ONPOINT HEALTH DATA

Using All-Payer Claims Data to Better Understand the Behavioral Health Provider Workforce

Mental health conditions affect many people across the United States. Research has found that while roughly equal percentages of adults living in urban and rural areas are impacted, the latter are less likely to have their healthcare needs met and are at greater risk for severe outcomes like suicide. Many factors contribute to this disparity – including stigma and affordability – but rural residents also face challenges in simply accessing behavioral health services.[1]

Federal and state initiatives, including the Rural Health Transformation Program that began in 2026, increasingly are focused on strengthening the provider workforce in rural areas. To succeed, these programs need to accurately identify areas of provider shortage and offer interventions that can help increase access.

While traditional sources of provider workforce data – state licensing data and the National Plan and Provider Enumeration System (NPPES) data from the U.S. Centers for Medicare & Medicaid Services (CMS), for example – can help, they offer limited information and can quickly become outdated as providers move, retire, or change the services they offer. Additionally, these sources do not distinguish between licensed providers who are actively delivering care and those who are not providing services, nor do they provide information about current practice location and the types of insurance accepted.

Expanding our 2025 Collective Impact program – the Multi-State Behavioral Health Initiative – Onpoint analysts explored filling this gap in provider information by using data from all-payer claims databases (APCDs) to analyze the availability of BH providers across five participating states: Connecticut, Georgia, Maryland, Minnesota, and Vermont.

ABOUT THE 2026 MULTI-STATE BEHAVIORAL HEALTH INITIATIVE

The Multi-State Behavioral Health Initiative is part of Onpoint's Collective Impact program, which provides cross-state solutions that deliver insights, deepen understanding, and demonstrate the value of all-payer claims databases (APCDs) nationwide.

In our 2026 update, Onpoint refreshed the award-winning 2025 behavioral health dashboards with a new year of data from each participating state's APCD. In addition to exploring diagnoses, utilization, cost, co-occurring medical conditions, and social drivers of health, the 2026 reporting features a new dashboard dedicated to the BH provider workforce. This issue brief discusses how Onpoint successfully used APCD data to identify BH providers and variations across the five participating states.

[1] Rural mental health. Rural Health Information Hub, School of Medicine & Health Sciences at the University of North Dakota. May 2026. Link (last accessed July 27, 2026): https://www.ruralhealthinfo.org/topics/mental-health

THE ADVANTAGES OF USING APCDs TO IDENTIFY PROVIDERS

All-payer claims databases (APCDs) offer a dynamic complement to more static sources of provider data such as license registries and NPPES. APCDs collect healthcare claims data – administrative information used to document services and negotiate payments from insurers – from commercial health plans, Medicaid, and Medicare that include diagnoses, procedures, charges, associated payments, provider details, and more. Unlike other sources, claims data helpfully capture information on providers who are actively billing for care, the locations where that care is delivered, and the types of insurance they accept.

APCDs also have some limitations related to provider data; for example, they do not capture services delivered by providers who do not accept insurance or services received by uninsured patients. In addition, the 2016 U.S. Supreme Court decision in *Gobeille vs. Liberty Mutual Insurance Co.* exempted a portion of commercial plans – estimated in some states to be up to 40 percent of the total commercial population – from mandatory reporting to state APCDs. Despite these limitations, APCDs remain one of the richest sources of healthcare data available for researchers, policymakers, and the public.

METHODS

Drawing on APCD medical claims and eligibility data from the five participating states, Onpoint identified active behavioral health providers using methods adapted from research on the primary care workforce identified in APCD data from Virginia.[2] Onpoint also leveraged identity-resolution results from our Provider Index table, which links an ID for each provider – assigned by Onpoint to track a provider across an APCD despite changes in the submitted data – to their National Provider Identifier (NPI), a unique 10-digit identifier assigned by CMS. Using NPIs, Onpoint identified provider information in NPPES, including the provider's "entity type" (i.e., whether the provider is an individual or an organization) as well as multiple taxonomy codes that specify the provider's specialties.

To identify behavioral health providers in the participating states, Onpoint' took the following steps:

Step 1. Identify Individual Providers

A single medical claim can catalog many providers related to rendered services, including the billing provider, the attending provider, the referring provider, and the rendering provider. Not every provider listed on a claim is an individual; many billing providers, for example, are organizations that range in size from a small group practice to a sprawling health system.

For this analysis, Onpoint focused on rendering providers – those who actually delivered the services reported on a claim. Onpoint identified these individual clinicians using distinct rendering provider NPIs reported on medical claims in the APCDs across all payer types (i.e., commercial, Medicaid, and Medicare) for each state for each measurement year.

Step 2. Define the BH Workforce in Each State

Once Onpoint identified these distinct rendering provider NPIs, we determined which of these providers had (a) provided behavioral health services in each year and (b) provided these services within the participating state. (State APCDs often include claims from providers who are not located within the state, as residents may travel out of state to receive care, especially if they live close to a state border.)

To define the behavioral health workforce in each participating state, Onpoint first linked each distinct rendering provider NPI to the most recent information available about that NPI in NPPES. As mentioned above, NPPES includes an "entity type" field that indicates whether a provider is an individual or an organization. Since individual providers are the focus of the new behavioral health Provider Workforce dashboard, Onpoint excluded rendering provider NPIs when the entity type indicated an organization.

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[2] Huffstetler AN, Sabo RT, Lavallee M, Webel B, Kashiri PL, Britz J, Carrozza M, Topmiller M, Wolf ER, Bortz BA, Edwards AM, Krist AH (2022). Using state all-payer claims data to identify the active primary care workforce: A novel study in Virginia. *Annals of Family Medicine, 20*(5), 446–451. Link (last accessed July 27, 2026): https:/doi.org/10.1370/afm.2854

We then determined if the provider was a BH specialist using the following criteria:

- **Taxonomy.** First, we examined the primary taxonomy code listed in NPPES for each NPI. If the primary taxonomy code indicated that the provider was a behavioral health specialist, they were included as a behavioral health provider.
- **Utilization.** Onpoint also examined all medical claim lines associated with the provider for each measurement year. If more than 50% of the provider's claim lines were related to BH services, they were included as a behavioral health provider.

  For each distinct rendering provider NPI, Onpoint identified the most common service location ZIP code reported on the paid claim lines for each measurement year. If that ZIP code fell within the participating state, they were considered to provide services within that state for that measurement year.

Step 3. Categorize by Provider Type

Using taxonomy codes from NPPES, providers were categorized into major provider types, including therapists, social workers, psychologists, physicians, nurses, pharmacists, and other providers.

Step 4. Assign Geographic Location

To support the analysis of provider access across counties, providers were assigned to a county based on the ZIP code of the service location reported most frequently in the claims data.

PROVIDER MEASURES

Once Onpoint identified the BH provider workforce for each participating state, our analysts calculated measures to support cross-state analysis. These measures included:

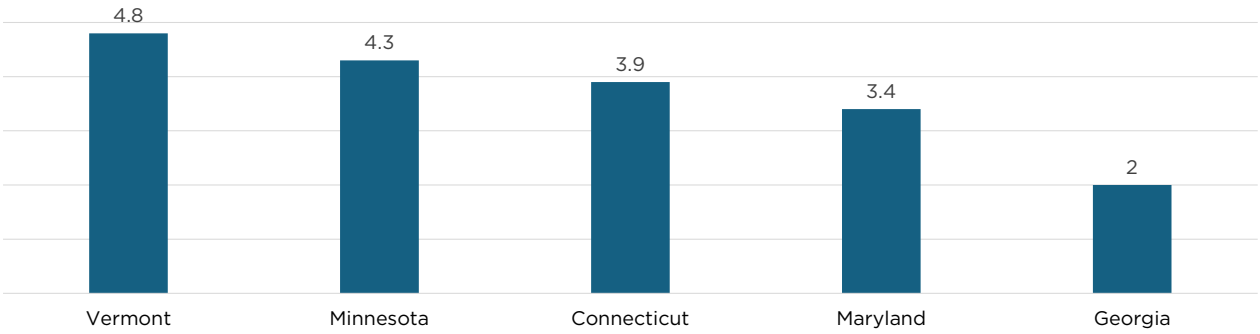
- **Provider-to-population ratios.** Onpoint calculated the number of behavioral health providers per 1,000 APCD members, as well as the number of behavioral health providers per 1,000 members with BH conditions (or per 1,000 members with mental health conditions if substance use disorder (SUD) claims were not available for analysis).
- **Insurance participation.** Onpoint identified whether providers had any paid claims – measured separately for each insurance type – from commercial, Medicaid, and Medicare health plans for each measurement year.

KEY FINDINGS

The Provider-to-Population Ratio Varied across States

Provider availability varied substantially across the five states, ranging from 4.8 providers per 1,000 members in Vermont to 2.0 in Georgia, with Minnesota, Connecticut, and Maryland in between as illustrated in the following figure.

BH Providers per 1,000 Members by State (2022 & 2023)

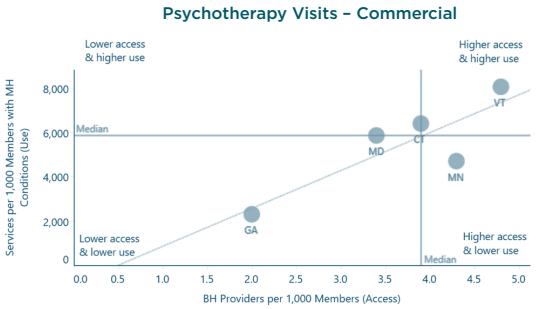


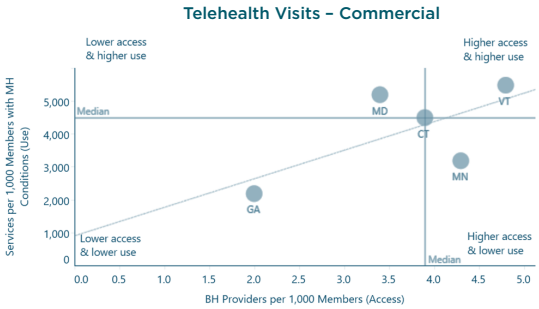
Notes: For Connecticut and Maryland, 2022 data were used due to incomplete Medicare FFS data. For the other states, 2023 data were used. Georgia did not have Medicare data.

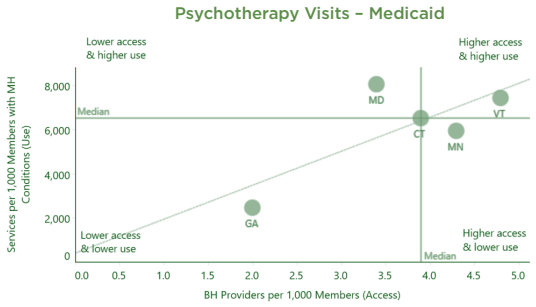
Higher Behavioral Health Provider Availability was Linked to Higher Service Use

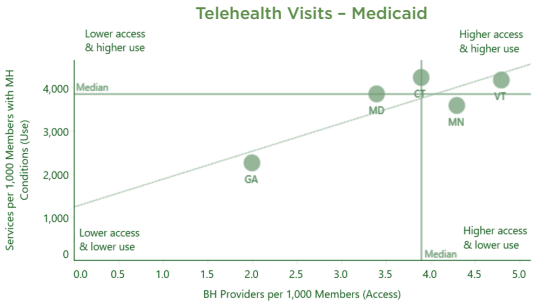
In states with greater BH provider availability, patients with mental health (MH) conditions had higher use of related outpatient health services, including psychotherapy and telehealth across both the commercial and Medicaid populations as illustrated in the graphs below.

Behavioral Health (BH) Provider Availability for Members with Mental Health (MH) Conditions (2023)





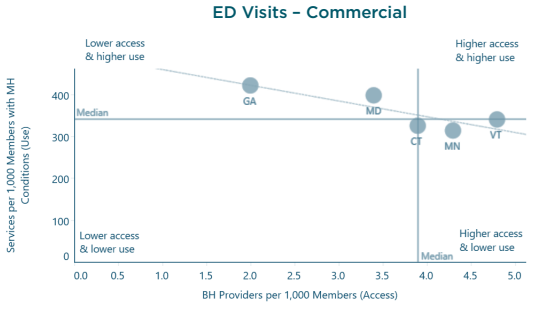


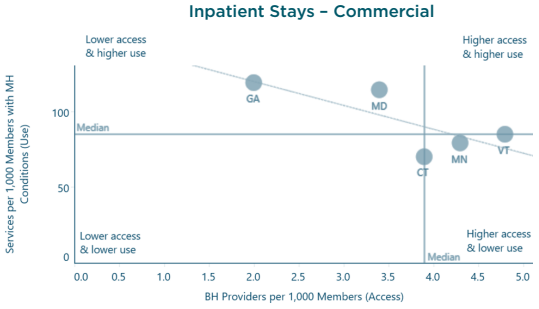


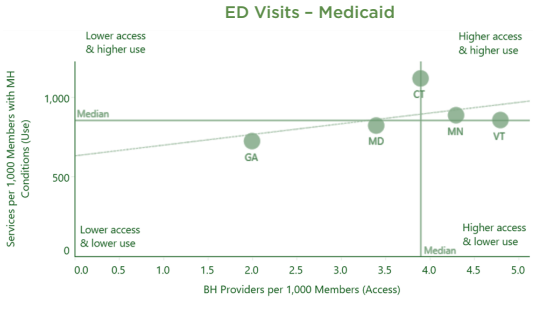
Notes:
(1) Medicare data were not available across the participating states and thus were excluded from the analysis. (2) Relationships shown are based on the unweighted, crude APCD rates by state. These relationships are descriptive and do not imply causation.

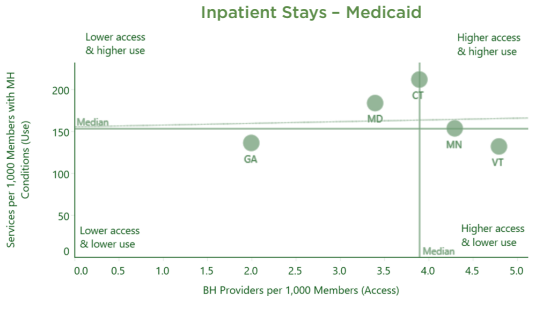
For commercial members, higher provider availability was also associated with lower use of acute care services (e.g., emergency department visits, inpatient stays), which may suggest that these members were able to get their mental health conditions addressed in lower acuity settings. Although this relationship was less consistent for Medicaid populations, the findings suggest that a higher provider availability may support more outpatient and preventive care for behavioral health.

Behavioral Health (BH) Provider Availability for Members with Mental Health (MH) Conditions (2023)









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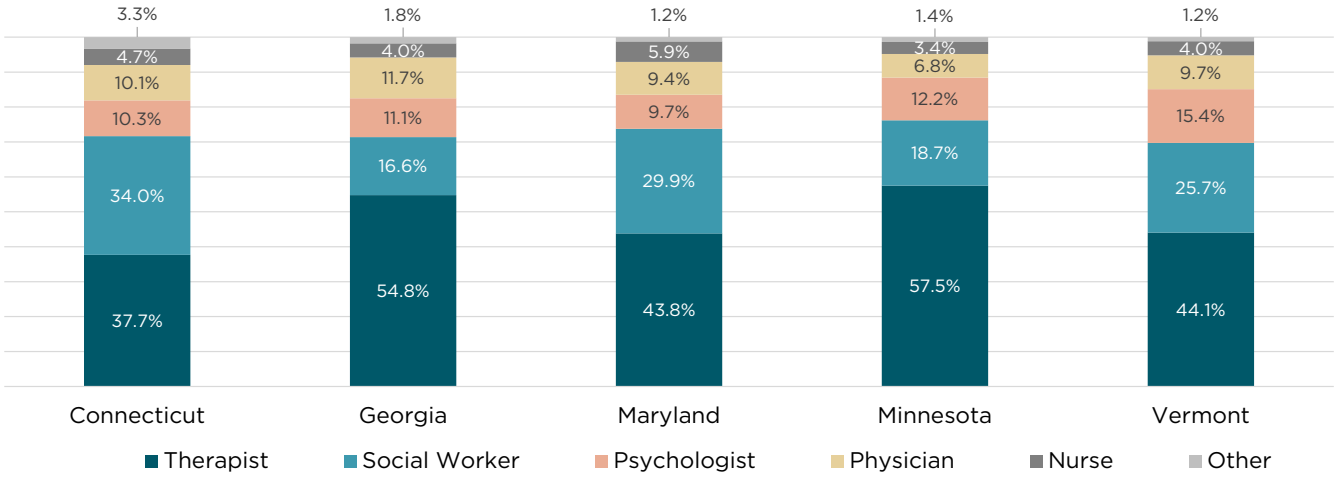
(1) Medicare data were not available across the participating states and thus were excluded from the analysis. (2) Relationships shown are based on the unweighted, crude APCD rates by state. These relationships are descriptive and do not imply causation.

The Provider Mix Differed by State

As shown in the figure below, therapists and social workers comprised the largest share in each participating state. Other provider types varied in ways that may have affected service availability and care delivery.

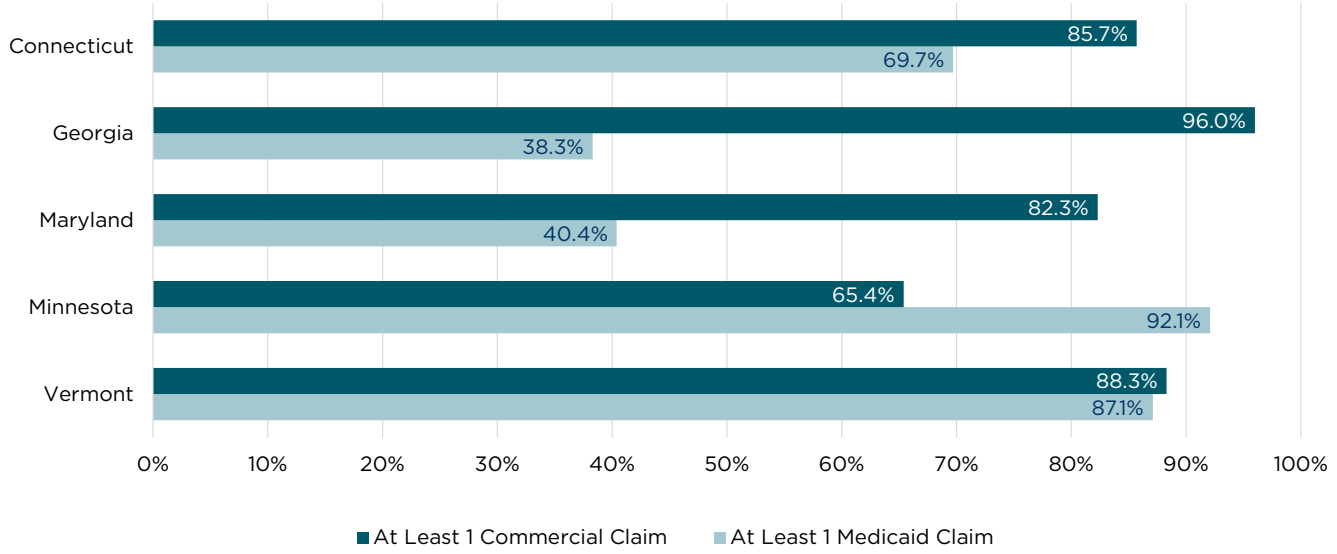
BH Workforce Composition in the APCD by Provider Type (2022 & 2023)



Notes: For Connecticut and Maryland, 2022 data were used due to incomplete Medicare FFS data. For the other states, 2023 data were used. Georgia did not have Medicare data.

Medicaid Participation Accounted for Additional Access Gaps

Insurance participation impacts access to care. Among behavioral health providers identified in the APCD data, commercial participation was high across states, but Medicaid participation varied widely. This suggests that provider workforce measures based on provider counts from state licensure data may overstate the volume of available BH providers for the Medicaid population; analyses that use APCD data, like this one, can provide more accurate results.



It should be noted that only commercial and Medicaid data were available for analysis related to Georgia, which may account for the very high percentage of identified BH providers who had at least one claim from a commercial plan.

CONCLUSION

These findings suggest that policymakers could enhance care delivery by prioritizing workforce development efforts in areas with the lowest provider-to-member ratios (and particularly the lowest provider-to-members-with-BH-conditions ratios), monitor Medicaid participation (another barrier to access) among providers, and use APCDs to evaluate network adequacy and identify areas of investment.

Despite some limitations, APCDs have multiple advantages as a data source for analyzing and monitoring the behavioral healthcare workforce since they capture regularly updated information on providers who are actively delivering care. This creates a clearer picture of the BH provider workforce and allows researchers to better assess the relationship between workforce availability and healthcare service use, including changes over time and responses to intervention initiatives.

APCD data is standardized within states and increasingly comparable across states – as illustrated by our Multi-State Behavioral Health Initiative – offering effective support for state-level analyses and cross-state comparisons of workforce patterns and health service utilization across geographies and payer types.

While this brief has focused on using APCD data to identify behavioral health providers, our methods could easily be adapted to examine other provider populations of interest – including primary care, obstetricians/gynecologists, and cardiology – by changing the taxonomy and procedure codes used for identification.

ABOUT THE AUTHORS

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ABOUT ONPOINT HEALTH DATA & OUR COLLECTIVE IMPACT INITIATIVE

Onpoint Health Data is a nonprofit organization that specializes in collecting, integrating, and analyzing health data to provide our clients with enriched data sets and innovative analytic solutions tailored to their specific needs. We are an independent, nonpartisan organization supporting federal, state, and regional health improvement initiatives for nearly 50 years.

Our Collective Impact initiative provides mission-focused solutions that deliver insights, deepen understanding, and demonstrate the value of APCDs nationwide.

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