The Impact of Telehealth Expansion on Access to Behavioral Health Services

Key Takeaway

- Using two methods to assess prevalence, we found that approximately 1 in 5 individuals in Michigan has a behavioral health/mental health condition.
- Behavioral health specialist shortages are prevalent in many Michigan counties. In fact, 50% of counties have 10 or fewer specialists, and 20% have either one or none at all.
- In 2021, telehealth services accounted for 46% of all behavioral healthcare provided to Medicare beneficiaries residing in Michigan counties with high demand for these services.
- Among Medicaid beneficiaries residing in Michigan counties with high demand for behavioral healthcare, 52% received their treatment via telehealth in 2021.
- In 2021, 82% of behavioral healthcare delivered to Medicare patients living in areas with shortages of behavioral health specialists came from professionals located in a different county. Furthermore, 47% of visits to these specialists were conducted via telehealth.

Policy Consideration

- Telehealth expansion has undeniably enhanced access to behavioral health services in two significant ways. First, it has provided a means of delivering care to areas in Michigan with a high demand for behavioral health services. Second, it has extended access to counties where there are shortages of behavioral health providers, bringing these much-needed services to underserved communities.

Telehealth has revolutionized the practice of behavioral health by providing an easy and accessible way for patients to receive treatment for mental health and substance abuse issues. Before telehealth became widespread, many people with behavioral health conditions faced difficulties accessing care, often due to a shortage of providers in their area. Additionally, the social stigma and inconvenience of in-person visits prevented many from seeking help. Telehealth has eliminated these barriers by enabling patients to connect with providers remotely, regardless of their location. This has been especially beneficial for those living in rural areas, where accessing mental healthcare can be particularly challenging.

According to the Centers for Disease Control, over half of all individuals will be diagnosed with a mental illness or disorder at some point in their lifetime.[4] Additionally, one in five Americans will experience a mental illness in a given year. This trend holds true in the state of Michigan, where an analysis by Altarum, funded by the Michigan Health Endowment Fund, estimates that in 2019, nearly 20% Michigan's 9.9 million residents experienced a mental illness.[5]

4 Centers for Disease Control and Prevention. About Mental Health. https://www.cdc.gov/mentalhealth/learn. Accessed April 21, 2023.
5 Rhyan C, Turner A, Daly M, Hudrle-Rabb Danielle. Access to Behavioral Health Care In Michigan, 2019 Data Update. Altarum. https://altarum.org/publications/access-behavioral-health-care-michigan-2019-data-update. Accessed May 4, 2023.

We analyzed the impact of telehealth expansion on access to behavioral health services using two analytic approaches:

> **Analysis #1: To what extent has the expansion of telehealth changed access to care from behavioral health specialists in counties with a high demand for behavioral health services?** To conduct this analysis, we initially computed the demand for behavioral health services at the county level. Next, we determined the extent to which telehealth, provided by behavioral health specialists, had penetrated these high-demand counties for behavioral health services.
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> **Analysis #2: To what extent has the expansion of telehealth improved access to behavioral health specialists in counties facing shortages of such specialists?** For this analysis, we first identified counties with a low supply of behavioral health specialists (i.e., behavioral health shortage areas). Next, we determined the extent to which telehealth, provided by behavioral health specialists outside of these counties, had penetrated these areas.

Analysis #1: To what extent has the expansion of telehealth changed access to care from behavioral health specialists in counties with a high demand for behavioral health services?

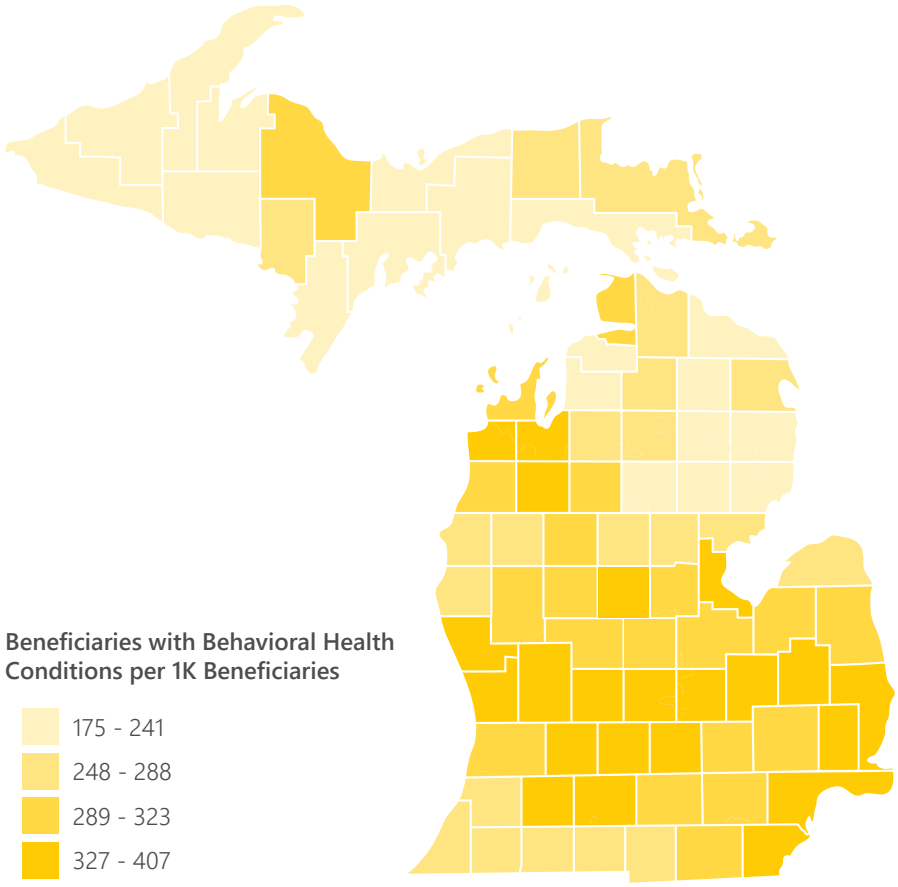
We calculated the county-level demand for behavioral health services in two ways:

- **Method #1: Prevalence of any mental illness using 2018-2020 National Survey on Drug Use and Health (NSDUH).** This is analogous to the approach used by Altarum in their report, *Access to Behavioral Health Care in Michigan*
- **Method #2: Percentage of individuals who have an insurance claim with a behavioral health diagnosis listed using Medicare fee-for-service data from 2019-2021.** We established that patients needed to have two or more claims for a qualifying behavioral health diagnosis. These claims for behavioral health diagnoses could be submitted by any provider, including primary care providers, not just behavioral health specialists.

Both methods of estimating demand have their advantages and disadvantages. For instance, survey-based methods can provide insight into the overall need for behavioral health services, regardless of whether care was received but may overestimate the demand for behavioral health as patients may self-report symptoms without necessarily desiring or meeting criteria for treatment. On the other hand, claims-based methods may underestimate prevalence by not capturing individuals with behavioral health conditions who did not seek care. Therefore, we used both survey-based and claims-based estimates to provide a more comprehensive understanding of county-level demand for behavioral health services.

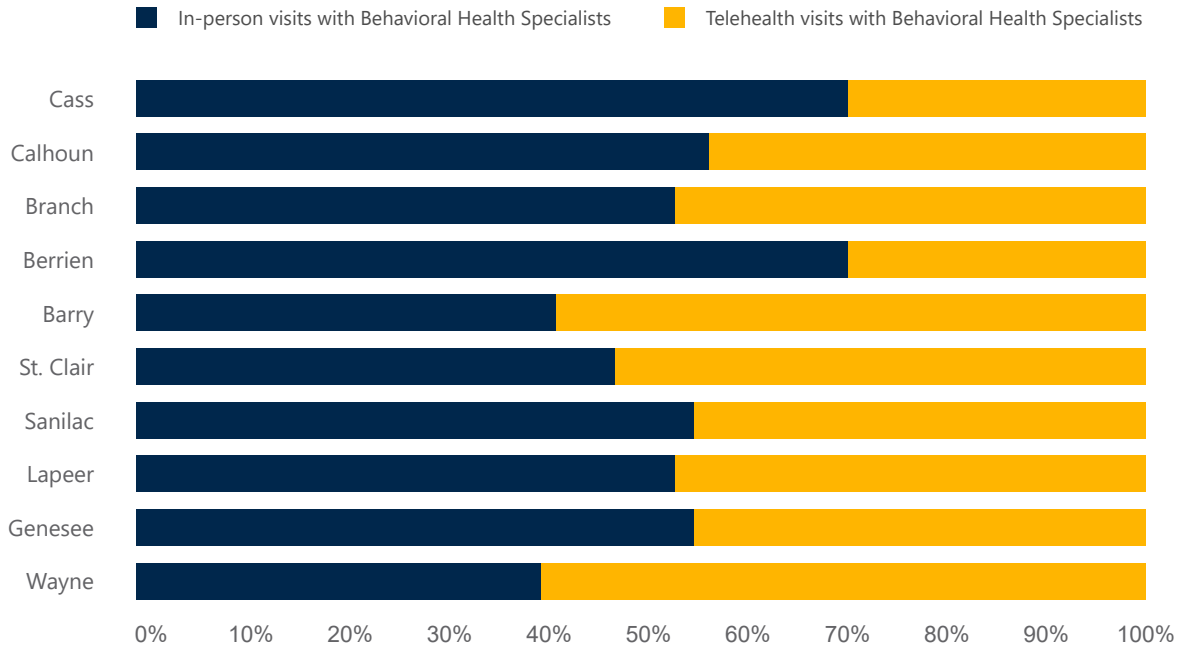
Using the survey-based method, we found that the average county-level prevalence of any mental illness was 21% and that the county-level prevalence ranged from 18% to 23%. Using the claims-based method, we found that the county-level prevalence of behavioral health conditions was 23% and that the county-level prevalence ranged from 7% to 40%. Exhibit 22 illustrates the geographic distribution of patients who have been diagnosed with a behavioral health condition based on our claims-based method.

Exhibit 22: Demand for Behavioral Health Services in Michigan Counties Based on Claims Data, 2021



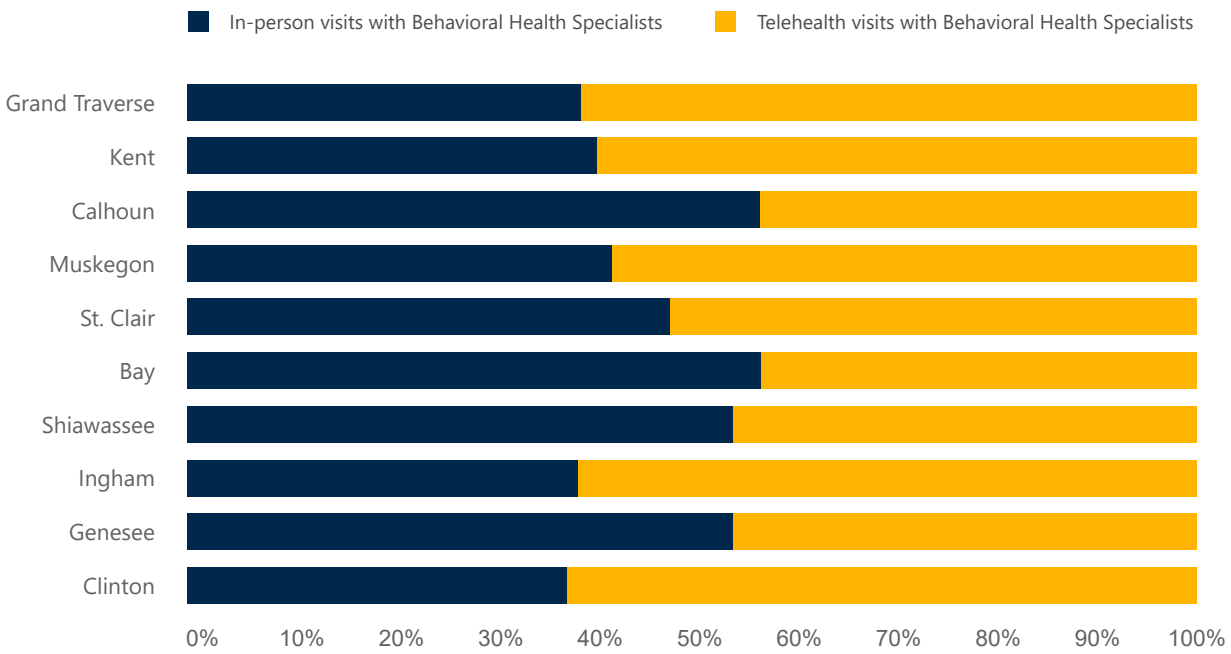
To determine the utilization of telehealth in Michigan counties with high demand for behavioral health services, we first analyzed the top ten counties with the highest demand using data from the 2018-2020 National Survey on Drug Use and Health. We then calculated telehealth visit rates with behavioral health specialists using 2021 Medicare fee-for-service data. On average, we found that 46% of visits with behavioral health specialists in these counties were conducted via telehealth, with a range of 29% in Cass County to 60% in Wayne County.

Exhibit 23: Percentage of Behavioral Health Specialist Visits Conducted via Telehealth in the 10 Counties with the Highest Survey-Based Demand for Telehealth, 2021



We then performed a similar analysis by identifying the top ten counties with the highest demand for behavioral health services utilizing Medicare claims data. We discovered that, on average, 53% of visits with behavioral health specialists in these counties were conducted via telehealth, with a range of 63% to 43%.

Exhibit 24: Percentage of Behavioral Health Specialist Visits Conducted via Telehealth in the 10 Counties with the Highest Claims-Based Demand for Telehealth, 2021



We performed a complementary analysis of Medicaid claims both at the visit and individual level. Results are shown in Exhibits 25 and 26.

Exhibit 25: Number of Medicaid-Enrolled Beneficiaries Residing in High-Demand Counties, Who Had an Outpatient Visit for Mental Health or Substance Use Disorder, with Only In-Person Visit(s) vs. Telehealth Visit(s), 2019 & 2021

	In-person only	Any telehealth	% telehealth
2019	253,158	4,040	1.6%
2021	130,505	141,395	51.6%

Exhibit 26: Number of Outpatient Visits for Mental Health or Substance Use Disorder by Medicaid Beneficiaries Residing in High-Demand Counties, In-Person vs. Telehealth, 2019 & 2021

	# In-person visits	# telehealth visits	% telehealth
2019	5,903,065	11,888	0.2%
2021	5,143,080	1,094,524	17.5%

Analysis #2: To what extent has the expansion of telehealth improved access to behavioral health specialists in counties facing shortages of such specialists?

There are various ways to measure the shortage of behavioral health specialists. One such method is by analyzing the ratio of behavioral health providers to citizens. According to research from the University of Wisconsin Population Health Institute, Michigan has an average of one behavioral health provider for every 360 citizens; however, there is significant variation in the availability of behavioral health providers across different counties. Of Michigan's 83 counties, only 15 have ratios below this statewide average, leaving 68 counties facing varying degrees of shortages. Additionally, Michigan has a total of 242 designated Health Professional Shortage Areas (HPSAs) for mental healthcare, which means that more than 40% of the state's population lives in an area with unmet behavioral healthcare needs. Furthermore, analysis from Altarum indicates that about 40% of Michigan residents with a behavioral health condition do not receive treatment, and for those with substance use disorders, 80% do not receive care.[6]

To pinpoint areas facing a shortage of behavioral health providers, we calculated the number of behavioral health providers with a mailing address in each county. We considered providers in the fields of psychiatry, geriatric psychiatry, neuropsychiatry, psychology, clinical psychology, licensed clinical social work, and addiction medicine as behavioral health specialists. We included only providers who were actively providing care in our data set, which is an advantage over relying solely on National Provider Identification numbers, as some providers may have an NPI but not be currently providing care. Additionally, we also included Federally Qualified Health Centers (FQHCs) and Rural Health Clinics as behavioral health providers because the specialists at these centers may not bill using their own national provider identifier. While methodological differences can lead to varying classifications of what constitutes a behavioral health shortage area, when we compared our analysis to that produced by Altarum, we found 86% agreement in the counties identified as a behavioral health shortage area.

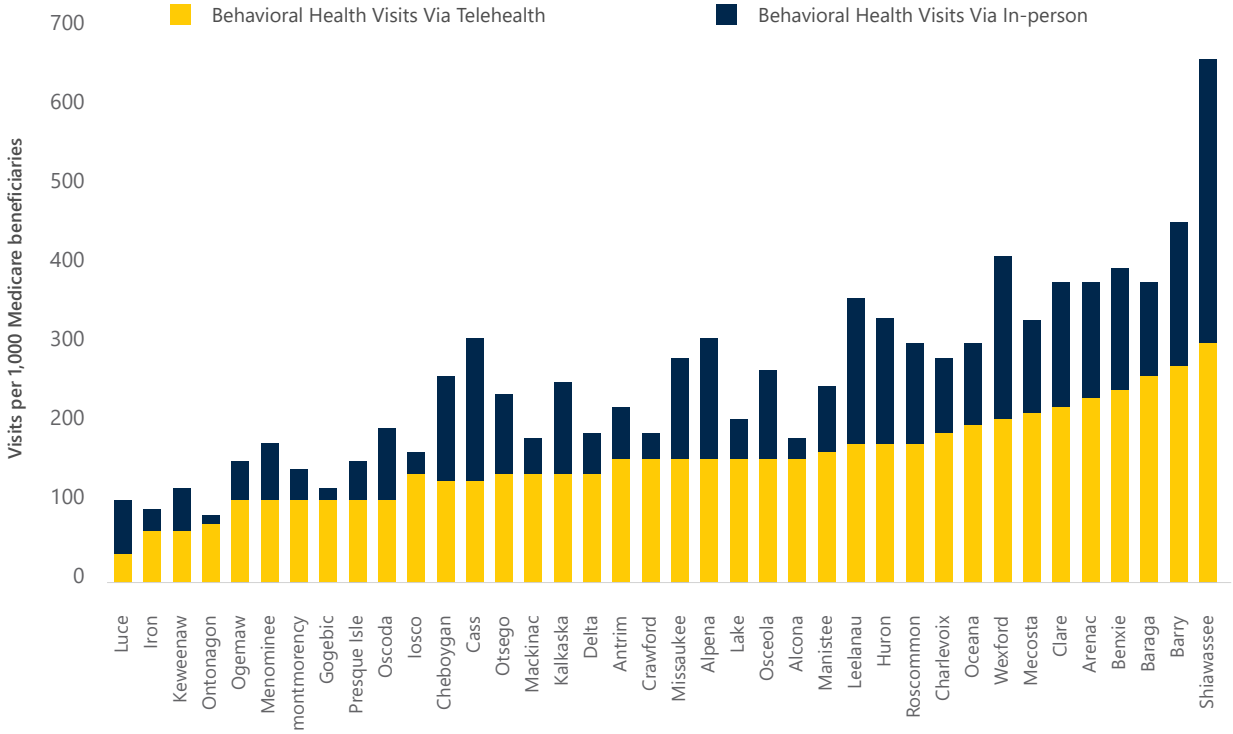
Specifically, we identified the following 38 counties as behavioral health shortage areas because they have 10 or fewer behavioral health specialists that practice in the county:

6 Rhyan C, Turner A, Daly M, Hudrle-Rabb Danielle. Access to Behavioral Health Care In Michigan, 2019 Data Update. Altarum. https://altarum.org/publications/access-behavioral-health-care-michigan-2019-data-update. Accessed May 4, 2023.

Baraga	Luce	Cass
Keweenaw	Arenac	Wexford
Ontonagon	Delta	Gogebic
Mackinac	Kalkaska	Alpena
Oscoda	Crawford	Charlevoix
Ogemaw	Clare	Huron
Roscommon	Cheboygan	Manistee
Lake	Mecosta	Presque Isle
Missaukee	Iron	Shiawassee
Osceola	Alcona	Barry
Iosco	Oceana	
Menominee	Otsego	
Montmorency	Leelanau	
Antrim	Benzie	

In our first analysis of telehealth access in counties experiencing a behavioral health shortage, we determined the number of visits conducted by behavioral health providers for Medicare fee-for-service patients. We then evaluated the proportion of these visits that were performed through telehealth versus in-person. We found that 57% of visits in areas with a behavioral health shortage were conducted via telehealth.

Exhibit 27: Utilization of Telehealth and In-Person Care by Patients Residing in Behavioral Health Shortage Areas, 2021



However, this issue required further investigation. While telehealth was being used in behavioral health shortage areas, it was uncertain whether it was truly improving access to care or simply making it more convenient for patients. In the former scenario, we would expect that behavioral health specialists who do not reside in behavioral health shortage areas would provide care to patients in those areas. If this is the case, we can confidently say that access to care has been improved through telehealth. However, if all the telehealth care provided to patients in behavioral health shortage areas is by providers who also reside in those areas, then it is simply more convenient but not necessarily an improvement in access to care.

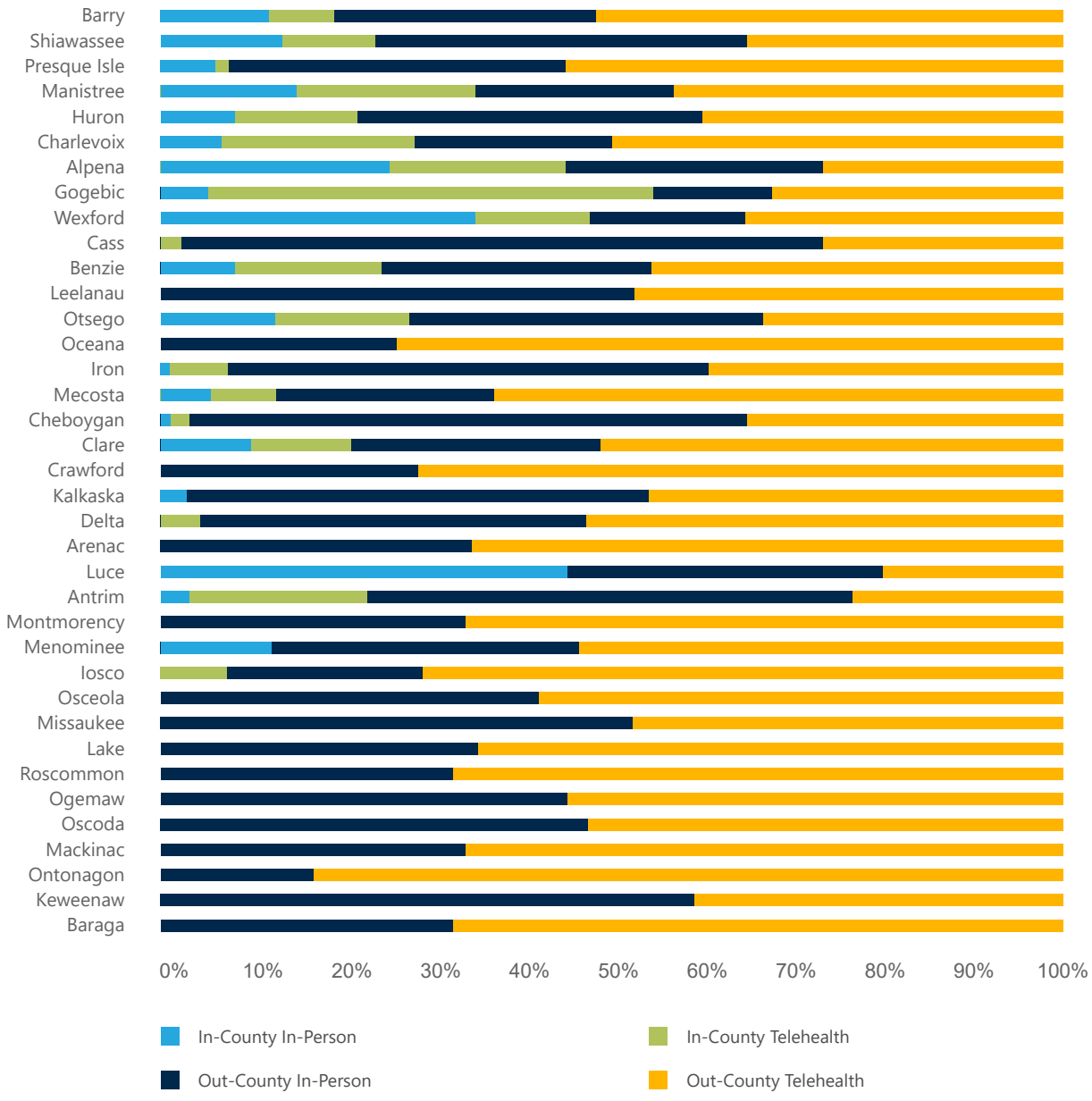
To investigate this, we divided behavioral health specialist visits into four categories:

Category	Patient and provider location
1. In-county in-person	Patient and provider are located in the same county and the visit is performed in person
2. In-county telehealth	Patient and provider are located in the same county and the visit is performed via telehealth
3. Out-of-county in-person	Patient and provider are located in different counties and the visit is performed in person
4. Out-of-county telehealth	Patient and provider are located in different counties and the visit is performed via telehealth

The first two categories represent local care, with the second category being more convenient as it is through telehealth. The third category represents care outside of the behavioral health shortage area but still requiring the patient to travel to receive care. Lastly, the fourth category, which is of particular interest, is telehealth provided to high-need shortage areas by providers who reside in other counties.

Exhibit 28 illustrates our finding that a considerable proportion of patients residing in behavioral health shortage areas received care through telehealth from providers outside other counties. Specifically, we found that 82% of behavioral health visits in behavioral health shortage areas were delivered by behavioral health specialists residing in a different county. 47% of these visits were conducted via telehealth. The remaining 36% took place in person, requiring patients to travel to a different county to receive the service. These findings strongly indicate that telehealth has significantly improved access to behavioral health services in areas with a shortage of providers.

Exhibit 28: Percentage of Behavioral Health Specialist Visits Provided by Out-of-County Specialists via Telehealth (Yellow Bar) in Michigan Counties with Shortages of Behavioral Health Specialists, 2021



We performed a complementary analysis of behavioral health shortage areas in Medicaid claims both at the visit and individual level. Results are shown in Exhibits 29 and 30.

Exhibit 29: Number of Medicaid-Enrolled Beneficiaries Residing in Behavioral Health Provider Shortage Counties with Outpatient Visits for Mental Health or Substance Use Disorder: In-Person Visit(s) Only vs. Telehealth Visit(s)

	# Patients with In-Person Visits Only	# Patients with Telehealth Visits	% Telehealth
2019	26,171	2,836	9.1%
2021	17,252	13,813	41.7%

Exhibit 30: Number of Outpatient Visits for Mental Health or Substance Use Disorder by Medicaid Beneficiaries Residing in Behavioral Health Provider Shortage Counties: In-Person Visit(s) vs. Telehealth Visit(s)

	# Visits that were In-person	# Visits that were Telehealth	% Telehealth
2019	514,808	8,593	1.6%
2021	437,605	97,168	18.1%