As required, this work will occur in two stages: the first stage being this preliminary report and the second stage a final report, due on December 15, 2022. This preliminary report provides background information about the emergence of APCDs across the country; presents an overview of the MN APCD; and documents some of the important contributions from research over the years. Then, based on information from other states, this report sketches out the opportunity associated with expanded access to the data for Minnesota. It does so, in part, by recognizing the value that new use cases could bring to the state.

The following initial high-level findings were identified from a preliminary environmental scan of practices across the existing 17 APCDs in the country:

- Most states currently have data use policies in place to share granular data with a set of authorized users for a range of applications. However, not all states produce Public Use Files like Minnesota does.
- Oversight of data and data users’ compliance with data use provisions are critical elements to successful data use policies.
- Data release committees are key components of successful oversight processes.
- Policies for expanded access to, and use of, APCD data can coexist with patient privacy and data protections when developed through a thoughtful, transparent process.
- To serve a broad set of data users, many states have enhanced their data by collecting additional information, including dental claims and non-claims-based payments.
- State-university partnerships can be effective tools to maximize effectiveness of data for policy applications.
- Expanded use of the MN APCD will require new funding to cover costs associated with the collection, management, and sharing of these data.

Finally, this preliminary report includes an overview of the following activities that will be conducted throughout the coming year to produce final recommendations for consideration by the Minnesota Legislature.



Introduction

In the 2021 legislative session, the Minnesota Legislature directed the Minnesota Department of Health (MDH) to provide recommendations for expanding access to data in the Minnesota All Payer Claims Database (MN APCD). According to the legislation, these recommendations are being designed to¹:

- Establish requirements for which outside entities may use the data.
- Determine whether data released to outside entities may identify health care facilities and providers.
- Develop an application process for outside entities to access the MN APCD.
- Consider whether to establish a data access committee to advise MDH on selecting outside entities permitted to access the data.
- Determine how MDH will exercise ongoing oversight over data use by outside entities.
- Address steps that must be taken by outside entities to protect MN APCD data from unauthorized use.
- Propose whether the state should participate in a state-university partnership to promote research using Medicaid data.

This preliminary report provides background information on APCDs, initial findings from an environmental scan, and a road map to develop the final report, due to the MN Legislature by December 15, 2022.

Background

What is an All Payer Claims Database and why is it valuable?

According to a report from the Commonwealth Fund², the United States spends nearly twice as much as other wealthy nations to provide health care, but our outcomes often are worse than that of other nations. While our health care system underperforms those in other nations, our health care costs continue to escalate much faster than our paychecks and overall inflation. According to the Kaiser Family Foundation³, between 2010 and 2020, average family premiums in the U.S. increased 55 percent, at least twice as fast as wages (27 percent) and inflation (19 percent). To improve understanding of health care trends and to address challenges in public and population health, health care markets, quality of care, and the rising cost of health care, many states have continually developed APCDs as data assets to inform health policy making.

All Payer Claims Databases (APCDs) are large-scale databases that systematically collect health care transaction records, including medical claims, pharmacy claims, and, in many states, dental claims. These data, collected from multiple private and public payers, typically include information on enrollment, prices, and providers.⁴

¹ Chapter 7 - MN Laws. (2021). mn.gov. <https://www.revisor.mn.gov/laws/2021/1/Session+Law/Chapter/7/>

² Tikkanen, R., & Abrams, M. (2020, January 30). *U.S. health care from a global perspective, 2019: Higher spending, worse outcomes?* The Commonwealth Fund. <https://www.commonwealthfund.org/publications/issue-briefs/2020/jan/us-health-care-global-perspective-2019>

³ Claxton, G., Rae, M., Young, G., & McDermott, D. (2020, October). *2020 employer health benefits survey*. KFF. <https://www.kff.org/health-costs/report/2020-employer-health-benefits-survey/>

⁴ All-Payer Claims Database (APCD) Council. (2014). *The Basics of All-Payer Claims Databases: A Primer for States*. *Institute for Health Policy and Practice (IHPP)*. <https://scholars.unh.edu/ihpp/125/>

APCDs were initially developed with the primary goal of enhancing health care transparency. Over time, use has expanded to inform policymakers and others working to address concerns facing the health care system in the United States.

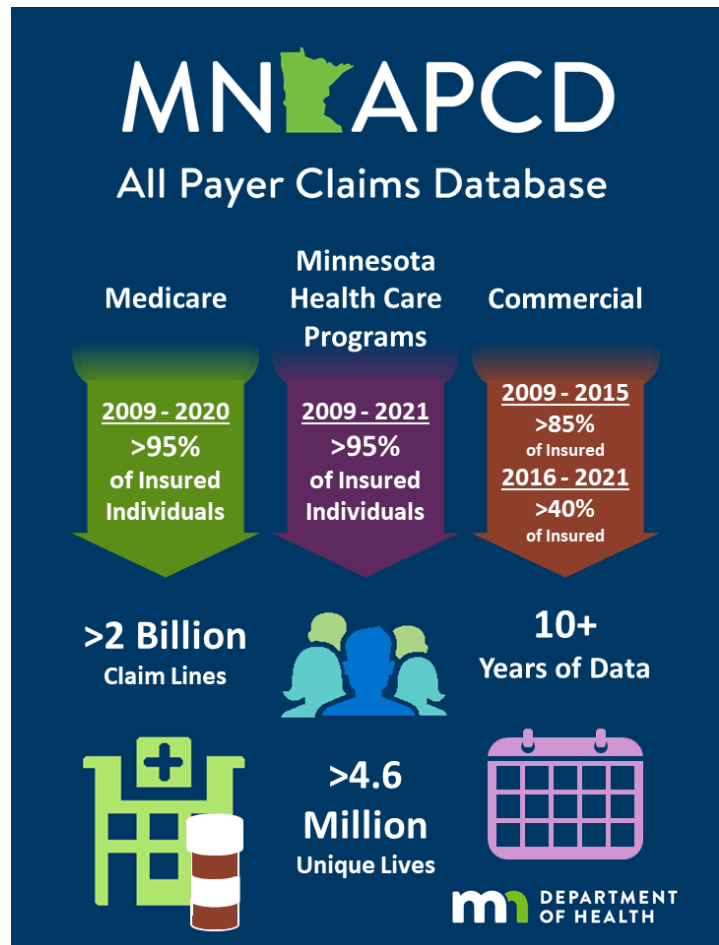
The first statewide APCD system was established in Maine in 2003. To date, 17 other states also collect, maintain, and use APCD data to inform health policy.

Minnesota's APCD (MN APCD)

The Minnesota APCD was established in 2008 as part of a bipartisan reform package aimed at enhancing transparency about the value of health care.⁵ In 2014, the Legislature refocused use of the MN APCD towards the development of research activities on cost, quality, access, and disease burden. Today, Minnesota is a leader in the use of APCD data to study health related issues.

The MN APCD includes health care transaction data, or claims, for over 4.6 million people for a given year, and covers more than 10 years of health care use in the state. Data are collected for over 95 percent of individuals with Medicare and those that rely on Minnesota Health Care Programs, as well as over 85 percent of the commercially insured population before 2016 and over 40 percent after.⁶

In Minnesota, unlike in most other states, data in the MN APCD are de-identified. This means the data do not include individually identifiable elements such as name, address, social security number or birth date.



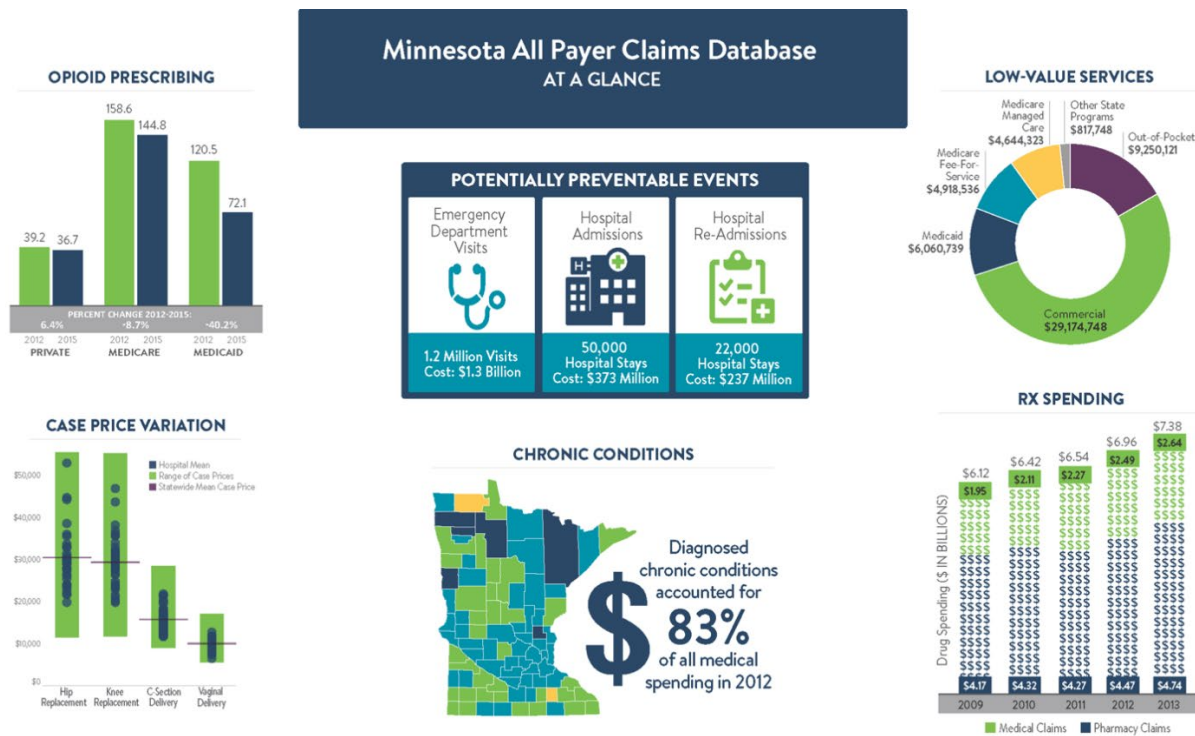
The MN APCD, like most other APCDs, does not include data from uninsured individuals or for care covered by Tricare, Veterans Affairs benefits, or the Indian Health Service. In addition, the MN APCD does not include claims from plans that do not cover general medical care, such as dental-only insurance, workers' compensation, and accident-only insurance.

⁵ Minnesota Statutes. (2008). *62u.04 payment reform; health care costs; quality outcomes*. Office of the Revisor of Statutes. <https://www.revisor.mn.gov/statutes/cite/62U.04>

⁶ For a detailed explanation for the drop in the commercially insured population available in the MN APCD please see Appendix C on page 24 of this report.

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To date, MDH has used the MN APCD for a wide range of applied research studies that fall into the following broad categories: health care utilization and spending, health care quality, system efficiency and waste, health care market trends, epidemiology, and public health. These research studies align within the permitted uses of the MN APCD set forth by the Legislature, which includes legislative-directed studies as well as studies of variation (including geographic variation) in utilization, cost, quality, and illness burden.⁷ Highlights from some of these studies are shown in the figure below. A list of all completed studies using the MN APCD is available on the [MN APCD website \(https://www.health.state.mn.us/data/apcd/publications.html\)](https://www.health.state.mn.us/data/apcd/publications.html), and a brief summary of some recent work is presented in Appendix A. In addition, there are numerous studies in-progress, and preliminary findings from these studies have been shared through presentations to the Legislature, state agencies and commissions, stakeholders, and at local, state, and national meetings or conferences. Examples of these topics include children’s healthcare, spending among high cost/high need individuals, spending on primary care, telemedicine, utilization, and spending for prescription drugs.



What opportunities exist in Minnesota for expanded access to the MN APCD?

In 2008 when Minnesota first established the MN APCD, the Legislature limited data access to MDH and identified the scope for how the data were to be used. This changed moderately in 2014, when the Minnesota Legislature obtained feedback from a workgroup about expanded use of the data. Access was still limited to

⁷ Authorized uses of the data were initially limited to a 2-year window. The Legislature has extended the sunset now several times. At this point, without further action by the Legislature, authorized use of the MN APCD would conclude on July 1, 2023.

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MDH, but the agency was required to produce a set of public use files (PUFs) and summary tables annually. Currently, six PUFs are available at no cost through the MDH website, with others under development; these files are highly aggregated to prevent the identification of individual members, providers, and health plans as stipulated by the Legislature. A summary of the MN APCD PUFs and a description of their content is available in Appendix B.

The United States Congress has taken notice of the value of APCDs and included provisions to further develop and enhance them through the Consolidated Appropriations Act 2021.⁸ The legislation noted the importance of state APCDs and outlined a grant funding program to support state efforts, as well as required the establishment of an advisory committee, the State All-Payer Claims Database Advisory Committee (SAPCDAC), to provide recommendations to the Department of Labor⁹ on expanded use of APCDs, data sharing, and collection. Data experts from a state APCD¹⁰, federal agencies, data groups, and employer and consumer groups were appointed to SAPCDAC.¹¹ The group held public hearings, heard testimony from witnesses and produced a report that was shared with members of Congress, and interested federal agencies such as Health and Human Services (HHS) and the Secretary of Labor. In the SAPCDAC report¹², the team of experts made recommendations for the standardization of data collection and release practices for state APCDs, as well as the broader use of the data for optimized benefit for states and federal efforts.

Expanded access to the MN APCD has the potential to increase the available evidence generated by these data to benefit Minnesota by raising the number of qualified users who have access to the data, bringing new expertise – for example, MDH only rarely works with clinical and actuarial experts – and building on the capacity to conduct approved studies and projects. Some examples of challenges that could be addressed in Minnesota with data driven solutions with existing or expanded use cases, based on lessons learned from other states, are summarized below.

Potential Additional Data Driven Solutions Using the MN APCD

Opportunities	Solutions Using MN APCD
Understand Market Competition	<ul style="list-style-type: none">▪ Evaluate impact of provider consolidation on health care prices and patient access
Reduce and Control the Cost of Health Care	<ul style="list-style-type: none">▪ Support consumer shopping and health care transparency through development of tools freely available to the public
Evaluate State Health Reforms	<ul style="list-style-type: none">▪ Assess the impact of changes in mental health service delivery on access and outcomes▪ Determine changes in health care delivery following telehealth policy changes

⁸ H.R.133 - 116th Congress (2019-2020): Consolidated Appropriations Act, 2021. (2020, December 27).

<https://www.congress.gov/bill/116th-congress/house-bill/133/text>

⁹ See Appendix C for more information on the role of the Department of Labor in APCD.

¹⁰ Minnesota's state health economist, Stefan Gildemeister served as one of two representative of state APCDs on the SAPCDAC.

¹¹ *State All Payer Claims Databases Advisory Committee (SAPCDAC) | U.S. Department of Labor.* (n.d.). Retrieved December 22, 2021, from <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/state-all-payer-claims-databases-advisory-committee>

¹² SAPCDAC. (2021). *State all payer claims databases advisory committee report with recommendations under section 735 of the employee retirement income security act of 1974.* <https://www.dol.gov/sites/dolgov/files/ebsa/about-ebsa/about-us/state-all-payer-claims-databases-advisory-committee/final-report-and-recommendations-2021.pdf>

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Opportunities	Solutions Using MN APCD
Measure Quality of Care	<ul style="list-style-type: none"> ▪ Identify unnecessary medical spending as identified by national experts on best practices ▪ Document prescribing patterns counter to best practices (opioid, antibiotics, etc.)
Support Insurance Regulation	<ul style="list-style-type: none"> ▪ Retrospective trend analysis on market movements ▪ Considering cost drivers as part of rate review process
Determine Network Adequacy	<ul style="list-style-type: none"> ▪ Data driven analysis that uses actual consumer experience to determine adequacy of carrier provider networks
Inform Surprise Billing Price Dispute Resolution	<ul style="list-style-type: none"> ▪ Protect consumers from charges for out-of-network health care services by producing commercially reasonable payments ▪ Dispute resolution and / or prevention processes
Improve Health of Population	<ul style="list-style-type: none"> ▪ Study impact of interventions on health outcomes ▪ Vaccination rates ▪ Disease prevalence ▪ Prevention service utilization ▪ Utilization of recommended or “high value” services to support health
Understand Impact of COVID-19	<ul style="list-style-type: none"> ▪ Utilization and spending on health care services related to COVID-19 testing, vaccination, and treatment ▪ Disruption to preventive health services (e.g., vaccinations, cancer screenings) and scheduled surgeries (e.g., knee replacement, spine surgery, etc.) during pandemic ▪ Post-COVID or “long COVID” health outcomes
Improve Health Equity	<ul style="list-style-type: none"> ▪ Examine variation in health care utilization, access, spending and outcomes with focus on issues relevant to populations that are often underrepresented and who disproportionately experience disparities, including but not limited to rural populations
Bring value to Medicaid operations and policy decisions	<ul style="list-style-type: none"> ▪ Assess churn in state public health care programs and the impact of transitions ▪ Conduct cross-payer analysis of benefits and service use ▪ Assess if Medicaid is effectively used as payer of last resort when multiple sources of coverage exist¹³

As Minnesota considers expanded access to the MN APCD and new use cases, there are opportunities to improve the effective use of the data through intentionally enhancing the existing data. The collection of dental claims and non-claims-based payment data will be considered for the final recommendations, as will other enhancements that can strengthen the data. While some states have already collected these claims or otherwise enhanced their data through partnership with federal agencies and employers, Minnesota is well positioned to lead the nation in the use of these data to inform policy challenges.

¹³ See Appendix D: MN APCD DHS Medicaid Business Need Use Cases.

MDH Approach to Developing Final Recommendations on Expanding Access to Data in the MN APCD

For this preliminary report, we conducted an initial scan of data use practices across states and reviewed recent publications on APCDs.¹⁴ The final report will more thoroughly consider the experiences by other states and the federal government concerning the dissemination of data and the data use practices. States with APCDs have a great deal to learn from one another and have often shared achievements, lessons learned, and opportunities for data use. As always, paramount in this work will be identifying ways to protect patient privacy and ensure data security.

More specifically, the following components, along with anticipated guidance from the U.S. Department of Health and Human Services (HHS), will make up the effort to develop final recommendations:

1. An in-depth environmental scan
2. Comprehensive engagement with Minnesota stakeholders
3. Identification of best practices

To develop recommendations, MDH has partnered with Human Services Research Institute (HSRI)¹⁵, an organization with a long track record of effectively and meaningfully engaging diverse stakeholders to develop practical recommendations through group meetings, interviews, focus groups, and user experience research, among other methods; in this effort, HSRI will work with local partners. The HSRI team also has extensive experience with data release policy and operation in Maine, Colorado, Oregon, and New Hampshire.

1. Environmental Scan

MDH will further evaluate existing data release policies and practices of other state APCDs, including those that have similar privacy requirements, as well as states whose data release practices have been noted as being exceptional. MDH will use the resources available through the National Association of Health Data Organizations (NAHDO), a national organization that coordinates efforts among states with APCDs and produces reference material that will be

EXAMPLES OF KEY DATA RELEASE FEATURES IN OTHER STATES

Arkansas

- Clearly articulated process
- Well-designed webpage

Colorado

- Well-resourced team
- Timely data sharing

Maine

- Option to access data through secure hosting environment
- 30-day public comment period

Massachusetts

- Data are normalized/cleaned
- Limited to 5 years of data

New Hampshire

- Option to receive up to 10 years' worth of data at no cost

Rhode Island

- Separate data sharing guidelines for state agencies and outside data requestors

Washington

- Varying eligibility based on requestor type

¹⁴ For example: Grace, K., Dworsky, M., Heins, S., Schwam, D., Shelton, S., Whaley, C., & Health Care, R. (2021). The History, Promise and Challenges of State All Payer Claims Databases Background Memo for the State All Payer Claims Database Advisory Committee to the Department of Labor. <https://aspe.hhs.gov/sites/default/files/private/pdf/265666/apcd-background-report.pdf>

¹⁵ <https://www.hsri.org/>

beneficial to the completion of the environmental scan. While few states produce the volume of research as Minnesota does, most do provide a process for data release to qualified entities and researchers to make use of the data in the benefit of their state’s residents.

Another key consideration will be the within-state agency data sharing policies and practices in Minnesota that could inform the final recommendations.


- **State Agency Partnerships** – Determine which state agencies will benefit most from MN APCD data and interest in using the data to advance their data driven approach.
- **State-University Partnerships**¹⁶ – Mutually beneficial university partnerships are popular with state APCDs because universities gain the ability to better contribute to the public benefit while states benefit from additional research.
 - Expedient cost-effective partnership
 - Expertise in data analytics and data science
 - Shared vision and trust
 - Understanding of state health policy and agency needs
 - Potential Federal Medicaid Match Funding


Additionally, MDH will evaluate federal agencies’ and national data organizations’ policies and practices for data release and determine if anything at the national level can inform and add value to the final recommendations.


2. Stakeholder Engagement


Throughout the process of using the MN APCD, MDH has worked closely with a range of stakeholders. This has included working with providers and measurement experts on technical issues, and with groups of stakeholders in 2014 and 2015 to consider effective use of the data.¹⁷ Over time, MDH has also worked with employers, physicians, and public health experts on developing research and to further increase the awareness of the data and emerging research findings. Most recently, MDH sought guidance from the community through a Request for Information (RFI) on new applications for the use of the MN APCD and from researchers on how to enhance the effectiveness of Minnesota’s suite of PUFs. Stakeholder engagement is particularly critical for


Stakeholders

















Providers

- Hospitals
- Medical Professionals
- Mental Health Professionals

Payers

- National Insurance Carriers
- MN Non-Profit Carriers
- Data Driven Payers

State Agencies

- Public Health
- Information Tech
- Commerce
- Human Services

Legislature

- Bipartisan

Researchers

- Universities
- Data Users

Employers

- Self-Funded Payers

Consumers

- Advocacy

¹⁶ Milbank Memorial Fund (n.d.) *Medicaid agency-state public university partnership: The value proposition for Medicaid agencies*. Retrieved December 22, 2021, from https://www.milbank.org/wp-content/uploads/2020/09/Value_Prop_Medicaid-Agency_v5.pdf

¹⁷ <https://www.health.state.mn.us/data/apcd/allworkgroups.html>

developing recommendations related to how data governance can balance the tensions between preferences for granularity by data users and legal requirements established in the state around data privacy and use that reflect preferences about data access and use.

MDH plans to engage with stakeholders in Minnesota to discuss findings from the environmental scan, questions or concerns about data use, interest in use of the data, and best practices considerations for expanded data sharing. Stakeholders we plan to consult include, but are not limited to, the research community; Minnesota Departments of Human Services and Commerce; Minnesota State Employee Group Insurance Plan; MNsure; health insurers; health systems, including clinic and hospital staff; legislators and representatives of communities experiencing barriers in health equity.

In October of 2021, the Robert Wood Johnson Foundation published Recommendations from the National Commission to Transform Public Health Data Systems¹⁸ which underscored that modern public health data systems, such as the MN APCD, are more than simply a collection of individual data points, rather, they are defined as the actors and sectors with data and agency to make decisions to advance the health and well-being of a community, population, and nation. Establishing an equitable and ethical data sharing framework that is governed to protect privacy will be important work that will be done with the stakeholders as the expanded use of the MN APCD is considered.

3. Best Practices

The outcome of the work done in 2022 will determine what can be described as *best practices for Minnesota*, taking into consideration multiple views and perspectives. Data users' perspectives may describe best practices for data sharing differently than that of the state because of differing priorities. Data users prefer a simplified application process with quick access to data, while state APCDs may view best practice as a measured process that favors careful consideration over a rapid timetable. Best practice for data release will be one that results in Minnesota benefitting from the work of many quality data users and follows prudent practices for data protection.

While the following section on Initial Findings presents some best practices, these will be enhanced and tailored throughout 2022 into Minnesota-specific best practices.

¹⁸ National Commission to Transform Public Health Data Systems. (2021, October). Charting a course for an equity-centered data system. Robert Wood Johnson Foundation. <https://www.rwjf.org/en/library/research/2021/10/charting-a-course-for-an-equity-centered-data-system.html>

Initial Findings

There is a wealth of information already available from other states and other data entities for Minnesota to consider as we look to recommend a framework for expanding access to the MN APCD. This section highlights a list of *initial* findings that will benefit the development of final recommendations. These findings, however definitive they may seem, represent only a starting point for the upcoming work. MDH will pursue a careful and intentional approach to develop recommendations on broader access to MN APCD data, relying strongly on lessons from other states, the perspectives of stakeholders, and Minnesota’s history of carefully curating the use of health data.

Expanded Access

Expanded data access can coexist with patient privacy and data protection. States have shown this can be done through a thoughtful process that defines qualified uses, qualifications users must demonstrate they meet, and a data sharing framework to protect the data when used by others outside of the APCD agency.¹⁹

Most APCD states do have processes in place to share APCD data more broadly; however, not all produce PUFs like Minnesota does. Many states have expanded the data they collect to make them more useful to data users, including collecting dental claims, data on non-claims-based payments, and other information.

Some use cases will benefit from detail about medical systems and health care facilities, but it will be important to create a release process that will prevent competitive disadvantages from emerging.

State-university partnerships can be effective tools to maximize effectiveness of data for policy applications. As it concerns Medicaid, APCD data have been used to bring additional value to Medicaid. These initiatives have been supported by federal Medicaid matching funds.

¹⁹ See Appendix E for a summary of identified types of interested parties that may request use of data.

Data Sharing Framework

Defined Levels of Authorization

- Public use data sets
- Limited data sets
- Analytic data sets

Identification of Needs

- Data elements needed to complete research
- Data sharing format needed and available

Standardized Agreements

- Data use agreement (DUA)
- Data safeguards
- Limitations on use

Defined Application Process

- Steps required for data request and approval
- Clear timeline for applicant and review

Documentation and Communication

- Documentation and user guides
- Create awareness in the community of data
- Document data initiatives under way

Defining a data sharing framework is central to a successful expansion of data use by a state APCD. The accompanying figure details a set of components defined by other states as part of their data sharing framework and will serve as an initial set of best practices. In addition, key elements of the data sharing framework must include enhancement to existing standards regarding data security practices and data use provisions as discussed below.

Data Security Practices: Depending on the design of expanded access – will users access the state’s environment or work on authorized data within their systems – there need to be clearly articulated security protocols and administrative practices in place that will be audited by independent entities at regular intervals.

Data Use Provisions: Data use must be governed by legally binding data use agreements that identify permitted uses tied to specified benefits to Minnesota, articulate prohibitions related to data linkage and constructive reidentification of individuals, identify data users and the qualifications they must meet, limit analyses that would result in unfair market advantage, and specify, as appropriate, the requirement to publicly release findings.

Oversight Process

Oversight over data and data users is critical to a successful data use policy. This includes establishing a comprehensive application process, developing legally enforceable data sharing agreements, and provisions that provide oversight over adherence to established data use practices.

Establishing a data release committee is a key element in a successful oversight process, particularly if the committee members represent key stakeholders so different perspectives are included in the decision-making process for data release.

Funding Models/Mechanisms

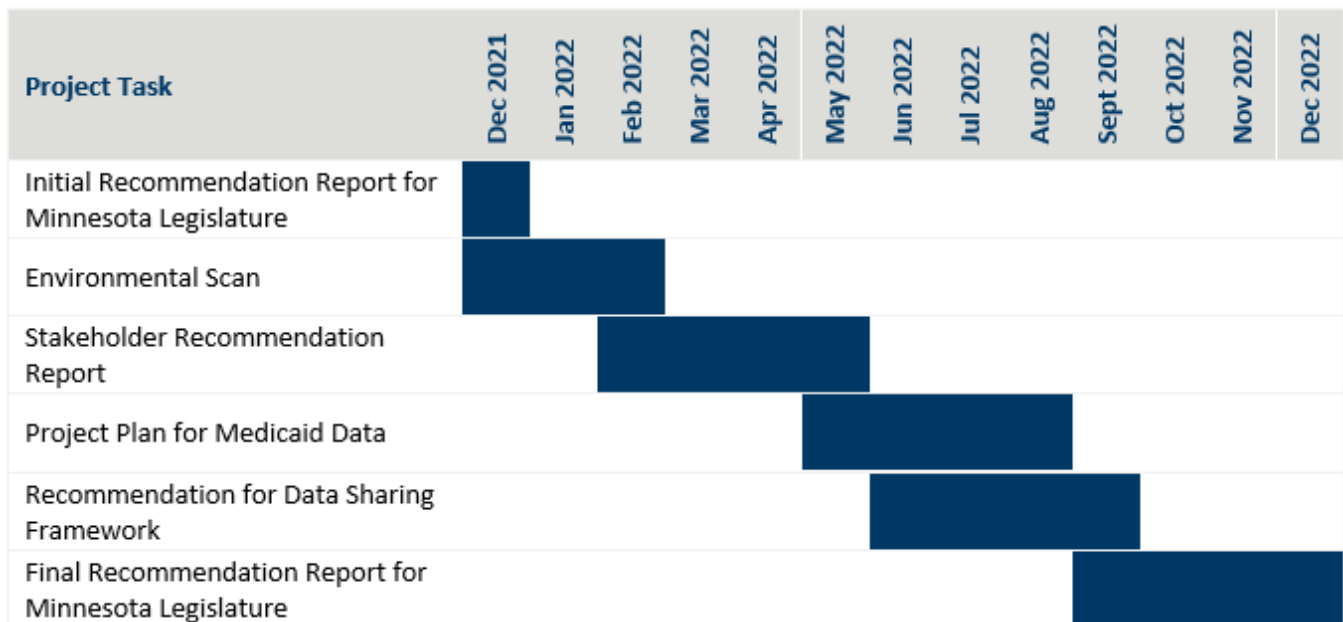
Expanded use of the MN APCD will require new funding to cover costs associated with the collection, management, and sharing (or hosting) of large data sets. New funding is needed to expand the scope of the existing data governance procedures, create and implement a data sharing framework, build additional reports and custom data sets for users, and enhance the quality of the data collected to accommodate more use cases. States with APCDs have all developed different strategies to support the ongoing cost of collecting and sharing data, and some are evaluating alternatives to their existing strategies. An effective strategy often includes funding from more than one of the different sources outlined below:

State	Federal	Grant	Other
<ul style="list-style-type: none">• State agencies using APCD data or requesting customized reports use funding paid to APCD agency	<ul style="list-style-type: none">• Medicaid dollars (90/10 funds) support APCD work in many states when used for Medicaid	<ul style="list-style-type: none">• Whether directly to the state APCD agency or other state agencies doing a study using the data (rate review, opioid use, etc.)	<ul style="list-style-type: none">• Subscription fees• Assessment fees• Licensing fees• Tiered usage fees• Other creative solutions

Road Map to Final Recommendations

To produce a Final Recommendation Report with clear and actionable steps that are relevant for Minnesota, MDH has developed a detailed plan as described in the Introduction Section. MDH and our partner, HSRI, have begun conducting the environmental scan. MDH anticipates concluding this work by February 2022. MDH has also begun researching experiences in data use by state-university partnerships, focusing primarily on the use of Medicaid data. A project plan for Medicaid data, which will build on existing conceptual work²⁰, will be developed by August 2022. The stakeholder engagement process will begin in the spring of 2022 and is scheduled to conclude with a report in May 2022.

Additional guidance from HHS about the grant program for APCDs is anticipated to be published by the fall of 2022, with the expectation that it would further inform MDH’s final recommendations and might provide additional funding for MN APCD expansion efforts.



²⁰ See Appendix D: MN APCD DHS Medicaid Business Need Use Cases.

Appendix A: Publications by MDH

Below is a summary of publications produced by MDH. More information and detail can be found on their [website](#).

Report Title	Publication Year	Key Findings
Blood Pressure Medication Non-Adherence in Minnesota (2015)	2021	<ul style="list-style-type: none"> ▪ In 2015 in Minnesota, almost three of every ten insured Minnesota adults taking blood pressure medications were non-adherent (29.2%) ▪ Non-adherence varied by age, type of insurance coverage, and geography
Treated Chronic Disease Prevalence and Costs in Minnesota (2015)	2019	<ul style="list-style-type: none"> ▪ Chronic disease-related health care spending is substantial, particularly for Minnesotans aged 60 or older ▪ Treated prevalence of many chronic conditions continues to rise across nearly all age groups ▪ Over time, health care spending attributable to chronic conditions and smoking is expected to continue rising steadily
Geographic Variation in Hypertension in Minnesota (2014)	2019	<ul style="list-style-type: none"> ▪ In 2014 in Minnesota, three out of every ten insured Minnesota adults had a diagnosis of hypertension ▪ Hypertension is more common in older age groups and more common in men than women ▪ Hypertension is slightly more common in the low-income Medicaid population than the commercial insurance population ▪ Hypertension is more common in rural areas than metropolitan areas
Population-Level Estimates of Telemedicine Service Provision Using an All-Payer Claims Database (2010-2015)	2018	<ul style="list-style-type: none"> ▪ The number of telemedicine visits increased dramatically from 2010 to 2015 ▪ Rates and patterns of use varied extensively by coverage type and geography: <ul style="list-style-type: none"> ▪ In metropolitan areas telemedicine visits were primarily direct-to-consumer services provided by nurse practitioners or physician assistants and covered by commercial insurance ▪ In nonmetropolitan areas telemedicine use was chiefly real-time provider-initiated services delivered by physicians to publicly insured populations.

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Report Title	Publication Year	Key Findings
Commercial Case Price Variation among High-Volume Inpatient Treatments in Minnesota Hospitals (July 2014 - June 2015)	Part 1: Jan. 2018 Part 2: Aug. 2018	<ul style="list-style-type: none"> ▪ Two reports indicate wide variation in the prices paid for common inpatient treatments ▪ Prices for the same treatment varied considerably statewide, as well as across hospitals and within hospitals
Patterns of Opioid Prescribing in Minnesota: 2012 and 2015	2018	<ul style="list-style-type: none"> ▪ Overall rates of opioid prescribing declined in Minnesota from 2012 to 2015, but the morphine milligram equivalents (MME) per prescription increased ▪ Nearly one in three Minnesotans with an opioid prescription in 2015 had multiple prescribers ▪ Prescription opioid use varied across counties. In some counties, prescription opioid use in 2015 was over 3 times the statewide average of 523 MME per resident.
Analysis of Low-Value Health Services in the Minnesota All Payer Claims Database	2017	<ul style="list-style-type: none"> ▪ Total spending on 18 low-value services measured was \$54.9 million ▪ Minnesotans spent \$9.3 million out-of-pocket for these services ▪ Diagnostic imaging for uncomplicated headaches was the most common and most costly low-value service observed

Appendix B: Public Use File Summary

Below is a summary of the public use files that have been developed and are available through MDH. Additional information, as well as the process for obtaining the PUFs is available on the [MN APCD’s website](https://www.health.state.mn.us/data/apcd/publicusefiles/index.html) (URL: <https://www.health.state.mn.us/data/apcd/publicusefiles/index.html>).

Public Use File	File design and details
Health Care Service (2013-2019)	<ul style="list-style-type: none"> ▪ This file is designed to analyze the distribution of health care service and procedural information for Minnesota residents. ▪ It presents the data in summarized form by age group and 3-digit ZIP code. Health care service information stems from the procedural or revenue codes reported on the medical claim.
Primary Diagnoses (2013-2019)	<ul style="list-style-type: none"> ▪ This file is designed to analyze the distribution of diagnostic information recorded in health care use for Minnesota residents. ▪ It presents the data in summarized form by age group and 3-digit ZIP code. Diagnostic information stems from the primary diagnoses on the medical claim.
Health Care Utilization (2013-2019)	<ul style="list-style-type: none"> ▪ This file is designed to analyze common types of health care use by major categories, including hospital admission, use of ambulance services, clinic visits, and more for Minnesota residents. ▪ It presents the data in summarized form by age group and 3-digit ZIP code. Health care utilization information is derived using the place of service codes for professional services and type of bill codes for institutional claims.
Prescription Drug (2012-2014 & 2016-2018)	<p>Two versions of Prescription Drug PUFs are available:</p> <ul style="list-style-type: none"> ▪ The <i>Summary</i> Prescription Drug PUF contains retail pharmacy claims data that have been aggregated by nonproprietary drug name (i.e., active ingredient). This file is designed to analyze retail prescription drug use and spending among Minnesota residents at the active ingredient level. This file includes demographic distributions of prescription drug users. ▪ The <i>Detail</i> Prescription Drug PUF contains retail pharmacy claims data that have been aggregated by the first two segments of the National Drug Code (i.e., drug product). This file is designed to analyze retail prescription drug use and spending among Minnesota residents at the drug product level.

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Public Use File	File design and details
Provider Specialty (2017-2019)	<ul style="list-style-type: none"> ▪ This file is designed to analyze variation in payments to providers by individual provider specialty across a variety of stratifying variables. A data dictionary is included as a separate worksheet in the PUF. ▪ The PUF stratifying variables represent payer type, site of service, patient resource utilization band, and provider and patient geography. Provider specialty was derived from the Medicare Provider Enrollment, Chain, and Ownership System (PECOS) and the National Plan and Provider Enumeration System (NPPES) using claim reported National Provider Identifier (NPI).
Member (2016-2018)	<ul style="list-style-type: none"> ▪ This file is designed to analyze variation in medical and pharmaceutical expenditures by cost sharing, within or across payer type and additional stratifying variables. ▪ The PUF stratifying variables represent member age group, sex, resource utilization band, geography, and median household income associated with member ZIP code. Expenditure variables include medical and pharmaceutical amounts paid by the insurer and member as well as combined medical and pharmaceutical costs.

Appendix C: Loss of Self-Funded Data and The Gobeille Decision

Most people in Minnesota and the rest of the United States who work for large employers do not have health insurance in the way that people typically think of insurance. Instead, their medical expenses are covered by their employer through a “self-funded” arrangement. Employees’ claims are administered by a third-party administrator (TPA), typically an insurance company but the employer assumes the financial risk usually borne by an insurer and so is responsible for all costs of care. These self-funded arrangements are regulated by the Employee Retirement Income Securities Act of 1974 (ERISA) and are preempted from complying with state requirements like data submission to APCDs. Data for self-funded payers were included in APCD data submissions through their TPA’s until 2016 when the Supreme Court decided in *Gobeille v. Liberty Mutual* that there was an ERISA preemption and only the US Department of Labor can set rules with which they must comply.

In 2016, the U.S. Supreme Court held in *Gobeille v. Liberty Mutual* that states cannot compel self-insured plans regulated by ERISA (Employee Retirement Income Security Act of 1974) to submit their data to State APCDs. Until this decision, data submission did not require a data submitter (typically a health insurance company, TPA or provider) to identify the plan type or whether a self-funded payer was regulated by ERISA; they simply submitted all commercial data to the State APCD. Following *Gobeille*, insurance companies and other data submitters had to unbundle their data submissions, create processes for identifying the ERISA self-funded plan data, and remove the data from files if an employer did not want the plan to submit data. However, at this point it is not clear to what extent employers are actively involved in the decision to have their data submitted to State APCDs. In any case, submission of commercial claims data, primarily as a result of the Supreme Court’s decision, have fallen precipitously across states.

The resultant loss of a significant amount of ERISA self-funded plan data in APCDs has impacted the ability of State APCD data users to fully understand the health care marketplace and its population. In addition, data users have a reduced ability to study health equity, estimate the uninsured, determine total dollars spent on health care, assess the effectiveness of health care delivery to State residents, and analyze quality of care, patient safety, and care variation. This loss of data may impact evidence-driven policy making across states with APCDs.

Expanding the use of the MN APCD may provide these self-funded employers with a reason to agree to submit their data. The SAPCDAC report provided the Secretary of Labor with recommendations that included compelling businesses to voluntarily include their data in state APCD submissions by sharing the value of the data and how self-funded data can support state efforts. The Department of Labor will be issuing guidance to employers in late 2021 or early 2022 that is likely to encourage states to make some changes to their APCD data collection and use of data, including providing a mechanism through which self-funded companies may Opt-In to data submission to state APCDs.

Appendix D: Draft MN APCD Use Case that Brings Value to Medicaid

During 2018 and 2019, MDH and the Minnesota Department of Human Services (DHS) have discussed potential ways of using the MN APCD data to inform and strengthen Medicaid operations and policy decisions. These discussions primarily spanned teams at DHS focusing on long-term care and health care operational and policy issues. Following is an abbreviated list of possible applications that were considered for the development of proposals for funding support by the U.S. Centers for Medicaid & Medicare Services (CMS).

Medicaid Business Need	Detail
Meeting CMS 42 CFR Part 447.203 Access Monitoring Review Requirements	<p>Serve as a data source to report on the following CMS identified areas:</p> <ul style="list-style-type: none"> ▪ Availability of Care Through Enrolled Providers – Leverage the MN APCD Master Provider Directory to identify beneficiaries’ access to certain categories of service (e.g., Primary Care, Specialists, Obstetrics, Behavioral Health, Substance Use Disorders) – compare to commercial and Medicare beneficiaries to examine disparities in access. ▪ Utilization data – While DHS data can show utilization for services paid for by Medicaid, MN APCD data can show utilization across payers for beneficiaries with secondary coverage, and longitudinally for individuals who may have not been consistently enrolled in Medicaid. ▪ Compare Medicaid rates to other health care payers – In 2016 AMRP, DHS only compares Medicaid rates to those paid by Medicare and the state employee health insurance program. The MN APCD would allow comparisons to the commercially insured population by provider type and site of service.
Cross-Payer Comparisons	<ul style="list-style-type: none"> ▪ Assessment of differences in service utilization e.g., preventive screenings, condition prevalence, opiate use, treatment patterns, quality measures, and payment variation across all payers (i.e., Medicare FFS, Medicare Advantage, MCO’s, Medicaid FFS, commercial). Can inform the setting of targets or benchmarks.
Coordination of Benefits / Dual Eligible Population	<ul style="list-style-type: none"> ▪ MN APCD could be used to identify whether Medicaid is being used appropriately as the payer of last resort – both from an access to care perspective and re: fraud/recovery.

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Medicaid Business Need	Detail
Churn Analyses / Continuity of Care	<ul style="list-style-type: none"> ▪ Given that the MN APCD contains data beginning in 2009, it can be used to follow beneficiaries as they churn into and out of Medicaid, to answer the following: Are beneficiaries able to remain with the same PCP? How is maternal care impacted by churn into/out of Medicaid? ▪ Identify and describe the coverage type beneficiaries have prior to Medicaid and in periods of disenrollment. ▪ As MCO contracts turn over and members must switch plans, what happens to their continuity of care? What happened to continuity of care due to population shifts due to COVID-19 pandemic?
Long Term Care and Home Health Services	<p>Provide full claims and insurance history for Medicaid beneficiaries to:</p> <ul style="list-style-type: none"> ▪ Understand patterns that contribute to initiating nursing home care and home health services. ▪ Identify opportunities to transition beneficiaries to alternative care settings.
Policy/Program Effectiveness	<ul style="list-style-type: none"> ▪ The MN APCD can be used to look at mental health parity across payers.
EHR Incentive Program	<ul style="list-style-type: none"> ▪ Collection of dental claims data could help verify patient mix/volume calculations for eligible providers in the Medicaid EHR Incentive Payment Program.
Pharmacy Rebate	<ul style="list-style-type: none"> ▪ Collection of data on pharmacy rebates could provide important information on the actual, total pharmacy spend in the state.
Health Equity Analyses	<p>In the context of the private market, assess:</p> <ul style="list-style-type: none"> ▪ Maternal access, outcomes, and mortality. ▪ DHS intervention for African American and American Indian women on Medicaid for preterm birth rates, low birth weight, rate differences across race, ethnicity, and language variables. ▪ Barriers to pediatric care, including developmental screening and preventive care: variation in reimbursement, immunization rates, dental services among children in particular are pretty low. ▪ The possible impact of prior authorization requirements on utilization patterns for prescription drugs? For example, HIV meds removed from DHS preferred drug lists (PDL) will now require 4-5 prior authorizations. Does removing drugs from PDL lower utilization? Analyze differences between DHS and private insurers – are there meaningful differences? Do private insurers require prior authorization too? 6 – month and 12 – month analysis of policy impact of the decision. ▪ Sickle Cell Disease (SCD) following patients’ disenrollment from Medicaid.

Medicaid Business Need	Detail
Telehealth and Telemedicine Services	<p>Study the impact of changes in policies governing and paying for telehealth services in response to the COVID-19 pandemic:</p> <ul style="list-style-type: none"> ▪ Access to specialty care, including telemedicine services for mental/behavioral health. ▪ Telemedicine care for chronic conditions such as hypertension and diabetes (how is it being used in Minnesota Health Care Programs vs. commercial; is quality of care and health outcomes comparable?). ▪ Impact of COVID-related changes to telehealth policies on utilization of telemedicine services (compare Minnesota Health Care Programs vs commercial?). ▪ Phone vs. in-person. ▪ How clinics are delivering care <ul style="list-style-type: none"> ▪ What services are being switched, how much will go back after the pandemic and how many will stay tele services? ▪ Is there a difference in quality of care (UTI, sinusitis, diabetes, mental health)? ▪ Has telehealth decreased appointment no show rates in FQHCs and IHS clinics? ▪ Describe and compare the kinds of services offered by Minnesota Health Care Programs vs. commercial plans in Minnesota to inform DHS/legislature on future policy changes to best meet patient needs.
COVID-19	<ul style="list-style-type: none"> ▪ Medicaid population changes due to COVID (how many and characteristics of patients changing from commercial to Minnesota Health Care Programs? From Minnesota Health Care Programs to no coverage?). ▪ Changes in utilization and spending. ▪ Continuity of Care disruptions due to COVID (coverage changes). ▪ Long-term consequences and foregone/delayed care effects (mortality, untreated chronic conditions). ▪ Vaccine adherence both existing vaccines and any future COVID-19 vaccines (include long term effects for new vaccines).

Appendix E: Data Requestor Types

States typically determine, as part of creating their data release policies, which types of data requestors will be considered since the data are of interest to many types of data users. The table below details some data requestor types and explains what each means:

Requestor Type	Definition
Commercial Entity	<ul style="list-style-type: none"> ▪ A for-profit business or organization that accesses data or information for resale in any form.
Assessed Entity	<ul style="list-style-type: none"> ▪ A health care provider, health insurance entity, third-party administrator, in effect at the time of the data request that has paid assessments to the State for a minimum of two consecutive fiscal years.
Educational Entity	<ul style="list-style-type: none"> ▪ A public or private elementary or secondary school, and any public or private post-secondary institution.
Redistributor	<ul style="list-style-type: none"> ▪ Any commercial entity, assessed entity, or non-profit entity that accesses data for inclusion in a larger composite database that is publicly released.
Non-Profit Entity	<ul style="list-style-type: none"> ▪ A governmental agency or public or private organization that has been determined to be exempt from taxation under the United States Internal Revenue Code, Section 501 (c).
Consumers	<ul style="list-style-type: none"> ▪ A governmental agency or public or private organization that has been determined to be exempt from taxation under the United States Internal Revenue Code, Section 501 (c).

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