



ASPE
ASSISTANT SECRETARY FOR
PLANNING AND EVALUATION

**OFFICE OF BEHAVIORAL HEALTH,
DISABILITY, AND AGING POLICY**

The Role of the Outpatient Behavioral Health Provider in Crisis Services: Opportunities and Existing Reimbursement Pathways

Prepared for
the Office of the Assistant Secretary for Planning and Evaluation (ASPE)
at the U.S. Department of Health & Human Services

by
Mathematica

January 2025

Office of the Assistant Secretary for Planning and Evaluation

The Assistant Secretary for Planning and Evaluation (ASPE) advises the Secretary of the U.S. Department of Health and Human Services (HHS) on policy development in health, disability, human services, data, and science; and provides advice and analysis on economic policy. ASPE leads special initiatives; coordinates the Department's evaluation, research, and demonstration activities; and manages cross-Department planning activities such as strategic planning, legislative planning, and review of regulations. Integral to this role, ASPE conducts research and evaluation studies; develops policy analyses; and estimates the cost and benefits of policy alternatives under consideration by the Department or Congress.

Office of Behavioral Health, Disability, and Aging Policy

The Office of Behavioral Health, Disability, and Aging Policy (BHDAP) focuses on policies and programs that support the independence, productivity, health and well-being, and long-term care needs of people with disabilities, older adults, and people with mental and substance use disorders. Visit BHDAP at <https://aspe.hhs.gov/about/offices/bhdap> for all their research activity.

NOTE: BHDAP was previously known as the Office of Disability, Aging, and Long-Term Care Policy (DALTCP). Only our office name has changed, not our mission, portfolio, or policy focus.

This research was funded by the U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation under contract and carried out by Mathematica. Please visit <https://aspe.hhs.gov/topics/behavioral-health> for more information about ASPE research on behavioral health.

THE ROLE OF THE OUTPATIENT BEHAVIORAL HEALTH PROVIDER IN CRISIS SERVICES: OPPORTUNITIES AND EXISTING REIMBURSEMENT PATHWAYS

Authors

Maggie Magee
Brenda Natzke
Natalie Porter
Hannah Klukoff
Allison Wishon
Adrienne Kehne
Jung Kim
Mathematica

January 14, 2025

Prepared for

Office of Behavioral Health, Disability, and Aging Policy
Office of the Assistant Secretary for Planning and Evaluation
U.S. Department of Health and Human Services

The opinions and views expressed in this report are those of the authors. They do not reflect the views of the Department of Health and Human Services, the contractor or any other funding organization. This report was completed and submitted on September 27, 2024.

Acknowledgments

The authors would like to acknowledge the contributions of the broader research team, including Jake Vogler and Rosette Nguyen and the programming team, Christine Cheu, Keep Nathanson, and Mike Rudacille. Michaela Vine, Melissa Azur, and Melissa Sanchez provided quality assurance and project guidance. We also appreciate the leadership and support of Joel Dubenitz, Judith Dey, and Sarah Steverman of the Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. John Kennedy and Sharon Clark provided editing and production support. We would also like to thank the key informants who shared their considerable knowledge and experiences with us.

This page has been left blank for double-sided copying.

Contents

I.	Introduction	1
II.	Methods	5
	A. Environmental scan	5
	B. Claims analyses	5
	C. Key informant interviews	7
III.	Role of Outpatient Providers in Crisis Services.....	9
	A. Role in supporting people during a crisis.....	9
	B. Willingness, readiness, and capacity to respond to a crisis.....	10
	C. Barriers to providing crisis services.....	12
IV.	Use of Psychotherapy for Crisis Codes	15
	A. Use of Psychotherapy for Crisis CPT codes, 90839 and 90840, in claims	15
	1. Characteristics of enrollees with crisis claims	19
	2. Enrollees with an existing provider relationship.....	25
	3. Characteristics of providers using crisis code 90839	25
	4. Mental health and substance use diagnoses included on claims with code 90839	27
	5. Use of add-on code 90840	28
	B. Variation in use of codes	29
V.	Opportunities for outpatient providers to complement the crisis services system	35
	A. Key opportunities.....	35
	B. Conclusions and future directions	37
	References.....	39
	Appendix A Detailed Methods and Notes.....	43
	Appendix B Supplemental Tables.....	53

Tables

I.1	Variation in providers eligible to use Psychotherapy for Crisis codes, by payor.....	2
A.1	Key informants – Individual outpatient providers.....	50
B.1	Use of Psychotherapy for Crisis Code in 2022, by State, Among Medicaid Enrollees.....	55
B.2	Use of Psychotherapy for Crisis Code in 2022, by State, Among Medicare Enrollees	57
B.3	Use of Psychotherapy for Crisis Code in 2022, by State, Among Commercial Enrollees	59
B.4	Demographic Characteristics, 2022, Among Medicaid Enrollees	61
B.5	Demographic Characteristics, 2022, Among Medicare Enrollees	63
B.6	Demographic Characteristics, 2022, Among Commercial Enrollees.....	65
B.7	Psychotherapy for Crisis Service Utilization in 2022, by Enrollee Demographic Characteristics, Among All Medicaid Enrollees	67
B.8	Psychotherapy for Crisis Service Utilization in 2022, by Enrollee Demographic Characteristics, Among All Medicare Enrollees	69
B.9	Psychotherapy for Crisis Service Utilization in 2022, by Enrollee Demographic Characteristics, Among All Commercial Enrollees.....	71
B.10	Provider Characteristics Among Those Who Billed Using Psychotherapy for Crisis Code, 2022, Medicaid ^a	73
B.11	Provider Characteristics Among Those Who Billed Using Psychotherapy for Crisis Code, 2022, Medicare ^a	74
B.12	Provider Characteristics Among Those Who Billed Using Psychotherapy for Crisis Code, 2022, Commercial ^a	75

Figures

IV.1	Rate of claims with code 90839 per 10,000 Medicaid, Medicare, and commercial enrollees, across all U.S. states, 2018–2022	16
IV.2	Rate of claims with code 90839 per 10,000 enrollees, by state, 2022	18
IV.3	Age distribution of Medicaid, Medicare, and commercial enrollees and enrollees with at least one claim with code 90839, 2022	20
IV.4	Sex distribution of Medicaid, Medicare, and commercial enrollees and enrollees with at least one claim with code 90839 in 2022	21
IV.5	Proportion and rate per 10,000 Medicaid, Medicare, and commercial enrollees and enrollees with at least one claim with code 90839 by behavioral health condition in 2022.....	22
IV.6	Race and ethnicity demographics of Medicaid and Medicareenrollees and enrollees with at least one claim with code 90839 in 2022	24
IV.7	Distribution of provider type on claims with crisis code 90839, 2022.....	26
IV.8	Percent of claims with code 90839 provided via telehealth, 2018-2022.....	27
IV.9	Categories of diagnosis codes used in any diagnosis field on claims with code 90839, 2022.....	28
IV.10	Use of add-on code 90840 among all claims with code 90839, by payor, 2022.....	29
IV.11	Medicare Physician Fee Schedule, national payment amount for CPT codes 90837 (Traditional Psychotherapy) and 90839 (Psychotherapy for Crisis), 2013–2024.....	32

I. Introduction

About one in four adults in the United States experiences a mental health condition or illness each year (Headway 2024; National Association of Counties 2024). Suicide rates have steadily increased over the past 20 years (Centers for Disease Control and Prevention n.d.; Martínez-Alés et al. 2022), and suicide is the second leading cause of death among people ages 10 to 14 and 25 to 34 (National Institute of Mental Health 2024). Improving behavioral health services to support people experiencing a crisis is a priority of state and federal initiatives, as there is growing recognition that law enforcement and emergency medical services often lack resources and specialized training to prevent and address behavioral health crises (Kalb et al. 2022; Substance Abuse and Mental Health Services Administration [SAMHSA] 2020).

SAMHSA's National Guidelines for Behavioral Health Crisis Care: Best Practice Toolkit lay out a vision for a system of crisis services that interacts seamlessly with a comprehensive continuum of behavioral health care to improve real-time access to care (SAMHSA 2020). Crisis services should be available through any entry point to prevent immediate harm (Kalb et al. 2022; SAMHSA 2020). In this interactive system, the availability of affordable, high-quality outpatient behavioral health services can both reduce the need for intervention by helping to prevent situations from escalating into a crisis and support the demand for crisis services when a situation does escalate into a crisis (SAMHSA 2020). Further, effective crisis services have the potential to prevent or reduce hospitalizations or incarceration (Kalb et al. 2022).

Two Current Procedural Terminology® (CPT) codes were introduced in 2013 to support the provision and reimbursement of services to people experiencing crisis situations.¹ Physician and nonphysician practitioners can use the Psychotherapy for Crisis codes, 90839 and 90840, to bill for services they provide in certain settings, including private offices, clinics, skilled nursing facilities, hospitals, and via telehealth (American Psychological Association [APA] Services, Inc. 2024, 2013). The codes aim to support “an urgent assessment and history of a crisis state, a mental status exam, and a disposition” for a presenting problem that is “typically life-threatening or complex and requires immediate attention to a patient in high distress” (American Medical Association [AMA] 2022).

Psychotherapy for Crisis CPT codes

- 90839 covers the first 30–74 minutes of psychotherapy for crisis on a given date
- 90840 covers each additional 30 minutes of psychotherapy for crisis
- Can be used by physicians and other qualified health care professionals
- Includes treatments such as “psychotherapy, mobilization of resources to defuse the crisis and restore safety, and implementation of interventions to minimize the potential for psychological trauma”

Source: American Medical Association 2022.▲

¹ The American Medical Association developed CPT codes for providers to report common clinical procedures and services to payors using a standard set of codes; the American Medical Association maintains, reviews, and updates codes on a regular basis (American Psychological Association Services, Inc. 2024).

The Psychotherapy for Crisis codes, 90839 and 90840, are available for use by both public payors (Medicaid and Medicare) and commercial payors (Blyler et al. 2025). State Medicaid agencies and commercial payors have flexibility to use several additional national procedure codes for crisis services, such as the Healthcare Common Procedure Coding System (HCPCS) codes for core crisis services recommended in SAMHSA’s National Guidelines (see Exhibit/box to the right for national procedure codes mentioned in the National Guidelines).² Medicare historically has reimbursed for only the two Psychotherapy for Crisis codes.³ As a result, the use of billing codes and the extent to which different types of providers can receive reimbursement for crisis services vary by payor type and across individual insurers (Dormond and Afayee 2016, Blyler et al. 2025). However, not much is known about how providers use the Psychotherapy for Crisis codes in practice or whom providers serve when using the codes. Further, payors also have flexibility to establish requirements for how and when codes can be used, such as the provider types eligible for reimbursement and settings in which they can be used, potentially contributing to variation in their application.

National procedure codes for core crisis services

- H0030: Behavioral health hotline service
- H2011: Crisis intervention service, per 15 minutes
- S9484: Crisis intervention mental health services, per hour
- S9485: Crisis intervention mental health services, per diem▲

Additionally, each insurer establishes its own policies for use of the codes potentially adding to variation in how the codes are used, such as: credentialing requirements for providers to participate in its network; documentation requirements for reimbursement; rules for the use of billing codes and modifiers; and service limits (APA Services 2022; Schergen n.d.). Some insurers may limit the number of hours or occurrences for which providers can use the codes per calendar month or year without authorization or require the person to have an existing relationship with the provider before approving a claim. In a review of commercial insurers’ post-COVID-19 telehealth policies (including use of the psychotherapy for crisis codes), for instance, APA Services (2023a) identified that policies for five national and eight regional payors ranged widely in flexibility of covered procedure codes and billing guidance, such as use of specific procedure and place-of-service codes and modifiers. The table below illustrates the variation in payors’ policies on providers eligible to use Psychotherapy for Crisis codes.

Table I.1. Variation in providers eligible to use Psychotherapy for Crisis codes, by payor

Payor type	Providers eligible to use the Psychotherapy for Crisis codes
Medicaid	Eligible providers vary by state. A 2016 review found psychiatrists are eligible providers in 33 states, psychologists in 31 states, licensed clinical social workers in 33 states, licensed professional counselors in 29 states, and licensed marriage and family therapists in 29 states (Dormond and Afayee 2016). Some states reimburse addiction counselors using CPT code 90839 or HCPCS code H2011 (Beck et al. 2018).
Medicare	Physicians, psychologists, licensed clinical social workers, clinical nurse specialists, nurse practitioners, physician assistants, and certified nurse-midwives are eligible providers (CMS 2024).

² Some payors may also allow the use of H0007: Alcohol and/or drug services crisis intervention.

³ To better support the provision of mobile crisis services in Medicare, the 2024 Medicare Physician Fee Schedule final rule established two new HCPCS codes for psychotherapy for crisis services, G0017 and G0018, provided specifically in non-facility, non-office settings. These codes were available to Medicare providers effective January 1, 2024, and may be adopted by state Medicaid programs and commercial payors (CMS 2023).

Payor type	Providers eligible to use the Psychotherapy for Crisis codes
	CMS issued updates, effective January 1, 2024, that marriage and family therapists and mental health counselors are eligible to enroll with Medicare to bill as independent practitioners for services for the diagnosis and treatment of mental illnesses (CMS 2024).
Commercial	Each insurer establishes its own policies around eligible providers.

The Office of the Assistant Secretary for Planning and Evaluation (ASPE) recently explored the use of claims-based reimbursement to support crisis services and found that Psychotherapy for Crisis was the most common CPT codes associated with Medicare and commercial claims and used in all states (Blyler et al. 2025). ASPE recognized that the introduction of the Psychotherapy for Crisis codes enabled more types of providers, namely social workers and other outpatient behavioral health providers, to bill for crisis services than previously. Outpatient behavioral health providers, both physician and non-physician professionals with education and training in mental health and/or SUDs, provide a range of types of therapy and counseling, prescribing of medications for mental health and SUD, medication management, and harm reduction during in person or telehealth visits (SAMHSA 2023). Outpatient providers are also an important part of the behavioral health workforce that can actively respond to acute mental health and substance-related events or crises.

ASPE engaged Mathematica to examine use of the Psychotherapy for Crisis CPT codes in public and commercial payor claims and suggest opportunities for how outpatient providers can best integrate into and complement the behavioral health crisis services continuum. We conducted an environmental scan and key informant interviews with outpatient providers to understand how they perceive their role in crisis services and how they make decisions about billing for crisis services, including how they use the Psychotherapy for Crisis CPT codes. We also conducted an analysis of the CPT codes 90839 and 90840 in Medicaid, Medicare, and commercial claims data from 2018 through 2022. This report provides a brief overview of our methods and summarizes findings from key informant interviews and claims analyses. The report concludes with potential opportunities for outpatient providers to complement and support the crisis service system.

Study highlights

- Since 2013, two Current Procedural Terminology® (CPT) Psychotherapy for Crisis codes, 90839 and 90840, have been available for providers to use to bill for psychotherapy services for people experiencing a crisis. Outpatient behavioral health providers are an important part of the behavioral health care system that can actively respond to acute mental health and substance-related events or crises.
- This report describes findings from a study of the use of the Psychotherapy for Crisis CPT codes and perceptions among outpatient providers of their role in the behavioral health crisis services system and suggests opportunities to support outpatient providers to best integrate into the crisis services system. This mixed-methods study included a targeted environmental scan, key informant interviews with provider association representatives and outpatient providers, and a descriptive analysis of the Psychotherapy for Crisis codes in Medicaid, Medicare, and commercial claims data from 2018 through 2022.
- Use of the code 90839 was low for all payors from 2018 to 2022 and was higher among Medicaid enrollees than Medicare and commercial enrollees. Differences in the use of code 90839 suggest potential differences in reimbursement policies across states and payors.
- An existing relationship between an enrollee and a behavioral health provider could be a factor in whom an enrollee reaches out to during a crisis and in the provider’s decision to take a crisis call or refer the enrollee to

a higher level of care. Across all three payors, 30 to 45 percent of enrollees with at least one crisis claim had an existing provider relationship.

- Interview respondents varied in their knowledge and use of the Psychotherapy for Crisis CPT codes. Although these codes aim to provide better reimbursement for highly skilled and time-intensive services, lack of knowledge of the codes, limited provider training in delivering crisis services, inconsistency in reimbursement policies across payors, and insufficient compensation were barriers to use of the codes. Future work could explore the extent to which demand for crisis services in outpatient settings is being met, as it is likely that crisis services are delivered in outpatient settings not represented by the claims analyzed in this study. ▲

II. Methods

We used a mixed-methods approach to examine the CPT codes 90839 and 90840 in public and commercial payor claims and to explore how outpatient therapists perceive their roles supporting people who experience a crisis.

A. Environmental scan

We conducted a targeted environmental scan to develop a baseline understanding of the use of the Psychotherapy for Crisis CPT codes and the outpatient therapist role in delivering services during a crisis. We identified 40 relevant resources through searches of the English-language peer-reviewed and grey literature published since the CPT codes became available in 2013. We extracted relevant information from 22 of the most illuminating resources using a structured abstraction tool and analyzed it for key themes. To supplement the scan and inform other study activities, we held four key informant interviews with experts in behavioral health billing and crisis service delivery, summarized interview responses, and conducted thematic analyses to synthesize responses with other data sources.

Key research questions

- How do outpatient therapists understand and describe their role in the crisis services system? Do therapists have the capacity, skills, and resources needed to respond to crises in outpatient settings when they occur?
- To what extent did providers use the Psychotherapy for Crisis codes (90839 and 90840) over the most recent five-year period for which data are available? What types of providers used them and where?
- What prompts providers to use the Psychotherapy for Crisis codes? Do providers always use them when providing crisis services?▲

B. Claims analyses

Overview of the analytic approach. We examined the use of Psychotherapy for Crisis CPT codes 90839 and 90840 in Medicaid, Medicare, and commercial claims data for all states, the District of Columbia, Puerto Rico, and the United States (U.S.) Virgin Islands from 2018 through 2022, conducting separate analyses for each payor. We first identified enrollees with at least one claim with crisis code 90839 and then examined the characteristics of those enrollees, the provider type, place of service, and behavioral health diagnoses associated with the crisis claim. For each year in the study period, we calculated the number and percentage of enrollees with at least one crisis claim, the number of crisis claims, and the rate of crisis claims per 10,000 enrollees by state and by enrollee and provider characteristics. We also looked at claims with the combination of the two codes and calculated session duration for claims billed using only 90839 and those with one or more instances of the add-on code 90840. Finally, we calculated the proportion of enrollees who received a 90839/90840 service from a provider with whom they had an existing relationship; we identified the servicing or rendering provider on an enrollee's first crisis claim and looked for any claims with the same provider in the previous year or years (we looked for previous claims in the study period as early as January 1, 2018).

Data sources and study population. For **Medicaid**, we obtained enrollee characteristics from the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files Research Identifiable Files

(TAF RIF) demographics and eligibility file, and claims data from the TAF RIF other services and inpatient claims files. The Medicaid analysis included all Medicaid enrollees who were eligible for full,

comprehensive, or limited Medicaid benefits during the study period. For **Medicare**, we obtained enrollees' characteristics from the Medicare Master Beneficiary Summary File, and claims data from Inpatient, Outpatient, and Carrier claims files. The Medicare analysis included all Medicare enrollees eligible for Medicare Fee-For-Service Part A or Part B during the study period. A separate ASPE contractor conducted the **commercial** claims analysis using Merative MarketScan® data, a convenience sample of commercial insurance plans that includes fee-for-service claims and managed care encounters. Demographic and enrollment data are from the 2018–2022 MarketScan annual enrollment files, and crisis service claims were identified in the Inpatient and Outpatient services files.

Enrollee and provider characteristics analyzed

- **Enrollee characteristics:** age,⁴ sex, geographic area (rural or urban), and behavioral health conditions⁵ for all payor types and race and ethnicity, indication of a disability based on enrollment data,⁶ and dual enrollment for Medicaid and Medicare analyses.
- **Provider characteristics:** Place of service (such as office, telehealth, or hospital) and servicing or rendering provider type (for example, psychiatrist, social worker, or physician).▲

Limitations. The analysis of claims data has the following limitations.

1. We excluded Medicare Advantage (MA) enrollees from the Medicare analysis because MA data do not include the level of detail required for this analysis.
2. We conducted the Medicaid and Medicare analyses at the claim level rather than at the claim line level, a standard approach with Medicaid and Medicare data. Each Medicaid and Medicare claim includes a "header" record along with one or more "line" records that include additional detail. Some claims included multiple claim lines that each include the 90839 code, but we counted the code only once for the claim. This potential undercount of crisis claims affected less than 3 percent of Medicaid claims and less than 5 percent of Medicare claims. We observed a higher proportion (9 percent) of commercial claims with multiple lines with the Psychotherapy for Crisis code on the same claim ID than in the Medicaid and Medicare data; when a claim ID had multiple claim lines with different dates of service, we used the claim ID and service date combination to identify a unique crisis in the commercial claims.

⁴ Age categories differed for each payor due to the specific demographics of their enrollee populations. Commercial: 12 and younger, 13–18, 19–29, 30–39, 40–49, 50–59, 60–64, and 65 and older. Medicaid: 11 or younger, 12–17, 18–25, 26–35, 36–45, 46–55, 56–64, and 65 and older. Medicare: 17 and younger, 18–34, 35–64, 65–74, 75–84, and 85 and older.

⁵ Behavioral health conditions include two categories: mental health conditions and substance use disorders (SUDs). Mental health conditions include (1) anxiety disorders, (2) mood disorders, (3) personality disorders, (4) schizophrenia and other psychotic disorders, and (5) other mental health disorders. SUDs include alcohol use disorder, opioid use disorder, and other drug use disorders. An enrollee is counted as having a co-occurring disorder when they have both a mental health condition (any type) and a substance use disorder (any type).

⁶ Disability based on enrollment data does is not inclusive of all Medicaid or Medicare enrollees with a disability.

3. We limited the lookback period for existing relationships to January 1, 2018, to align with the beginning of our analytic time period. As a result, the lookback period is shorter for earlier years in the study period and may underestimate the percent of claims with a provider who has a preexisting relationship with the patient in the earlier years of your study compared to the later years. For example, we had up to two years of lookback (2018–2019) if the first crisis claim occurred in 2019 but five years of lookback (2018–2022) if the first crisis claim occurred in 2022.
4. Rural and urban designations Medicaid and Medicare data were not available for 2022.
5. In Medicaid data, we identified people who had an indication of a disability using enrollment in certain programs or waivers for people with disabilities in the eligibility file. For Medicare, we identified those with indication of a disability using the Medicare Status Code variable from MBSF, and combined “disabled with ESRD” and “disabled without ESRD” code values. Disability based on enrollment data is not inclusive of all Medicaid or Medicare enrollees with a disability. Commercial data did not include information on disability.
6. We did not conduct tests of statistical significance, so any differences over time or across payors are descriptive.
7. Some data fields were incomplete. For example, some behavioral health-related claims were missing from the California Medicaid file, which could affect Medicaid results for that state. Results for some states may be an undercount due to data quality concerns in variables used in the analysis in some states and years (in particular, see the [DQ Atlas](#) for states with procedure code data categorized as unusable or high concern; this is also detailed in the claims analyses methods section of Appendix A). Provider specialty and the National Provider Identifier (NPI) were missing from about 20 percent of Medicare claims, and NPI was missing from about 35 percent of commercial claims.
8. This analysis was not meant to be a comprehensive analysis of crisis service codes. Crisis service codes other than 90839 and 90840 were not part of this analysis. In addition, federal grants, state funds, and clients themselves pay for crisis services, which are not represented in claims.

C. Key informant interviews

We conducted semi-structured interviews with two groups of key informants: (1) representatives of behavioral health provider associations and (2) individual outpatient behavioral health providers. The purpose of the interviews was to understand perspectives on the role of outpatient behavioral health providers in providing crisis services and to explore how providers use Psychotherapy for Crisis CPT codes 90839 and 90840.

Identifying respondents. We identified relevant behavioral health provider associations by reviewing sources from the environmental scan, conducting a targeted web search, and consulting experts in the behavioral health field (i.e., experts who participated in the environmental scan interview and internal Mathematica experts). We identified a convenience sample of individual outpatient providers through referrals from behavioral health provider associations, web searches, and through the networks of research team members.

Collecting data. We completed seven interviews with representatives of behavioral health provider associations and nine interviews with individual outpatient providers. Interview respondents spanned a range of provider types, practice settings, geographic locations, and experience providing crisis services.

- Provider associations and individual providers represented marriage and family therapy, professional counseling, psychology, psychiatry, social work, and specialty SUD treatment.
- Individual providers who participated in an interview had a range of experience providing crisis services and practiced in a range of settings (hospital, small- and large-group practice, and solo practice) and in seven states (Alabama, Arizona, California, Colorado, Massachusetts, Minnesota, and Ohio).

Interviews explored the extent to which provider types and individual providers provide crisis services; providers' willingness, readiness, and capacity to respond to a crisis; how providers make decisions about billing for crisis services; and factors influencing the use of CPT codes 90839 and 90840. Interviews with association representatives included questions about the guidance associations offer their members about providing and billing for crisis services.

Qualitative data analysis. Interviews were transcribed and analyzed thematically. We used a Microsoft Excel-based data extraction tool to organize data by respondent type (that is, association representative or individual provider), provider type, and topic, and then analyzed the data to identify key themes within and across groups.

Limitations. Our small sample size and the diversity of respondents limit the findings from the qualitative data. The small number of interviews limits our ability to identify patterns or themes by respondents' characteristics, such as provider type, practice setting, or region. In addition, these findings may have limited generalizability.

III. Role of Outpatient Providers in Crisis Services

A. Role in supporting people during a crisis

Findings from the environmental scan and key informant interviews indicate that outpatient behavioral health providers play a role in supporting people before, during, and after a crisis.

Outpatient behavioral health providers play a preventive role by helping clients develop skills to avoid a potential crisis. Resources identified through the environmental scan described outpatient therapists' responsibility to work with clients to prepare for a possible crisis by creating a safety plan and educating clients about available resources such as a crisis hotline number (Blow 2016; Health Resources & Services Administration [HRSA] 2022; Pope 2022; Weir 2022). Similarly, provider association representatives and individual providers discussed working with clients who might be at risk of crisis to develop a safety plan, coping skills, and tools to stay safe should they experience a crisis. Individual providers whose practices do not have on-call staff or a 24-hour hotline emphasized the importance of educating clients in advance about resources available in the community so clients understand who to call and where to go if they need support at a time when their provider is unavailable.

Defining crisis

In the context of billing Psychotherapy for Crisis codes 90839 and 90840, crisis is defined as a presenting problem that is "typically life threatening or complex and requires immediate attention to a person in high distress" (AMA 2022). Although interview respondents agreed with this definition of crisis, some felt it represented the "severe end" of what constitutes crisis and added that crisis can also be defined more broadly to include circumstances in which a person is dysregulated, unable to manage their feelings, or otherwise experiencing an escalation of need. A few providers said that crisis is self-defined by the client. Respondents often described that one goal of outpatient behavioral health providers is to prevent a situation from escalating to an acute crisis.

Interview respondents also described using de-escalation techniques to help clients who are in distress regulate and prevent a situation from escalating to the level of a crisis. A few respondents mentioned that routine screening for suicidality in health care settings can help identify people in crisis as well as those for whom early intervention can prevent a crisis. A psychologist whose hospital recently implemented routine screening for suicide risk explained that this practice helps connect behavioral health providers with clients who are "escalating" but not yet in crisis. The provider's role in these cases is to determine what supports the client needs and the level of care that is needed.



"Historically, I think we've always talked about crisis at the very peak, the most dangerous moment. And that's important, but what if we can connect with [clients] when they're escalating, but they're not quite there? I think that's a win-win for everybody."

- Psychologist

When responding to a client in crisis, the role of the outpatient provider might include assessing the client's risk and needs, helping the client regulate and defuse the crisis, and connecting the client to additional resources or higher levels of care as needed. A few resources identified through the environmental scan reiterated that therapists might have to manage crises themselves, including by

assessing and defusing suicidal ideation or risk of self-harm (Headway n.d.). A practitioner guidance document from the American Psychological Association encourages psychologists to stay up to date on evidence-based suicide risk assessments and interventions to help increase psychologists' confidence when supporting people in a crisis (Weir 2022). Interview respondents described several evidence-based screening tools and de-escalation techniques that outpatient behavioral health providers use when working with a client in crisis, including the Columbia Suicide Severity Rating Scale, the Stanley Brown Safety Planning Intervention, and agency- or practice-specific policies and procedures that guide providers' response to a crisis.

If an outpatient therapist is unable to de-escalate the crisis themselves, their responsibilities could include connecting clients to a higher level of care. For example, some resources written for providers suggest providers have a responsibility to transfer clients to a crisis line, direct emergency medical services to the client's location, or otherwise facilitate admission to inpatient care (Blow 2016, HRSA 2022). In interviews, respondents explained that outpatient providers should be able to recognize when a client requires a higher level of care than they can provide in an outpatient setting and should be knowledgeable about crisis services in the client's community. Respondents emphasized the importance of ensuring a warm referral to emergency medical services and mobile crisis units.

Outpatient providers believe follow-up after a crisis is important but face challenges providing it.

Interview respondents described roles for outpatient providers after a crisis, including instances in which the person in crisis is an existing client or the provider receives a referral to provide outpatient therapy to a new client experiencing a crisis. Some respondents commented that it is best practice for outpatient providers to follow up with an existing client after they receive crisis services from another provider or facility. However, respondents shared that they must make time to make a follow-up call and are unlikely to be compensated by insurers for time spent following up. In addition, insufficient communication between other crisis services providers and outpatient therapists affects follow-up. A few providers mentioned they are not often notified if an existing client receives crisis services from other providers, such as a mobile crisis team or a hospital emergency department. A counselor who works in a practice connected to a large health care system said that, although the hospital refers new clients to her, she does not receive information about the services the hospital provided or whether the referral is to follow-up from a crisis. A few respondents stated that they would like to see more linkages and better communication between hospitals and outpatient providers so outpatient providers can be a resource during a crisis event and afterwards.

B. Willingness, readiness, and capacity to respond to a crisis

The environmental scan yielded limited literature on outpatient therapists' readiness, willingness, and comfort responding to a crisis. Multiple resources described the important role that therapists have in developing safety or crisis plans with clients at risk of a crisis (Blow 2016; Pope and Compton 2022; Weir 2022) and providing support during or after a crisis (SAMHSA 2020). However, none focused on the level of preparedness among outpatient therapists to perform these activities. Our interviews suggest the provision of crisis services by outpatient behavioral health providers varies depending on factors including providers' willingness and readiness, their practice setting and available resources to support a crisis, and their relationship with the person in crisis.

Key informants offered differing perspectives on outpatient behavioral health providers' preparedness and level of comfort providing crisis services.

Most association representatives asserted that their members have the training and preparation necessary to handle a crisis. However, association representatives did note that a therapist's level of comfort depends on the setting in which the therapist practices, years of experience, the licensure status of the therapist and level of supervision the therapist has, and the specific policies and procedures of the agencies or practices where they work. Interviews with providers suggest that how comfortable or willing a therapist might be responding to a crisis depends on how much experience they have in doing so and how much, if any, crisis-specific education or training they have received. A social work association representative noted that how often social workers provide crisis services varies, and some social workers who are comfortable providing these services become known for this skill and receive more referrals for clients in crisis as a result.



"Managing crisis is part of our scope of practice. And so, it's something that, across the board, anyone in private practice is able to do."

- Association representative, social work

A few individual providers with significant experience and expertise in crisis services noted that although they themselves feel comfortable responding to a person experiencing a crisis, this is not the case for many therapists. Individual providers who rarely encounter clients in crisis in their practice indicated less comfort providing crisis services. Some providers may choose to work in outpatient settings (rather than in an emergency department or on a mobile crisis team) because they do not wish to focus on or specialize in crisis care. An individual therapist explained that although she would provide crisis services if an established patient experiences distress during a session, she is not interested in working in settings in which crisis care is the primary service.

Outpatient behavioral health providers' capacity to respond to a client in crisis can depend on whether the crisis occurs during an appointment or between appointments. Respondents described encountering clients who present in crisis during regularly scheduled appointments; in these cases, providers would use the appointment time to assess, de-escalate, and make a safety plan. If they could not resolve the crisis during the appointment, some providers said they would extend the session and others said they would refer the client to external crisis services at that point. If an existing client reaches out in a crisis outside of a scheduled appointment time, some providers said they could likely reschedule other clients to respond to the crisis, and others said they would be more likely to refer the client to a higher level of care. The approach depended on their capacity and practice setting.

Outpatient behavioral health providers might be more likely to provide crisis services to existing clients than to new clients. Several individual providers explained that their level of comfort in providing crisis services in an outpatient setting depends on their existing relationship with the client. Providers felt more confident providing crisis services in an outpatient setting if they understood the client's history, social context, and risk factors from working with the client previously.

Providers and association representatives indicated it is uncommon for a new client to reach out or present in crisis at an initial encounter, though a few respondents had experienced this. However, some behavioral health providers reported they received new client referrals from non-behavioral health

colleagues who identified their patient was in crisis through a routine screening. Psychologists and psychiatrists noted that as more non-behavioral health practices adopt universal screening for depression and suicidality, behavioral health providers are increasingly called on to provide crisis services to those who screen positive. In such cases, respondents said they would be more likely to refer someone new to a higher level of care compared to an existing client with whom they had a therapeutic relationship.

C. Barriers to providing crisis services

Respondents described several barriers to providing crisis services in outpatient settings, including lack of time, limited education or training, inadequate compensation, and liability concerns.

Providing crisis services in outpatient settings is time and resource intensive. Interview respondents explained that responding to a client in crisis often takes much longer than a standard appointment

because contacting the client's family or emergency contact and coordinating referrals take time, in addition to the time spent face to face with the client. Providing this care requires an outpatient provider to rearrange their schedule and reschedule other clients' appointments. Several association representatives noted that their affiliated providers' ability to respond to a client in crisis depends on their caseload and practice setting, and some do not have the time and flexibility in their schedules to meet the needs of clients in a crisis. Some therapists



"There's not a whole lot of incentive to make yourself available to go take care of a crisis situation, unless it's your patient, if it's going to be more intense, mess up your schedule, and you're going to get paid less...Not a whole lot of motivation to grow that service, to look for more opportunity to do that kind of work."

– Association representative, psychologist

said they would try to extend the session to de-escalate or re-regulate the client even if that meant delaying appointments with other clients. Others said they would do their best to assess and de-escalate during a session but may ultimately feel more comfortable referring the client to the emergency department. Therapists noted that even if they end up referring a client to a higher level of care, a client in crisis requires additional time and documentation to ensure their safety.

Outpatient therapists' ability to make time in their schedule to respond to a client in crisis appeared to depend on their practice setting. Some individual providers confirmed that to operate a private practice, it is necessary to maintain a certain caseload, which limits the amount of time they can devote to a client who needs extra time to address a crisis. A therapist working in a solo or small group practice often does not have time outside of their scheduled appointments. In contrast, a large group practice or agency might have additional staff who can step in to support a client in crisis and protocols that document internal processes to support such a client. For example, an individual provider who works at a large agency that operates as a 988 crisis call center explained that their agency typically has the capacity to respond to clients who call or walk in during a crisis; in such cases, the front desk contacts the client's usual provider first, and if that provider is unable to respond, another therapist steps in to provide care.

Outpatient behavioral health providers might not receive sufficient compensation for providing crisis services. Some association representatives and individual providers explained that the outpatient providers risk losing revenue when they expend extra time and resources on providing crisis services. A few providers noted they might not be compensated by an insurance company for longer sessions and would miss out on revenue from seeing regularly scheduled clients. In particular, providers said they were unlikely to be compensated for time spent on activities that are necessary to provide high quality care and ensure client safety but are not part of the face-to-face client visit, such as contacting family members, coordinating with other providers, and arranging a transfer to another setting. One provider who works at a crisis center stated that her agency permits therapists to spend up to three hours with a client in crisis because this is the maximum time that insurance will reimburse; after three hours, therapists should refer clients to a higher level of care. In addition, a few individual providers mentioned that maintaining a 24-hour answering service to support providing crisis services is expensive. A social work association representative noted that providers have no way to bill for making a follow-up call to a client who received crisis care, despite this being a best practice.



"I'm definitely not going to be reimbursed by the insurance company for the five hours that I would be spending in my office trying to get that situation under control."

- Individual provider, social worker

Some outpatient behavioral health providers receive limited training in crisis services. Providers emphasized that providing crisis services is more intensive and difficult than typical psychotherapy and requires specialized training, including on evidence-based screening and interventions. Some individual providers who recently graduated or recently received licensure said crisis response was not a commonly addressed topic in their graduate studies. Association representatives generally echoed the sentiment that graduate programs do not provide much training on crisis services and noted that masters-level providers could benefit from more education and training. Individual providers felt that the training they received through continuing education programs or their current agencies felt more relevant and useful. One masters-level clinician said their graduate program did not provide adequate instruction and training about responding to a crisis; rather, they gained experience with crisis evaluations by working in a hospital and receiving on-the-job training. Another individual provider who owns a small practice that frequently provides crisis services noted they have to provide significant training on crisis services to therapists who join the practice as most masters-level therapists they hire have not had coursework on suicide or suicidality.

Therapists' concerns about client safety and liability can affect some therapists' willingness to respond to a crisis. One association representative posited that even if a therapist does respond to a crisis, they might be more likely to refer the client to a higher level of care (such as the emergency department) because they have concerns about signing off on a person's safety and being wrong. One individual provider shared that their graduate training included many discussions about potential liability concerns related to treating higher-risk clients. Although they acknowledged that discussing these anxieties was helpful, there was also notably less concrete instruction about crisis intervention techniques.

This page has been left blank for double-sided copying.

IV. Use of Psychotherapy for Crisis Codes

In this section, we present findings from analyses of the Psychotherapy for Crisis CPT codes, 90839 and 90840, in Medicaid, Medicare, and commercial claims data from 2018 through 2022, as well as perspectives from outpatient providers on how these codes are used in practice. The CPT manual instructs providers to use code 90839 for the first 30 to 74 minutes of psychotherapy for crisis services and only once per day. Providers can use the add-on code, 90840, multiple times, each time to bill for an additional 30-minute increment. In the rest of this report, we refer to these codes as the crisis codes or by the CPT code number.

For each payor we examined use of the crisis codes overall and for each state⁷ for each year in the five-year analytic period. We calculated the number of claims with code 90839, the number and percentage of enrollees with at least one claim with code 90839, and the rate of claims with code 90839 per 10,000 enrollees. Unless otherwise specified, we present 2022 values throughout this section because there was minimal variation across study years in rates and percentages.

A. Use of Psychotherapy for Crisis CPT codes, 90839 and 90840, in claims

Overall use of the code 90839 from 2018 to 2022 was low for all payors. Less than 1 percent of Medicaid, Medicare, and commercial enrollees in each year had a claim with code 90839. We display the distribution of the rate of claims with code 90839 per 10,000 enrollees for all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands for each year from 2018 to 2022 in a box and whisker plot in Figure IV.1. For each year, the box for each payor shows the range in rates for most states; the whiskers (the lines extending vertically from each box) show the highest and lowest state rates, and outliers are rates far above the range, depicted by open circles in Figure IV.1.⁸

Overall, rates of 90839 code use increased from 2018 to 2020 and decreased from 2020 to 2022 (Figure IV.1). However, some states saw increases or spikes in rates during the five-year analytic period (including New Hampshire, Delaware, Colorado, and Kansas) and other states saw rates across all three payors decrease over time (including Oklahoma, Connecticut, Maryland, and Arizona).

Crisis code use varied across states and was highest among Medicaid enrollees. The median rate of claims with code 90839 per 10,000 enrollees for all states was 8.9 for Medicaid, 4.7 for Medicare, and 11.2 for commercial enrollees in 2022, the most recent year in the five-year period. Across all years, the highest rate of crisis code use was 136.5 per 10,000 Medicaid enrollees in Montana in 2020. Across payors, although the 2022 median was slightly higher for commercial claims than Medicaid claims (a difference of about 2 claims per 10,000 enrollees), both median rates were relatively low, and the range in rates across states was large for Medicaid claims. These findings suggest use of code 90839 varied substantially by state in Medicaid claims and clustered in the low range for most states in commercial claims. In 2022 (the

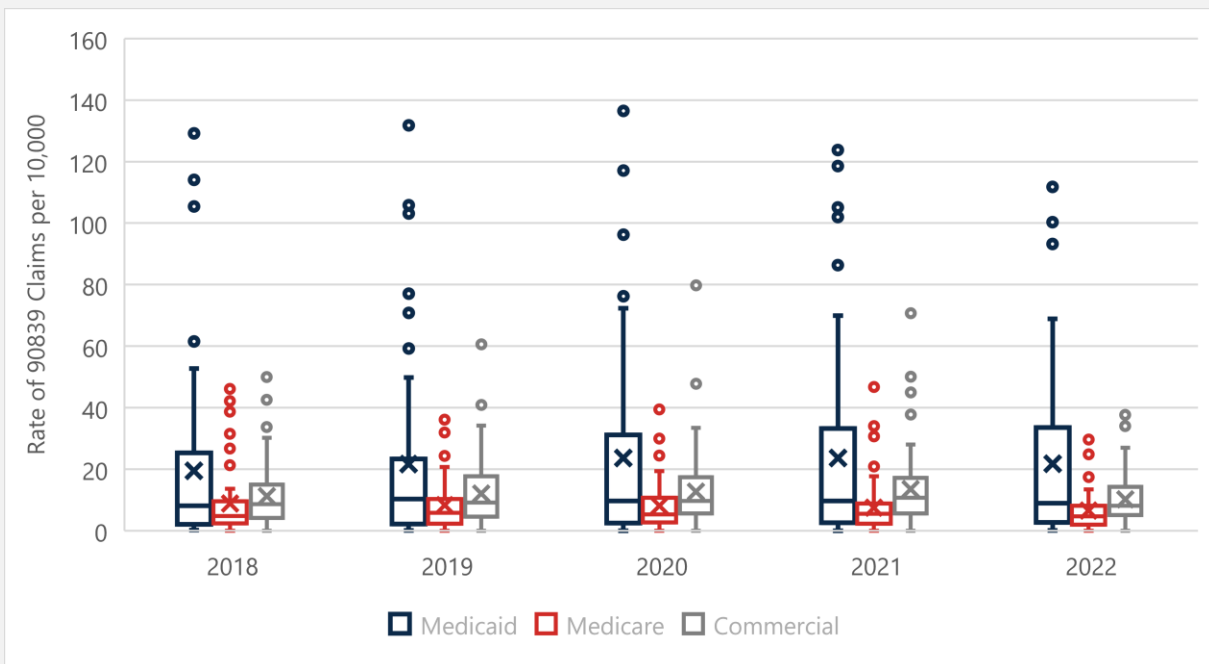
⁷ This analysis included all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

⁸ The standard approach to determining an outlier is to use any values more than 1.5 times the interquartile range (which includes rates between the first and third quartiles); in the box and whisker plot, outliers are rates that are above or below the whiskers,

most recent year of the five-year analytic period), the range in rates of claims with code 90839 for each payor follows:

- Medicaid: 0.1 (Pennsylvania) to 111.8 (Ohio) claims per 10,000 enrollees (Appendix Table B.1)
- Medicare: 0.7 (Mississippi) to 30.6 (Vermont) claims per 10,000 enrollees (Appendix Table B.2)
- Commercial: 3.3 (Minnesota) to 37.6 (Puerto Rico) claims per 10,000 enrollees (Appendix Table B.3)

Figure IV.1. Rate of claims with code 90839 per 10,000 Medicaid, Medicare, and commercial enrollees, across all U.S. states, 2018–2022



Source: Mathematica’s analysis of Medicaid TAF RIF claims data and Medicare FFS claims data, and Merative’s analysis of commercial MarketScan® data.

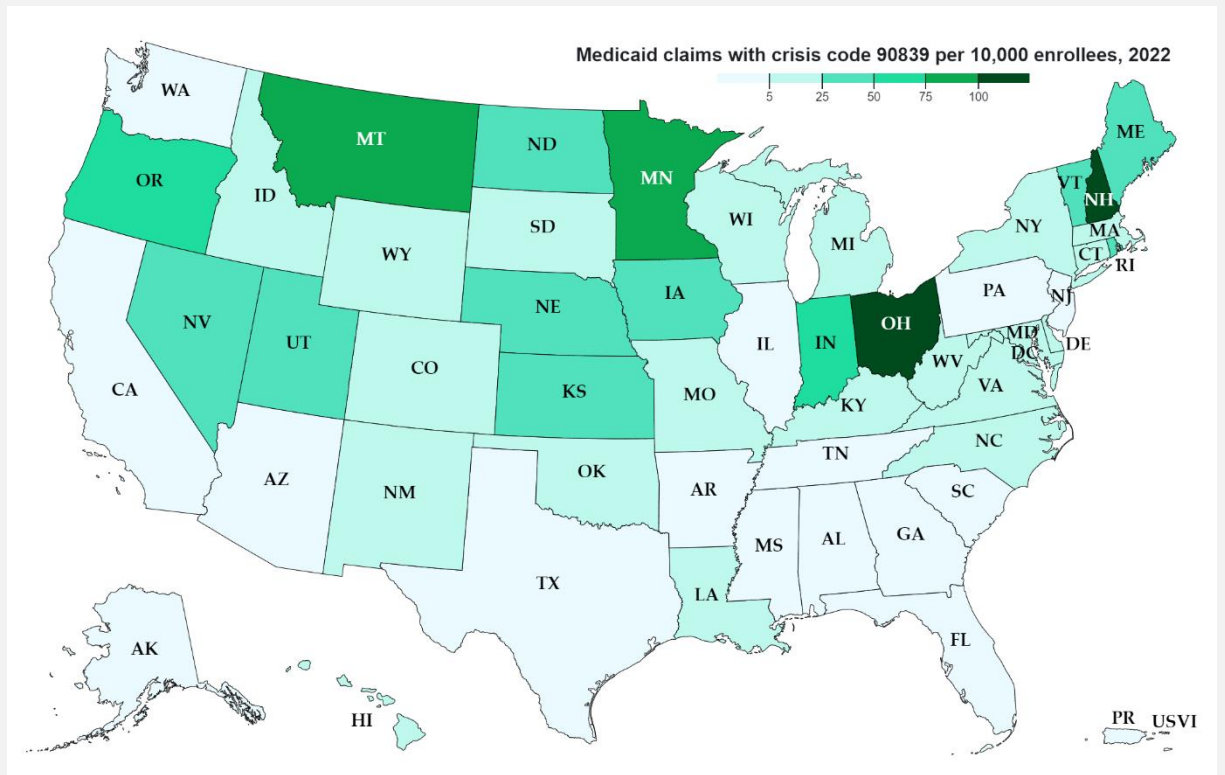
Note: The lower and upper bounds of each box represent the 25th and 75th percentiles, respectively; the horizontal line in each box is the 50th percentile or the median; the “X” in each box is the mean; and each dot above the box is an outlier value, defined using the Tukey standard as values greater than 1.5 times the interquartile range. States or territories with an outlier value in the five highest per year in at least two of the five years include for Medicaid, Indiana, Minnesota, Montana, Ohio, Oregon, and New Hampshire; for Medicare, Connecticut, Maine, Minnesota, Montana, New Hampshire, and Vermont; and for commercial, Louisiana, Michigan, Nevada, Puerto Rico, and Utah.

FFS = fee for service; RIF = Research Identifiable Files; TAF = Transformed Medicaid Statistical Information System Analytic Files.

Differences across payors in states with the highest use of code 90839 suggest potential differences in reimbursement policies. We assessed patterns of which states had the highest rates in each year, for each payor. Indiana, Minnesota, Montana, New Hampshire, and Ohio consistently had the highest rates of Medicaid crisis claims in 2022 (and in most years during the analytic period) (Figure IV.2). Maine, Minnesota, New Hampshire, and Vermont had the highest rates of Medicare crisis claims across all five years. Minnesota and New Hampshire are among the states with the highest rates of crisis claims for both Medicaid and Medicare. The states with the highest rates varied more for commercial claims than for

Medicaid and Medicare claims: Louisiana, Michigan, Nevada, Puerto Rico, and Utah had the highest rates in commercial claims in three or more years, while six other states were in the top five in one year each. State differences may be due to differences in each payor’s reimbursement policies for the use of these crisis codes, awareness among providers about the crisis codes, or the availability of crisis and behavioral health services in these states.

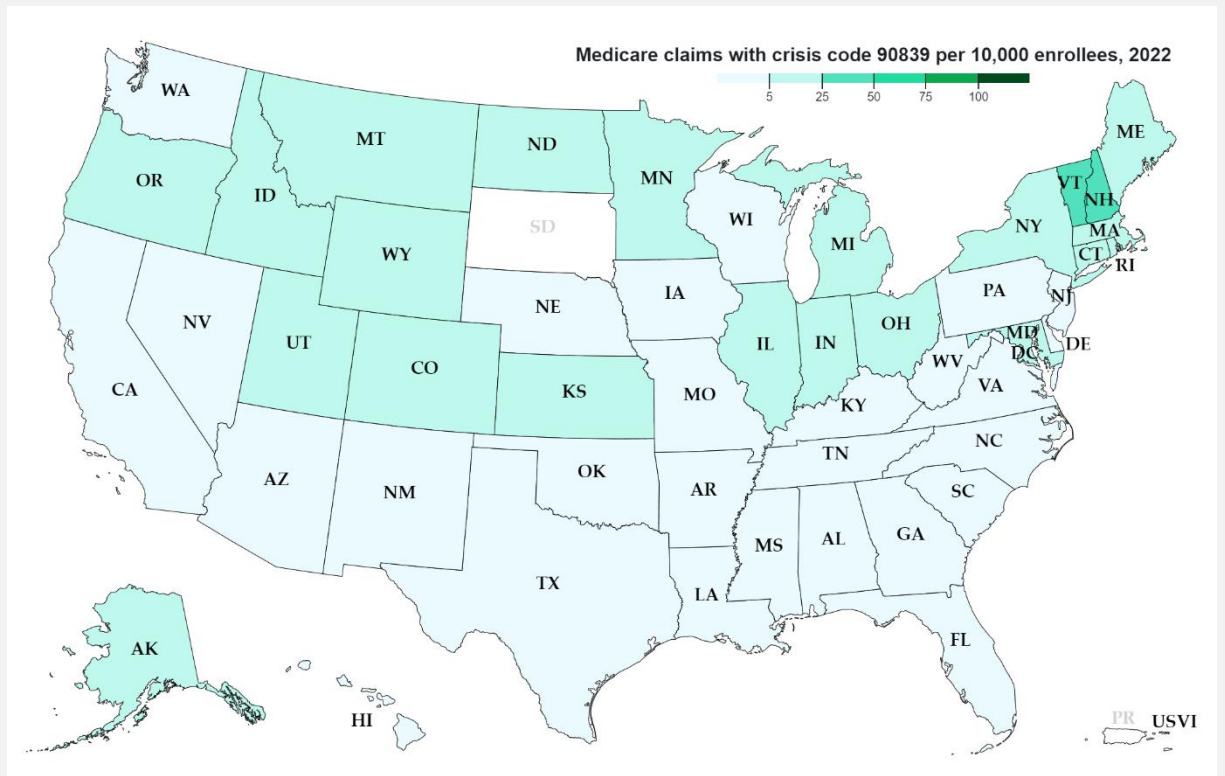
Figure IV.2. Rate of claims with code 90839 per 10,000 enrollees, by state, 2022



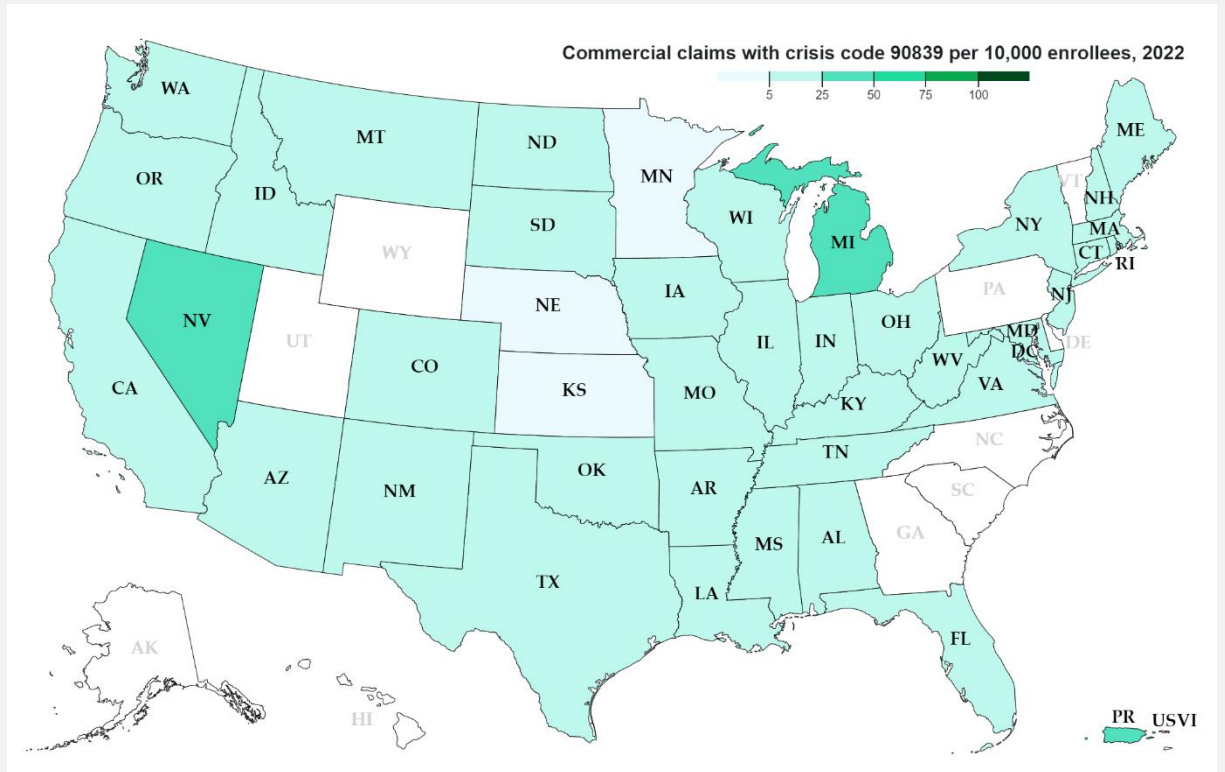
Source: Mathematica’s analysis of claims in the Transformed Medicaid Statistical Information System Analytic Files Research Identifiable File.

Note: No 2022 Medicaid data were available for South Dakota or Puerto Rico.

Section IV Use of Psychotherapy for Crisis Codes



Source: Mathematica's analysis of Medicare Fee-For-Service claims data.



Source: Merative's analysis of commercial MarketScan® data.

Note: No 2022 commercial data were available for Alaska, Delaware, the District of Columbia, Georgia, Hawaii, North Carolina, Pennsylvania, South Carolina, Utah, Vermont, and Wyoming.

1. Characteristics of enrollees with crisis claims

We examined enrollees' demographic characteristics within each payor dataset for (1) all enrollees and (2) enrollees with at least one crisis claim (a claim with code 90839) during the year. Specifically, we compared the demographic characteristics of each payor's overall enrollee population to the demographic characteristics of those with at least one crisis claim. We also examined the rate of claims with a crisis code per 10,000 enrollees by demographic characteristics.

Across all payors and years, adolescents and young adults were more likely to have at least one crisis claim and more likely to have multiple crisis claims per person, relative to other age groups⁹ (Figure IV.3). Medicaid enrollees ages 12 to 17, Medicare enrollees ages 35 to 64, and commercial enrollees aged 13 to 18 made up a larger share of the crisis claim population, meaning they were overrepresented among enrollees with at least one crisis claim. These age groups also had higher rates of crisis claims per 10,000 enrollees, suggesting they may also be more likely to have multiple crisis claims per person relative to other age groups.

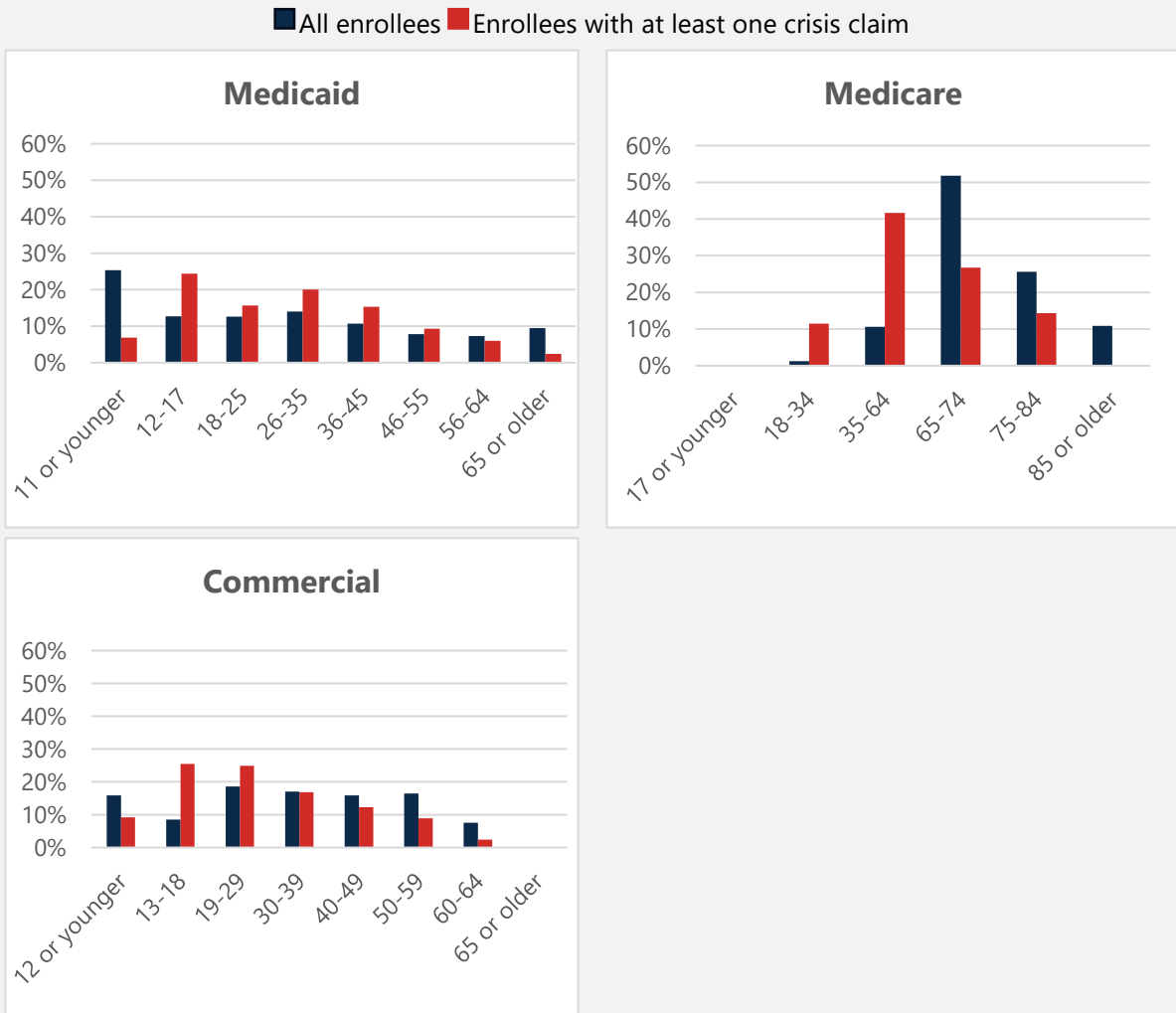
- Among Medicaid enrollees, those with at least one crisis claim were more likely to be young; for example, those ages 12 to 17 made up 13 percent of the overall Medicaid population but 24 percent of the population with a crisis claim in 2022 (Figure IV.3 and Appendix Table B.4). Of the Medicaid enrollees with at least one crisis claim, adolescents and young adults had more crisis claims per enrollee than other adult age groups (Appendix Table B.7).
- Among Medicare enrollees, those ages 35 to 64 made up 11 percent of the overall Medicare population but 42 percent of the population with at least one crisis claim in 2022 (Figure IV.3 and Appendix Table B.5). Of the Medicare enrollees with at least one crisis claim, adults in this age group had more crisis claims per 10,000 enrollees, compared with all other age groups (Appendix Table B.8).
- Among commercial enrollees, those ages 13 to 18 made up 8.5 percent of the overall commercial population but 26 percent of the population with at least one crisis claim in 2022 (Figure IV.3 and Appendix Table B.6). Of the commercial enrollees with at least one crisis claim, those ages 13 to 18 had almost twice as many crisis claims per enrollee as those ages 19 to 29 and 30 to 39, and about four times as many as those ages 50 to 59 (Appendix Table B.9).

Among Medicaid and Medicare enrollees, females with a crisis claim had more crisis claims per 10,000 enrollees than males with a crisis claim (Figure IV.4).

- In Medicaid and Medicare, females with at least one crisis claim made up a slightly higher proportion compared with the overall population (for example, 53 percent of the overall Medicare population were female and 59 percent of the population with at least one crisis claim were female in 2022). However, among enrollees with a crisis claim, females were more likely to have multiple crisis claims per enrollee than males (Appendix Tables B.4-B.5 and B.7-B.8).

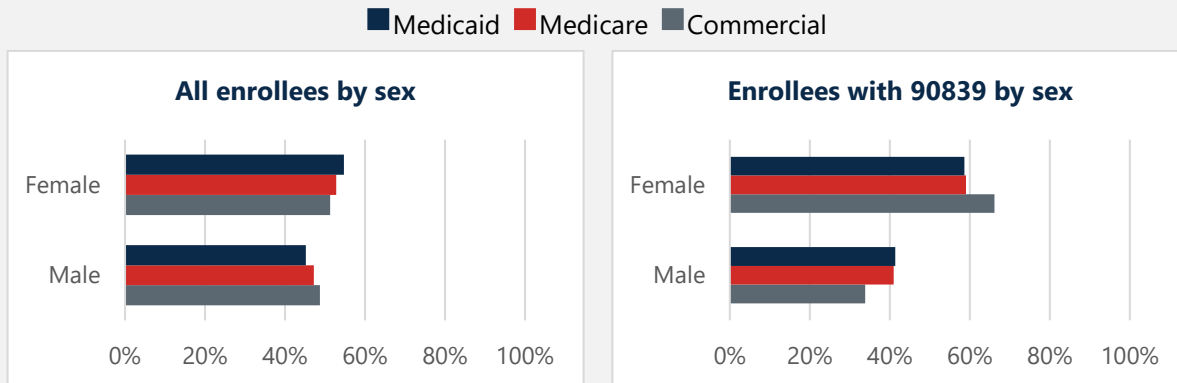
⁹ Age categories differed for each payor due to the demographics of their enrollee populations. Medicaid: 11 or younger, 12–17, 18–25, 26–35, 36–45, 46–55, 56–64, and 65 and older. Medicare: 17 and younger, 18–34, 35–64, 65–74, 75–84, and 85 and older. Commercial: 12 and younger, 13–18, 19–29, 30–39, 40–49, 50–59, 60–64, and 65 and older.

Figure IV.3. Age distribution of Medicaid, Medicare, and commercial enrollees and enrollees with at least one claim with code 90839, 2022



Source: Mathematica’s analysis of Medicaid TAF RIF claims data and Medicare FFS claims data, and Merative’s analysis of commercial MarketScan® data.
 FFS = fee for service; RIF = Research Identifiable Files; TAF = Transformed Medicaid Statistical Information System Analytic File.

Figure IV.4. Sex distribution of Medicaid, Medicare, and commercial enrollees and enrollees with at least one claim with code 90839 in 2022



Source: Mathematica’s analysis of Medicaid TAF RIF claims data and Medicare FFS claims data, and Merative’s analysis of commercial MarketScan® data.

FFS = fee for service; RIF = Research Identifiable Files; TAF = Transformed Medicaid Statistical Information System Analytic File.

- Among commercial enrollees, females made up 51 percent of the overall population but 66 percent of the population with at least one crisis claim in 2022. Although female enrollees were more likely to have at least one crisis claim, they had a similar rate of crisis claims as males, suggesting males had more crisis claims per enrollee because they made up a smaller proportion of the population with a crisis claim (Appendix Tables B.6 and B.9).

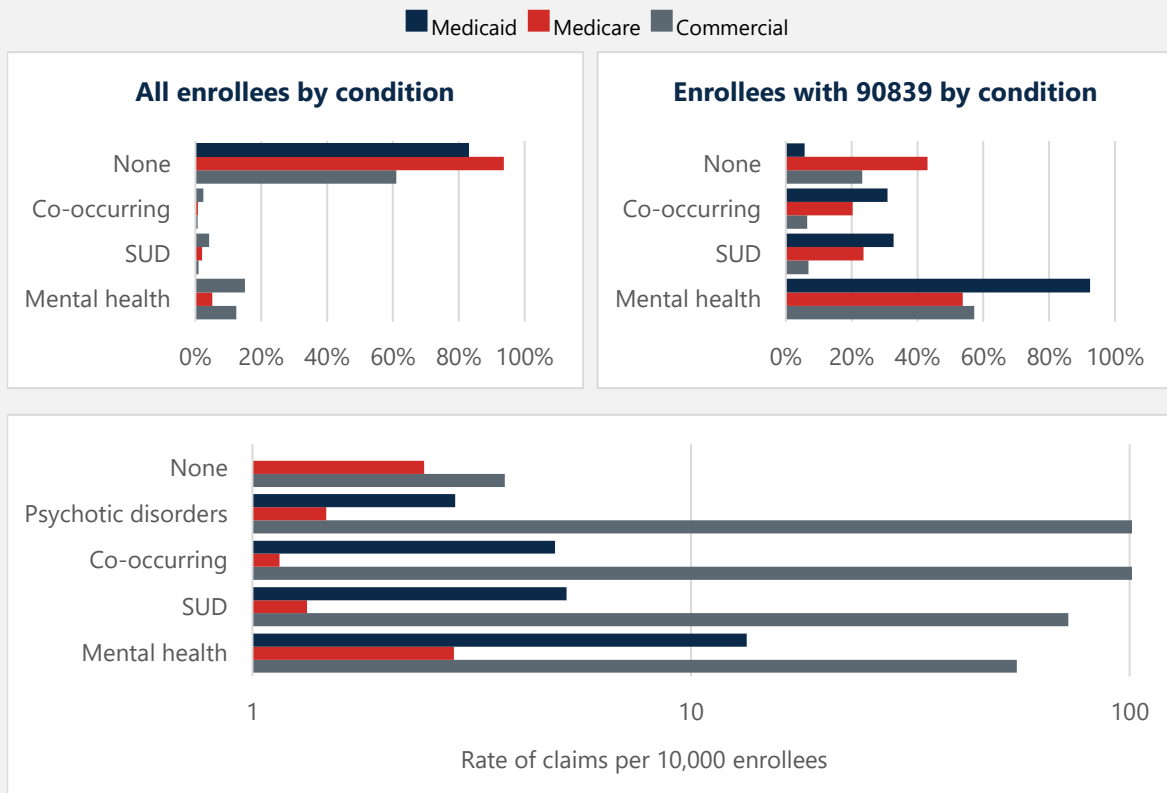
Across all payors and years, enrollees living in urban areas were more likely to have a crisis claim compared to enrollees in rural areas.

- Among Medicaid enrollees, similar proportions of all enrollees (79 percent) and of enrollees with at least one crisis claim (81 percent) resided in an urban area in 2021 (Appendix Table B.4).¹⁰ Of the Medicaid enrollees with at least one crisis claim, enrollees residing in an urban area had more crisis claims per enrollee than those residing in a rural area (Appendix Table B.7).
- Among Medicare enrollees, 81 percent of enrollees with at least one crisis claim resided in an urban area in 2021, which was slightly higher than the proportion for all Medicare enrollees (76 percent) (Appendix Table B.5). Of the Medicare enrollees with at least one crisis claim, enrollees residing in an urban area had more crisis claims per enrollee than those residing in a rural area (Appendix Table B.8).
- Among commercial enrollees, 90 percent of all enrollees and 91 percent of enrollees with at least one crisis claim resided in an urban area in 2022 (Appendix Table B.6).

¹⁰ Rural and urban Medicaid and Medicare data were not available for 2022.

Across all payors and years, enrollees with a history of a behavioral health diagnosis¹¹ were more likely to have a crisis claim compared to those without a history (Figure IV.5 and Appendix Tables B.4-B.6).

Figure IV.5. Proportion and rate per 10,000 Medicaid, Medicare, and commercial enrollees and enrollees with at least one claim with code 90839 by behavioral health condition in 2022



Source: Mathematica’s analysis of Medicaid TAF RIF claims data and Medicare FFS claims data, and Merative’s analysis of commercial MarketScan® data.

Note: Behavioral health information was missing from 26% of all commercial claims and 19% of commercial claims with code 90839.

Mental health = History of at least one mental health condition; SUD = History of at least one SUD condition; psychotic disorders = History of schizophrenia or other psychotic disorders; Co-occurring = History of at least one mental health and at least one SUD; FFS = fee for service; RIF = Research Identifiable Files; SUD = substance use disorder; TAF = Transformed Medicaid Statistical Information System Analytic File.

- Medicaid enrollees with a history of a mental health diagnosis were much more likely to have a crisis claim compared to those without a history of a mental health or substance use disorder (SUD) diagnosis. Among the overall Medicaid population, 15 percent had a history of a mental health diagnosis, 4 percent had a history of an SUD diagnosis, and 2 percent had a history of co-occurring mental health and SUD in 2022 (Figure IV.5 and Appendix Table B.4). Among Medicaid enrollees with

¹¹ Behavioral health conditions include two categories: mental health conditions and SUDs. Mental health conditions include (1) anxiety disorders, (2) mood disorders, (3) personality disorders, (4) schizophrenia and other psychotic disorders, and (5) other mental health disorders. SUDs include (1) alcohol use disorder, (2) opioid use disorder, and (3) other drug use disorders. We counted an enrollee as having a co-occurring disorder when they had both a mental health condition (any type) and an SUD (any type).

at least one crisis claim, almost 92 percent had a mental health diagnosis, 33 percent had a history of an SUD diagnosis, and 31 percent had a history of co-occurring mental health diagnosis and SUD in 2022.

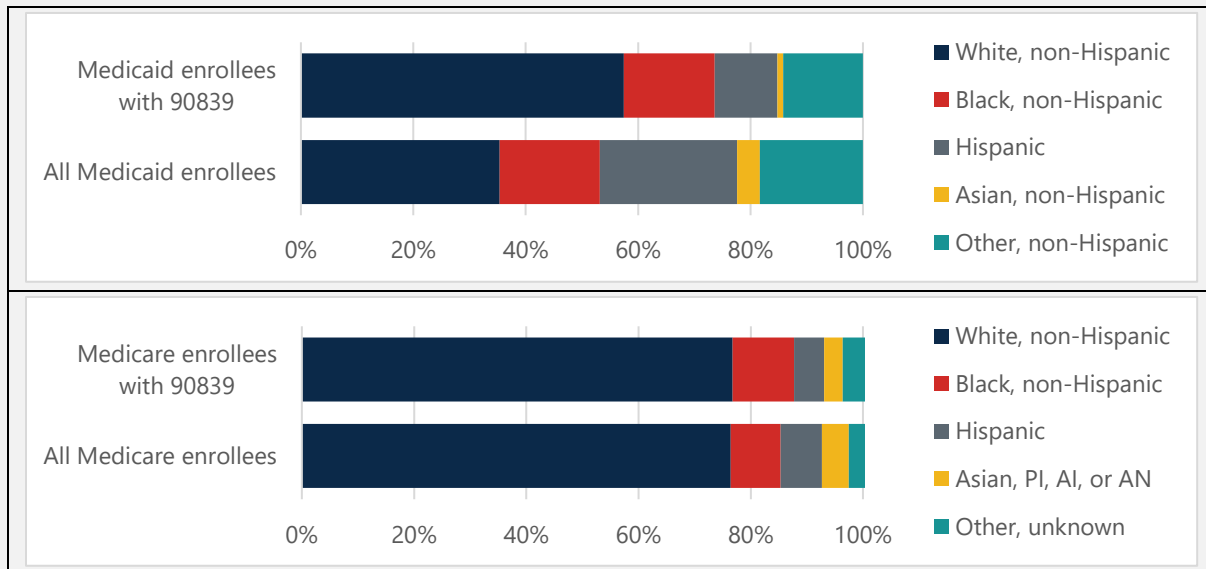
- Medicare enrollees with a history of a mental health diagnosis were more likely to have a crisis claim compared to those with no history of a mental health or SUD diagnosis. Among the overall Medicare population, 5 percent had a history of a mental health diagnosis, 2 percent had a history of an SUD diagnosis, and less than 1 percent had a history of co-occurring mental health and SUD in 2022 (Figure IV.5 and Appendix Table B.5). Among Medicare enrollees with at least one crisis claim, almost 54 percent had a mental health diagnosis, 24 percent had a history of an SUD diagnosis, and 20 percent had a history of co-occurring mental health and SUD in 2022.
- Commercial enrollees with a history of a mental health diagnosis were more likely to have a crisis claim than enrollees with no history of a behavioral health diagnosis. Among the overall commercial population, 12 percent had a history of a mental health diagnosis, 1 percent had a history of an SUD diagnosis, and less than 1 percent had a history of co-occurring mental health and SUD in 2022 (Figure IV.5 and Appendix Table B.6). Among commercial enrollees with at least one crisis claim, 57 percent had a mental health diagnosis, 7 percent had a history of an SUD diagnosis, and 6 percent had a history of co-occurring mental health and SUD in 2022.
- Across all demographic categories, commercial enrollees with a history of schizophrenia and other psychotic disorder had the highest rate of crisis claims (239.0 per 10,000 commercial enrollees) (Appendix Table B.9).

Non-Hispanic white enrollees in Medicaid and Medicare were more likely to have a crisis claim compared to other racial and ethnic groups (Figure IV.6 and Appendix Tables B.4-B.6).¹² For both Medicaid and Medicare, non-Hispanic white enrollees had higher rates of crisis claims per 10,000 enrollees compared to other racial and ethnic groups, suggesting they experienced a higher average number of crisis claims per person. Several factors may be contributing to these rate differences, including differential access to care, stigma, or cultural norms.

- Among Medicaid enrollees, non-Hispanic whites were overrepresented among enrollees with at least one crisis claim, making up 35 percent of the overall population but 57 percent of the population with at least one crisis claim (Appendix Table B.4)
- Among Medicare enrollees, non-Hispanic whites had higher rates of crisis claims relative to other racial groups despite making up the same proportion of the overall and crisis claim populations, about 76 percent (Appendix Table B.5).
- Asian enrollees generally had the lowest rates, despite slight differences in how each payor defined the race and ethnicity categories (Figure IV.6 and Appendix Table B.6).

¹² Medicaid race and ethnicity categories: non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic Asian, and non-Hispanic other. Medicare: non-Hispanic White, non-Hispanic Black, Hispanic, Asian or Pacific Islander, American Indian or Alaskan Native, Other race, and Unknown race. Commercial data did not include race and ethnicity.

Figure IV.6. Race and ethnicity demographics of Medicaid and Medicare enrollees and enrollees with at least one claim with code 90839 in 2022



Source: Mathematica’s analysis of Medicaid TAF RIF claims data and Medicare FFS claims data.

PI = Pacific Islander; AI = American Indian; AN = Alaskan Native; FFS = fee for service; RIF = Research Identifiable Files; TAF = Transformed Medicaid Statistical Information System Analytic File.

Differences in crisis claim rates among enrollees with indication of a disability and among enrollees dually enrolled in Medicare and Medicaid are likely influenced by differences in payor coverage for the service.

- Among Medicaid enrollees, those with indication of a disability, based on enrollment data, represented 2.8 percent of the overall population and 5.6 percent of the population with at least one crisis claim in 2022 (Appendix Table B.4).¹³
- In the Medicaid claims, 13 percent of enrollees were dually enrolled in Medicare and Medicaid, and about 11 percent of those with a crisis claim were dually enrolled in Medicare and Medicaid in 2022 (Appendix Table B.4).¹⁴
- Among Medicare enrollees, those with indication of a disability, based on enrollment data, were about 12 percent of the overall population and 53 percent of the population with at least one crisis claim in 2022 (Appendix Table B.5).

¹³ In Medicaid data, we identified those with indication of a disability based on enrollment in certain programs or waivers for people with disabilities in the eligibility file. For Medicare, we identified those with indication of a disability using enrollment data, specifically the Medicare Status Code variable from MBSF, and combined “disabled with ESRD” and “disabled without ESRD” code values. Commercial data did not include information on disability. Disability based on enrollment data does not include all Medicaid or Medicare enrollees with a disability.

¹⁴ Enrollees may be dually eligible for Medicaid and Medicare. Dual eligibility status is defined using enrollment information. Enrollees with full or partial dual eligibility are considered as having dual eligibility.

- In the Medicare claims, 15 percent of enrollees were dually enrolled in Medicare and Medicaid and about 59 percent of those with a crisis claim were dually enrolled in Medicare and Medicaid (Appendix Table B.5). Because Medicare is the first payor for those dually enrolled in Medicare and Medicaid, a higher number of Medicare claims than Medicaid claims might be expected.

2. Enrollees with an existing provider relationship

We examined whether enrollees with a crisis claim (code 90839) had an existing relationship with the provider on the claim. We defined previous relationship by identifying the provider listed on the enrollee's first crisis claim and looking for any other previous claim with the same provider as early as January 1, 2018 (which we refer to as the lookback period)¹⁵ and limited this analysis to enrollees with six months of continuous enrollment before the first crisis claim. Understanding the degree to which enrollees seek out a provider they already know during a crisis can give more context to the enrollee experience, as enrollees in crisis might prefer to reach out to a provider with whom they have an existing relationship and can be more receptive to de-escalation or post-crisis follow-up care. We compared demographic information for all enrollees with a crisis claim and enrollees with an existing provider relationship and did not observe large differences.

Across all three payors, 36 to 46 percent of enrollees had an existing provider relationship. In 2022, 43 percent of Medicaid enrollees, 36 percent of Medicare enrollees, and 46 percent of commercial enrollees with a claim with code 90839 had an existing provider relationship. This finding aligns with feedback from outpatient providers interviewed for this study who said they are more likely to provide crisis services for an existing client because they are familiar with the client's history and risk factors.

3. Characteristics of providers using crisis code 90839

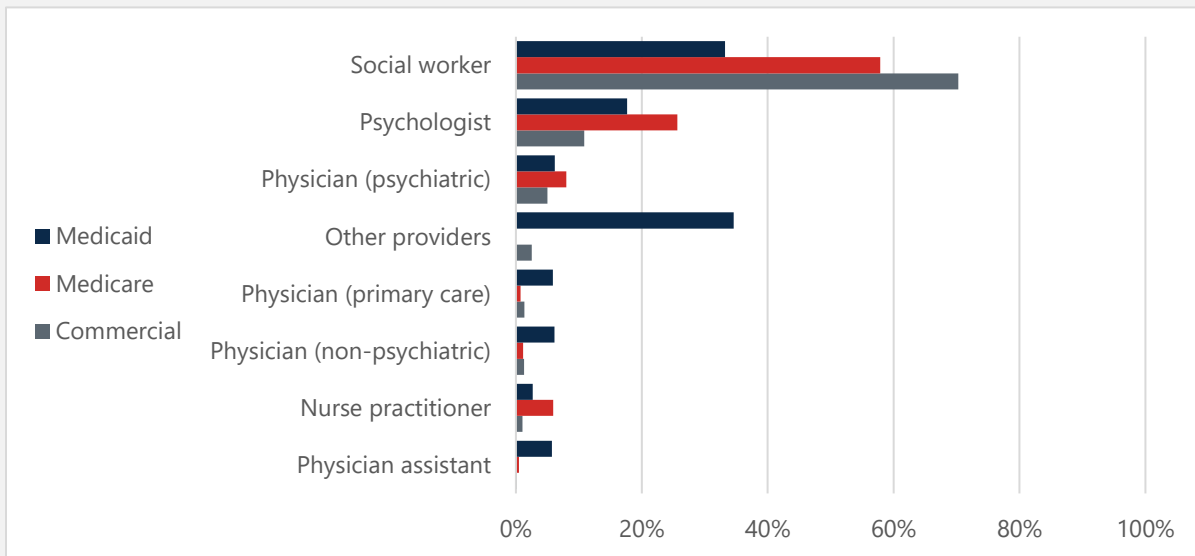
Social workers and psychologists were the provider types on the majority of claims with code 90839. In 2022, the most common provider type, using the National Provider Identifier, on claims with code 90839 was social workers: 33 percent for Medicaid, 58 percent for Medicare, and 70 percent for commercial claims (Figure IV.7). Psychologists and psychiatrists were the provider types with the next highest proportions.¹⁶

For all payors, of the providers associated with claims with code 90839, fewer than 10 percent were primary care physicians, non-psychiatric physicians, nurse practitioners, or physician assistants. During the five-year analytic period, the proportion of commercial claims with social worker listed as the provider type increased from 53 percent in 2018 to 70 percent in 2022, and the proportion with psychologist and physician listed as the provider type decreased over the same time period (from 17 to 11 percent for psychologists and 18 to 8 percent for all physician types combined). We did not see changes in the provider types on Medicare or Medicaid claims.

¹⁵ We considered defining the existing relationship using a lookback period of one year and a lookback period of up to five years (to the beginning of the analytic period, January 1, 2018) and found minimal difference between the approaches.

¹⁶ Servicing provider types: non-psychiatric physician, psychiatric physician, primary care physician, nurse practitioner, psychologist, social worker, physician assistant, other, facility, and missing.

Figure IV.7. Distribution of provider type on claims with crisis code 90839, 2022



Source: Mathematica’s analysis of Medicaid TAF RIF claims data and Medicare FFS claims data, and Merative’s analysis of commercial MarketScan® data.

Note: In Medicaid claims, 73 to 79 percent were categorized as facility claims per year during the analytic period based on inclusion of a facility servicing provider ID on the claim. The provider type was missing on 5 to 7 percent of commercial claims per year during the analytic period (not shown). MarketScan® data does not have a “Social worker” category, and instead uses “Therapists (supportive)” which includes social workers and is compared to the “Social worker” in Medicaid and Medicare claims above.

Percentages do not sum to 100 percent because more than one provider can be counted on a claim if the claim has more than one provider listed on different claim lines.

FFS = fee for service; RIF = Research Identifiable Files; TAF = Transformed Medicaid Statistical Information System Analytic Files.

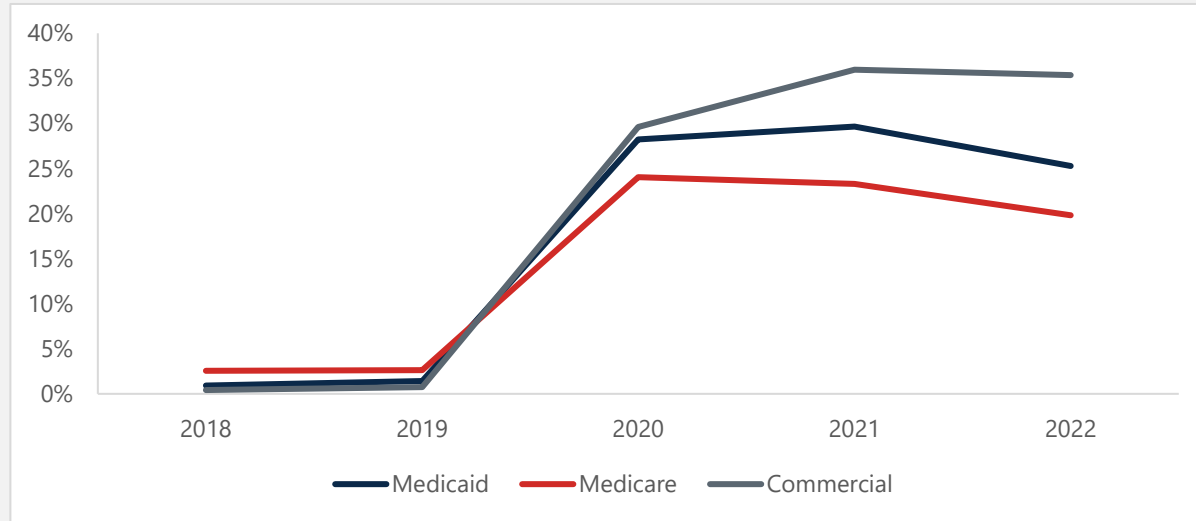
Most claims with code 90839 from 2018 to 2022 took place in office or outpatient settings, and telehealth claims increased during the pandemic years.¹⁷

- In Medicaid claims with code 90839, the percentage in an office decreased from 62 percent in 2018 to 52 percent in 2022 (the lowest percentage was 50 percent in 2021).
- In Medicare claims, the percentage of claims in an outpatient place of service decreased steadily from 73 percent in 2018 to 63 percent in 2022.

¹⁷ Place of service categories are defined differently for Medicare than they are for Medicaid and commercial. Medicare place of service categories include: outpatient, telehealth, emergency services, inpatient care, residence, residential and intensive outpatient or partial hospitalization, school-based services, other, and unknown or missing. Medicaid and commercial place of service categories include: office, clinic, community mental health center, urgent care facility, telehealth, emergency department, inpatient or outpatient hospital, psychiatric facility, home, homeless shelter, residential or non-residential substance abuse or psychiatric treatment facility, mobile unit, other, and unknown or missing.

- In commercial claims, the percentage of claims in an office decreased from 76 percent in 2018 to 50 percent in 2022.¹⁸
- Across payors, the proportion of crisis claims with telehealth as the place of service increased starting in 2020, at the start of the COVID-19 pandemic (Figure IV.8), and the proportion of crisis claims in an emergency department remained steady (around 6 to 10 percent).

Figure IV.8. Percent of claims with code 90839 provided via telehealth, 2018-2022



Source: Mathematica’s analysis of Medicaid TAF RIF claims data and Medicare FFS claims data, and Merative’s analysis of commercial MarketScan® data.

FFS = fee for service; RIF = Research Identifiable Files; TAF = Transformed Medicaid Statistical Information System Analytic Files.

4. Mental health and substance use diagnoses included on claims with code 90839

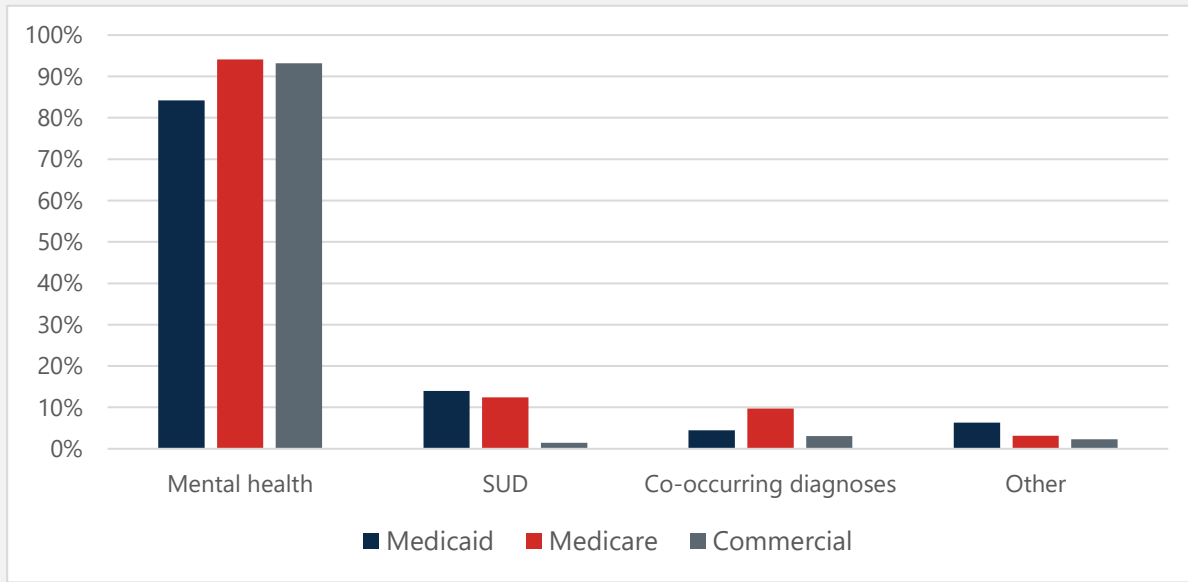
Most claims with code 90839 included a mental health-related diagnosis. Across all diagnosis fields on the claim, about 85 percent of Medicaid claims and over 90 percent of Medicare and commercial claims in 2022 included a mental health diagnosis (Figure IV.9). A smaller percentage had an SUD-related diagnosis (14 percent of Medicaid claims, 12 percent of Medicare, and fewer than 2 percent of commercial claims) or both a mental health and an SUD-related diagnosis (4 percent of Medicaid claims, 10 percent of Medicare claims, and 3 percent of commercial claims).

A small percentage of claims with code 90839 did not include a behavioral health diagnosis from our list of mental health or SUD diagnoses. The diagnosis codes for these claims included were mostly related to stress-related symptoms or events; SUDs in remission; intellectual or developmental disabilities, attention-deficit/hyperactivity disorder (ADHD), autism, and conditions such as COVID-19 infection. A very small percentage of claims included symptom descriptions such as “irritability and anger” or “mixed obsessional thoughts”, including suicidal ideation, and homicidal ideations. In most of these cases, it seems plausible

¹⁸ The outpatient category for Medicare billing encompasses some categories that are independent categories for Medicaid and commercial billing. Outpatient place of service category includes office, urgent care, outpatient hospital, independent clinic, federally qualified health center, community mental health center, public health clinic, rural health clinic, and outpatient home health/critical access hospital outpatient services.

that the diagnosis code could be related to a precipitating event that contributed to the crisis, the person in crisis might be experiencing their first mental health event or might not yet have received a formal diagnosis, or the provider might not have enough information to formally diagnose them with a behavioral health condition during the crisis event.

Figure IV.9. Categories of diagnosis codes used in any diagnosis field on claims with code 90839, 2022



Source: Mathematica analysis of Medicaid TAF RIF claims data and Medicare FFS claims data, and Merative’s analysis of commercial MarketScan® data.

Note: Percentages do not sum to 100 percent a claim can have more than one diagnosis code.

Co-occurring = At least one mental health and at least one SUD diagnosis; FFS = fee for service; RIF = Research Identifiable Files; SUD = substance use disorder; TAF = Transformed Medicaid Statistical Information System Analytic Files.

5. Use of add-on code 90840

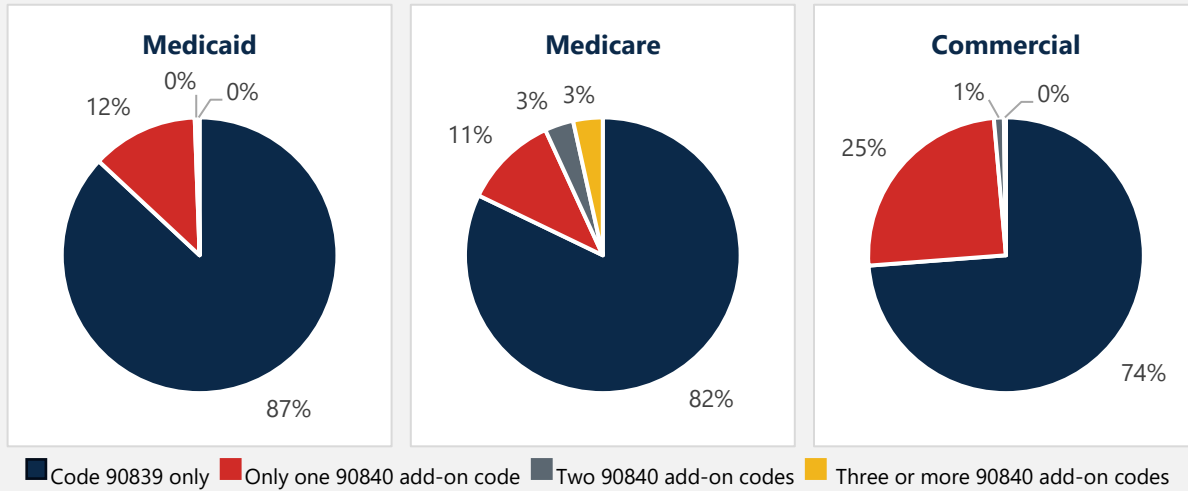
Finally, we considered use of the Psychotherapy for Crisis add-on code 90840, which providers can use for each additional 30-minute increment if they provide crisis services longer than the initial 30 to 74 minutes billed through code 90839. We examined the duration of the crisis psychotherapy services based on the two codes and the characteristics of enrollees for whom longer services were provided.

Use of the add-on code 90840 was rare and decreased over time. Less than 20 percent of Medicaid claims, 22 percent of Medicare claims, and 32 percent of commercial claims with code 90839 used the add-on code 90840 in 2022 (Figure IV.10).¹⁹ When a claim had the code 90840, it was most frequently included only once. Moreover, the proportion of claims with at least one add-on code decreased from 2018 to 2022 for all payors: from 18 to 13 percent for Medicaid, 20 to 18 percent for Medicare, and 31 to 26 percent for commercial claims. Several factors could contribute to the decrease in proportion of claims with at least one add-on code. Outpatient providers interviewed for this study described that providing

¹⁹ CPT code 90840 is an add-on code to 90839; each use of the add-on code indicates an additional 30-minute increment of psychotherapy for crisis.

crisis psychotherapy is time intensive, which would suggest that if providers are using codes 90839 and 90840, multiple occurrences of the add-on code 90840 would be identified on claims. Some interview respondents described uncertainty about being reimbursed for crisis psychotherapy using these codes, which would include reluctance to using the add-on code. It is unclear whether payors require additional documentation to demonstrate a person continues to be in high distress to justify use of the add-on code.

Figure IV.10. Use of add-on code 90840 among all claims with code 90839, by payor, 2022



Source: Mathematica’s analysis of Medicaid TAF RIF claims data and Medicare FFS claims data, and Merative’s analysis of commercial MarketScan® data.

FFS = fee for service; RIF = Research Identifiable Files; TAF = Transformed Medicaid Statistical Information System Analytic Files.

The duration of a unique episode of Psychotherapy for Crisis was typically just over an hour, although some claims indicated a duration of multiple hours. The CPT manual instructs providers to use code 90839 to bill for the first 30 to 74 minutes of psychotherapy for crisis, and to use code 90840 to bill for additional 30-minute increments. During the five-year analytic period, the mean duration of a unique episode of crisis psychotherapy, as billed using the code 90839 with and without the add-on code 90840, for each year ranged from 66 to 69 minutes in Medicaid claims, 73 to 77 minutes in Medicare claims, and 71 to 76 minutes in commercial claims, which reflects that most claims used only the code 90839. The upper quartile for duration ranged from 60 to 104 minutes per year during the analytic period across all payors, indicating that only a very small number of claims per year had such long session durations.

B. Variation in use of codes

Representatives of social work, marriage and family therapy, psychology, and psychiatric provider associations believed that although their members use Psychotherapy for Crisis codes to bill for crisis services, it is unlikely that they use the codes for all the crisis services they provide. Interviews with individual providers suggest that knowledge about the codes and their use varies widely among providers. Interviewees noted that their decisions about whether to bill the Psychotherapy for Crisis codes (or generally what codes to use when they provide a crisis service) are largely influenced by uncertainty

about the likelihood of reimbursement. Regardless of their knowledge level about the codes, providers noted a lack of incentive to use the Psychotherapy for Crisis codes.

Knowledge of codes 90839 and 90840 varied widely among interview respondents. Some provider association representatives (psychology, professional counseling, and marriage and family therapists) had prior knowledge of the codes but were unaware of how often or to what extent their members used them to bill for crisis services. Two interviewees representing social work provider associations were comparatively more confident that their members knew of the codes and used them to bill for crisis services they provided, though they shared different opinions regarding whether social workers used these codes consistently. Knowledge among individual providers also varied:

- Two providers noted having no prior knowledge of the Psychotherapy for Crisis codes before this study.
- Two providers shared that they had prior knowledge of the codes but had never used them due to rarely encountering clients in crisis.
- Other providers were familiar with the codes and had experience using them, but some noted a lack of knowledge of the codes was a barrier among their colleagues.

Representatives of psychiatrist and SUD provider associations had knowledge of the codes but said their members are unlikely to use them and would instead use the evaluation and management (E/M) codes to bill for all services they provide, including any that might fit the definition of a crisis service. E/M codes are CPT codes used to capture services provided by a physician (or other health care professional) in which the provider is either evaluating or managing a patient's health (AMA n.d.). A psychiatrist confirmed these assertions, noting that they only use E/M codes in the multiple practice settings in which they work, despite being generally aware of 90839 and 90840 as options. These interview findings align with the guidance from the American Psychiatric Association (2013) that psychiatrists would continue to use "a high-level E/M code when providing care for a patient in crisis." Shah and Lustig (2015) explained that the E/M codes cover medical services whereas codes 90839 and 90840 do not.

Some provider organization representatives and clinicians who had prior knowledge of the 90839 and 90840 codes indicated there is often confusion about appropriate use of the codes and which providers are allowed to use them. An association representative for SUD treatment providers noted there is uncertainty within the field about whether [non-psychiatrist] physicians can use these codes and the time threshold associated with them. They shared that in their opinion, the understanding among physicians is that only behavioral health providers may use the Psychotherapy for Crisis codes.

Individual providers also expressed some uncertainty regarding guidance for using the codes. One social worker, who had no prior knowledge of the Psychotherapy for Crisis codes, shared that their supervisor was under the impression that outpatient providers were not permitted to bill these codes. Several association representatives speculated that in the absence of clear guidance and education, providers are likely to bill codes with which they are more familiar.

Uncertainty about reimbursement and variation in coverage across payors affect respondents' billing practices. There is significant variation within and across payors in the codes available for reimbursement, which can be difficult for providers to track. Although many state Medicaid programs reimburse the Psychotherapy for Crisis codes, some choose not to and instead reimburse for services billed to other crisis related HCPCS codes such as H2011 (Crisis intervention service, per 15 minutes), H0007 (Alcohol and/or drug services; crisis intervention [outpatient]), and H0030 (Behavioral health hotline service), whereas Medicare does not allow use of these codes (Colorado Behavioral Health Administration and Colorado Department of Health Care Policy & Financing 2023; CMS 2024; Dormond and Afayee 2016).

Providers expressed confusion and frustration related to billing insurance for crisis services. A few providers were unsure whether their state Medicaid programs reimbursed for the Psychotherapy for Crisis codes and stated that the burden associated with seeking this information was a barrier even in situations that might warrant their use. One provider noted similar frustrations with commercial insurance payors. Though this provider had never used the Psychotherapy for Crisis codes, they noted several intricacies and variation across payors in general (for example, not being allowed to bill certain codes with certain diagnoses despite their clinical opinion, and variation among payors as to how much time constitutes a "prolonged" session). Another provider noted similar "eccentricities" in insurance approval and denial; another described "keeping our fingers crossed" when billing insurance. These sentiments align with findings from a ProPublica report based on interviews with psychologists, psychiatrists, and therapists about mental health services more generally, which describes commercial insurance service limitations that do not align with the provider's clinical judgment and administrative burden for reimbursement (Waldman et al. 2024). Although some providers – in particular those working in larger practices with staff dedicated to billing – might be able to adapt their billing practices to fit the specific requirements of different payors, other providers found it preferable, more efficient, and less administratively burdensome to utilize codes that they know are accepted by all payors.

Respondents indicated that since providers are often uncertain about whether and which payors will cover the Psychotherapy for Crisis codes, fear of having claims denied factors into providers' billing decisions. Providers who had used the Psychotherapy for Crisis codes were generally cautious in their approach to using these codes, instead relying on codes with which they have more familiarity and confidence that they will be reimbursed. A provider association representative felt that providers are "conditioned" not to use the codes even in instances when it would be appropriate in order

Alternative codes used by outpatient providers to bill for crisis services

Interview respondents mentioned several codes that they or their colleagues might use to seek reimbursement for crisis services instead of the Psychotherapy for Crisis codes. These included:

- Evaluation and management codes
- HCPCS code H2011 (Crisis Intervention Service, per 15 minutes)
- 90791 or 90792 (Psychiatric Diagnostic Evaluation)
- 90834 or 90837 (Individual Psychotherapy, 45 minutes or 60 minutes)
- 90785 (Interactive Complexity add-on code) ▲



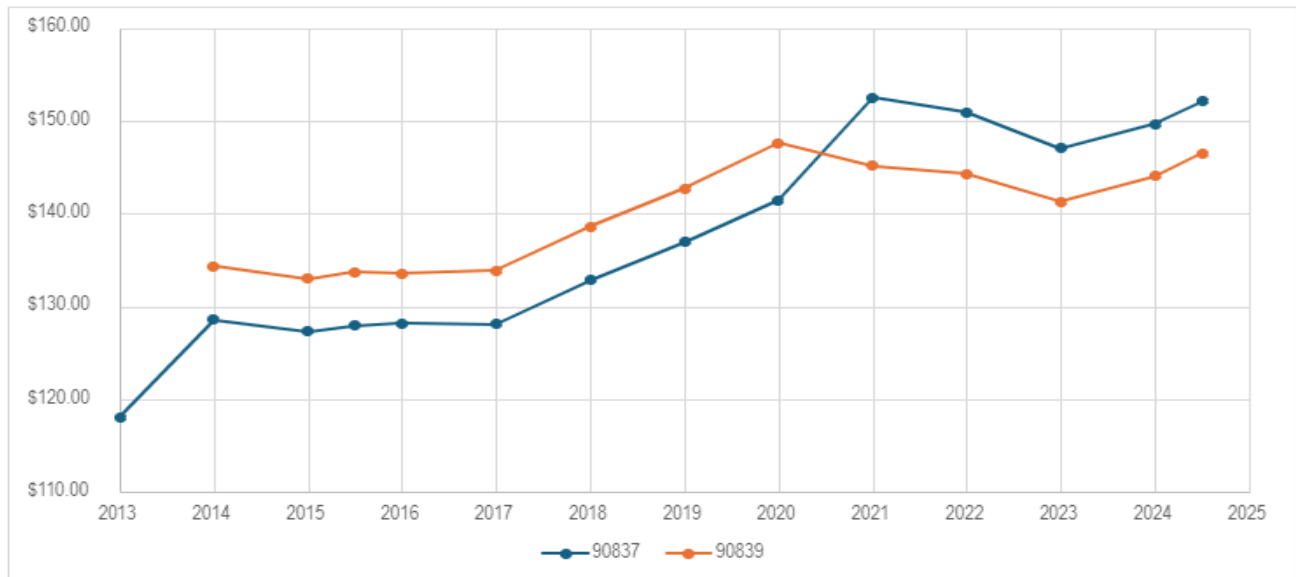
"We are only using [the Psychotherapy for Crisis codes] when we could very clearly say in the notes: 'This is what's happening, we do not want to argue about this.'"

- Social worker

to avoid pushback or denials from payers. Some providers, despite being aware of the codes, stated they were more likely to use the code for individual psychotherapy (90834 for 45 minutes or 90837 for 60 minutes) and modify with an interactive complexity add-on (90785) if they provided crisis services to a client. There was, however, varied understanding among respondents as to what constitutes appropriate use of the interactive complexity add-on. A few respondents mentioned that providers frequently use code 90791 (Psychiatric Diagnostic Evaluation) for a new client presenting in crisis. Other providers reported that they use the HCPCS code H2011.

Respondents noted that there is little incentive to use the codes, regardless of their level of knowledge. Several respondents who were familiar with the Psychotherapy for Crisis codes (both association representatives and providers) noted that the reimbursement rate for the codes might not be adequate or reflective of the work and time required to attend to a client in crisis or the time spent providing the additional documentation that is necessary to bill the codes, further disincentivizing their use. One association representative who was familiar with the codes recollected that when codes 90839 and 90840 were first introduced, they were reimbursed (by Medicare) at a higher rate than the traditional psychotherapy code 90837 (for 60 minutes). However, when the rate for traditional psychotherapy increased in 2020, the rate for the crisis codes remained the same, effectively valuing more acute, potentially more time-intensive services at a lower rate (Figure IV.11). A provider explained that in some situations, the financial incentive for billing for a crisis service can be at odds with the clinically and ethically appropriate approach; that is, it might be financially advantageous not to bill an encounter as a crisis service. The findings from the claims analysis show a decrease in the overall use of code 90839 after 2020; however, numerous factors could contribute to this decrease.

Figure IV.11. Medicare Physician Fee Schedule, national payment amount for CPT codes 90837 (Traditional Psychotherapy) and 90839 (Psychotherapy for Crisis), 2013–2024



Source: Medicare Physician Fee Schedule Look-up Tool (CMS 2024).

Another association representative, who also has experience providing direct services noted that the intent of the structure of the Psychotherapy for Crisis codes (i.e., 90839 for an initial provision of crisis services and 90840 for any necessary additional time) could theoretically be sufficient to support therapists providing crisis services, but the rates behind the codes are not. The same respondent also asserted that in their opinion, fee-for-service billing is an inappropriate payment methodology for funding a capacity system such as crisis services or crisis psychotherapy, which depends highly on the provider's availability and resources at any given time. However, this opinion was not universal; one social work association representative stated that, in their opinion, the consensus within the field is that the use of these codes accurately reflects the provision of crisis services and that members find the reimbursement rate adequately values the additional work required to treat someone in a crisis.

In discussions about billing practices and the use of the Psychotherapy for Crisis codes, some respondents invoked a broader trend among outpatient therapists away from accepting insurance. Respondents suggested that this shift is due in part to the administrative burden of working with multiple payors and low reimbursement rates. Waldman et al. (2024) reported that hundreds of behavioral health providers have left commercial insurance networks because of the service limitations, administrative burden for reimbursement, and frequent code changes imposed by insurers. Headway (2024) estimates that 70 percent of therapists do not participate in insurance because of the administrative burden. The availability of providers affects access to care for people with mental health conditions and in crisis, especially people with low incomes who might not be able to afford paying for services out of pocket.

This page has been left blank for double-sided copying.

V. Opportunities for outpatient providers to complement the crisis services system

Findings from this study suggest outpatient providers have the potential to deepen the capacity of and strengthen the crisis services system and identify several opportunities to better integrate outpatient providers within the crisis services system. This section summarizes key opportunities and conclusions based on analyses of claims data and interviews with outpatient providers.

A. Key opportunities

More than a decade after the introduction of two national Psychotherapy for Crisis codes (90839 and 90840), uptake of the codes varies widely across states. Providers who use the codes benefit from a dedicated reimbursement mechanism for crisis services that was unavailable before the introduction of the codes. However, the lack of coverage of these codes and unclear or onerous billing requirements by some state Medicaid agencies and commercial insurers might limit the appropriate use of the codes. In addition, most claims did not include the add-on code 90840, despite hearing from interview respondents that responding to a crisis requires additional time to support referrals, communication with family members, and follow-up documentation. Our interviews and analyses of claims offer the following areas of focus for the system to support and retain outpatient providers and enhance their role in providing crisis services.

Defining the role of outpatient behavioral health providers in the crisis service system. Although SAMHSA's National Guidelines (2020) describe the importance of outpatient services within the crisis service system to support people with a range of needs, limited information about outpatient providers' roles in crisis services has been published. A sizable portion (about one-third to almost one-half) of people with a crisis claim across payors had an existing provider relationship, based on the enrollee having a previous claim with the same provider listed on the crisis claim in our analysis. Outpatient providers who participated in this study said they were more likely to help an existing client experiencing a crisis than a person they did not know because they understand the client's history from previous interactions. Although we cannot draw any conclusions based on this exploratory study, having an existing provider relationship could be a factor in a person's decision to reach out for help during a crisis. These findings suggest outpatient providers are well positioned to play a part in preventing and addressing behavioral health crises and they, their clients, and other providers in the crisis services system would benefit from more clearly defined roles, expectations, and reimbursement.

Developing the outpatient behavioral health provider workforce to support crisis services.

Outpatient behavioral health providers are essential to the overall behavioral health workforce. SAMHSA's National Guidelines (2020) emphasize the importance of robust training for behavioral health providers who deliver crisis care through regional crisis call centers, crisis mobile teams, and at crisis receiving and stabilization facilities. Behavioral health providers in outpatient settings would benefit from adequate training to help them be similarly equipped to provide care to clients in a crisis. In this study, several behavioral health providers described receiving on-the-job training in crisis services from workplaces that specialize in crisis care; however, outpatient therapists without specific job training in crisis services might be underprepared to respond to a client in crisis. Specifically, respondents mentioned that master's

programs rarely provide training in crisis services. Additional training—such as continuing education programs, community-based crisis intervention education, and Project ECHO training—focused on a range of topics related to crisis services could help increase readiness and willingness among the existing workforce to provide crisis services. Crisis intervention techniques, evidence-based modalities, legal considerations, and support for small practices are areas of training that would bolster providers' preparedness and confidence to respond to a crisis.

Increasing coordination between outpatient providers and the crisis services system. Outpatient behavioral health providers support the crisis services continuum by working with clients to prevent and prepare for a crisis; assessing, de-escalating, and resolving a crisis; referring and facilitating transfers to higher levels of care when needed; and providing ongoing support after a crisis. In many cases, responding to an individual during a crisis involves multiple providers and agencies, including outpatient providers. Communication and coordination between entities is important to ensuring high-quality care and patient safety. Outpatient providers in this study noted a lack of communication from emergency departments and other crisis services when an existing client receives crisis care outside the outpatient setting. Although privacy laws and client preference might prohibit contacting another provider, connecting with a provider with whom the client has an existing therapeutic relationship to the extent possible and in line with client preferences can enhance support for clients before and after a crisis.

Clients discharged from a hospital or crisis stabilization unit would benefit from improved collaboration between crisis services providers and the clinicians providing follow-up care. Providers included in this study noted that outpatient providers often do not have openings available for new clients, which can prevent a person who has recently experienced a crisis from receiving crucial ongoing outpatient support. Improved coordination and collaboration between referring crisis services and outpatient providers in their communities could help direct clients to those willing and able to accept new clients. This could involve sharing evolving information about provider availability and agency protocols, or establishing memorandums of understanding between agencies, as suggested by SAMHSA (2020). However, provider capacity and scheduling constraints often limit the ability of outpatient providers to take on new clients. Additional supports or system reforms, such as policies and reimbursement that support same-day scheduling, could help to build in the scheduling flexibility required to serve as a reliable point of referral for new clients after a crisis.

Greater transparency and uniformity in reimbursement policies. The Psychotherapy for Crisis codes were developed with the intention of better reimbursement for providing highly skilled and time-intensive services. Lack of knowledge of the codes, inconsistency in reimbursement policy, and insufficient compensation might prevent providers from reaping the intended benefits of the Psychotherapy for Crisis codes. Additional efforts to inform providers about the use of these codes may improve their appropriate use. In particular, claims data indicate that providers use the add-on code 90840 infrequently to seek reimbursement for additional time spent caring for clients in crisis. In interviews, providers identified potential revenue loss while taking additional time to respond to a crisis as a barrier to providing crisis services. These data might indicate providers are unaware of the availability of the add-on code to reimburse for the additional time needed to respond to the crisis, or are uncertain the use of numerous add-on codes will be approved or provide sufficient reimbursement for their efforts. Increased

information sharing about appropriate and allowable codes might help reduce this barrier and increase the use of the add-on code in appropriate circumstances.

Although Medicare allows a broad range of provider types to bill using the codes in facility and non-facility settings, the provider types eligible to use the Psychotherapy for Crisis codes among state Medicaid programs and commercial insurers vary significantly (APA Services 2023a; Beck et al. 2018; Dormond and Afayee 2016). Some state Medicaid programs permit reimbursement for crisis psychotherapy provided via telehealth or in non-office and non-facility locations, whereas other Medicaid programs do not (Colorado Behavioral Health Administration and Colorado Department of Health Care Policy & Financing 2023; Orange County Health Care Agency Behavioral Health Service 2015). Commercial payors have considerable latitude to set requirements for reimbursement (APA Services 2023a). These differences in reimbursement policies by payor type and individual insurer contribute to confusion among providers about when and how to use the Psychotherapy for Crisis codes. Meeting the requirements for different insurers might deter some providers from seeking reimbursement or participating in commercial plans. As the crisis service system considers ways to support providers who can increase the availability of outpatient crisis services, streamlining state licensing requirements and commercial insurance requirements (for example, to use consistent criteria for credentialing and documentation) are ways to reduce administrative burden for providers.

B. Conclusions and future directions

This study identified important insights about the role of outpatient behavioral health providers in the provision of crisis services and the use of the Psychotherapy for Crisis codes. Variation across states and payors in the use of Psychotherapy for Crisis codes could reflect variations in payor coverage and billing policies, as well as differences in understanding of the appropriate use of codes by providers. Outpatient providers play a key role in preventing, addressing, and following up after crisis situations, but often face barriers in doing so. Providers' capacity to respond to a client in crisis might depend on several factors, such as when the crisis occurs, the training and financial resources available to the provider, and concerns about the provider's ability to keep their client safe. Findings also revealed opportunities to expand and better support outpatient providers' role within the crisis services continuum. However, questions remain. For example, findings from the claims analysis do not reflect the full range of crisis services provided to beneficiaries in outpatient settings because providers can use billing codes other than the Psychotherapy for Crisis codes for crisis services. In addition, the claims analyses in this study do not quantify unmet need for crisis services. Although the Medicaid, Medicare, and commercial claims we analyzed as part of this study showed that providers use the Psychotherapy for Crisis codes, payment sources for behavioral health crisis services include federal grants, such as SAMHSA block grants, and state and local funds. Self-pay also represents a greater proportion of payments for behavioral health services, compared to services for other conditions (Sinha et al. 2024), suggesting there could be many crisis services delivered in outpatient settings not represented in claims. Future work could explore the extent to which demand for crisis services in outpatient settings is being met, for example, using other common billing codes used for crisis services referenced during interviews with providers and association representatives. The interviews also revealed differences in the extent to which providers feel comfortable addressing crisis situations independently. Future work could explore differences in the characteristics of crisis situations that

outpatient providers address versus those that warrant referral to a higher level of care, the referral process for that care, and outcomes of those referrals.

References

- American Medical Association. "Evaluation and Management (E/M) Coding." n.d. <https://www.ama-assn.org/topics/evaluation-and-management-em-coding>.
- American Medical Association. "Current Procedural Terminology (CPT®) 2023 Professional Edition." American Medical Association, October 28, 2022.
- American Psychiatric Association. Office of Healthcare Systems & Financing. 2013. "Current Procedural Terminology (CPT) Code Changes for 2013 Overview." <https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Practice-Management/Coding-Reimbursement-Medicare-Medicaid/Coding-Reimbursement/cpt-overview.pdf>
- American Psychological Association Services, Inc. "The 2013 Psychotherapy Codes: An Overview for Psychologists." January 2024. <https://www.apaservices.org/practice/reimbursement/billing/psychotherapy-codes>
- American Psychological Association Services, Inc. Legal and Regulatory Affairs and Office of Health Care Finance and the Inter Organizational Practice Committee. "National and Regional Commercial Insurers' COVID-19 Telehealth Policies." June 15, 2023a. <https://www.apaservices.org/practice/clinic/covid-19-insurer-telehealth-policies-national-regional>
- American Psychological Association Services, Inc. "Psychotherapy Codes for Psychologists." November 2023b. <https://www.apaservices.org/practice/reimbursement/health-codes/psychotherapy>
- American Psychological Association Services, Inc. "2022 Guidelines for Reporting Interactive Complexity." January 28 2022. <https://www.apaservices.org/practice/reimbursement/health-codes/2022-reporting-interactive-complexity>
- American Psychological Association Services, Inc. Offices of Government Relations and Legal Affairs. "More FAQs on Payment for Psychotherapy Codes." January 31, 2013. <https://www.apaservices.org/practice/update/2013/01-31/psychotherapy-codes>
- Beck, A.J., C. Page, J. Buche, D. Rittman, and M. Gaiser. "Scopes of Practice and Reimbursement Patterns of Addiction Counselors, Community Health Workers, and Peer Recovery Specialists in the Behavioral Health Workforce." Behavioral Health Workforce Research Center, University of Michigan School of Public Health. 2018. https://www.healthworkforceta.org/wp-content/uploads/2023/07/BHWRC_SOPs.pdf
- Blow, R. "What Is the Therapist's Responsibility in a Crisis?" Development Counts, 2016. <https://www.developmentcounts.com/therapists-responsibility-crisis/>
- Blyler, C., A. Edmonds, A. Wishon, B. Natzke, M. Sanchez, C. Couzens, J. Brown, K. Miller, J. Dubenitz, J. Dey, S. Steverman, and M. Cornette. "Behavioral Health Crisis Services Billed to Commercial Insurance, Medicaid, and Medicare." Submitted to the Office of Behavioral Health, Disability, and Aging Policy in the Office of the Assistant Secretary for Planning and Evaluation. Washington, DC: Mathematica, January 2025.
- Centers for Disease Control and Prevention. "Suicide Data and Statistics: Suicide Rates." n.d. https://www.cdc.gov/suicide/facts/data.html#cdc_data_surveillance_section_4-suicide-rates.
- Centers for Medicare & Medicaid Services. "Physician Fee Schedule: Psychotherapy for Crisis." June 24, 2024. <https://www.cms.gov/medicare/payment/fee-schedules/physician-fee-schedule/psychotherapy-crisis>. Accessed August 26, 2024.

References

- Centers for Medicare & Medicaid Services (CMS), Health and Human Services (HHS). "Medicare and Medicaid Programs; CY 2024 Payment Policies Under the Physician Fee Schedule and Other Changes to Part B Payment and Coverage Policies; Medicare Shared Savings Program Requirements; Medicare Advantage; Medicare and Medicaid Provider and Supplier Enrollment Policies; and Basic Health Program." Federal Register, vol. 88, no. 220, 2023, pp. 79002–79005. Colorado Behavioral Health Administration and Colorado Department of Health Care Policy & Financing. "State Behavioral Health Services Billing Manual." July 2023. https://hcpf.colorado.gov/sites/hcpf/files/July%202023%20USCS%20Manual%20Draft%20-Final_0.pdf
- Dormond, M., and S. Afayee. "Understanding Billing Restrictions for Behavioral Health Providers." University of Michigan School of Public Health Behavioral Health Workforce Research Center, November 2016. https://behavioralhealthworkforce.org/wp-content/uploads/2017/01/FA3P4_Billing-Restrictions_Full-Report.pdf
- Headway. "About Us." 2024. <https://headway.co/about-us>
- Headway. "Billing and Coding: How to Use CPT Codes 90839 and 90840: Psychotherapy for Crisis." n.d. <https://headway.co/resources/cpt-code-90839-90840>
- Health Resources and Services Administration. "HPSAs by Type." n.d. <https://tableau.hrsa.gov/views/HPSADesignWithTabs/HPSAsbyType?%3Aembed=y&%3AisGuestRedirectFromVizportal=y>
- Health Resources and Services Administration. "Telehealth for Behavioral Health Care: Creating an Emergency Plan for Telebehavioral Health." December 7, 2022. <https://telehealth.hhs.gov/providers/best-practice-guides/telehealth-for-behavioral-health/preparing-patients-for-telebehavioral-health/creating-a-telehealth-emergency-plan>
- Hjelmstad, G. "Enhanced Crisis Response Services to Help North Dakotans." *Valley News Live*, June 10, 2021. <https://www.valleynewslive.com/2021/06/10/enhanced-crisis-response-services-help-north-dakotans/>
- Kaiser Family Foundation. "Status of State Medicaid Expansion Decisions: Interactive Map." May 8, 2024. <https://www.kff.org/affordable-care-act/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/>
- Kalb, L., C. Hologue, E. Stapp, K. Van Eyck, and J. Thrul. "Trends and Geographic Availability of Emergency Psychiatric Walk-In and Crisis Services in the United States." *Psychiatric Services*, vol. 73 no. 1, 2022, pp. 26–31. <https://psychiatryonline.org/doi/10.1176/appi.ps.202000612>
- Martínez-Alés, G., T. Jiang, K.M. Keyes, and J.L. Gradus. "The Recent Rise of Suicide Mortality in the United States." *Annual Review of Public Health*, vol. 43, April 2022, pp. 99–116. <https://doi.org/10.1146/annurev-publhealth-051920-123206>.
- Mental Health America. "Ranking the States 2022." 2022. <https://mhanational.org/issues/2022/ranking-states>.
- National Association of Counties, Commission on Mental Health and Wellbeing. "From Crisis to Solutions: Policy Catalysts for Improved Outcomes." July 2024. https://www.naco.org/sites/default/files/2024-07/MHC%20Report_Improved-Coutcomes.pdf.
- National Institute of Mental Health. "Suicide: Suicide is a Leading Cause of Death in the United States." February 2024. https://www.nimh.nih.gov/health/statistics/suicide#part_10459.

References

- Orange County Health Care Agency Behavioral Health Service. "Quality Review Tips: Crisis Intervention and Crisis Psychotherapy." 2015.
<https://www.ohealthinfo.com/sites/hca/files/import/data/files/45266.pdf>
- Pope, L.G., and M.T. Compton. "If This Is an Emergency, Hang up and Dial 911' in the Era of 988." *Psychiatric Services*, vol. 73, no. 10, 2022, pp. 1179–1181. <https://doi.org/10.1176/appi.ps.20220261>
- Scherger, J. "CPT Code 90839: Crisis Therapy Billing Guide [+2024 Reimbursement Rates]." TheraThink, n.d. . <https://therathink.com/cpt-code-90839/>
- Shah, V.N., and S.L. Lustig. "The New, Confusing CPT Codes: Tips for Documenting and Billing to Get Paid What You Deserve." *Psychiatric Services*, vol. 66, no. 4, 2015, pp. 418–420.
<https://doi.org/10.1176/appi.ps.201400321>
- Sinha, V., E. Rourke, M.J. Condon, and W. Brandel. "Recommendations for a Standardized State Methodology to Measure Clinical Behavioral Health Spending." Milbank Memorial Fund, April 2024. https://www.milbank.org/wp-content/uploads/2024/04/BH_SPENDING61824.pdf.
- Substance Abuse and Mental Health Services Administration. "National Guidelines for Behavioral Health Crisis Care: Best Practice Toolkit." 2020. <https://www.samhsa.gov/sites/default/files/national-guidelines-for-behavioral-health-crisis-care-02242020.pdf>
- Substance Abuse and Mental Health Services Administration. "Find Support: Types of Treatment." 2023. <https://www.samhsa.gov/find-support/learn-about-treatment/types-of-treatment>
- Waldman, A., M. Miller, D. Eldeib, and M. Blau. "Why I Left the Network." 2024. <https://projects.propublica.org/why-i-left-the-network/>.
- Weir, K. "What Psychologists Should Know About 988." American Psychological Association Services, Inc., October 7, 2022. <https://www.apaservices.org/practice/business/practitioners/crisis-lifeline-number>.

This page has been left blank for double-sided copying.

Appendix A

Detailed Methods and Notes

This page has been left blank for double-sided copying.

Detailed Methods and Notes

A. Environmental scan

We conducted a targeted environmental scan to identify existing literature on (1) the use of Psychotherapy for Crisis CPT codes, including guidelines on how the relevant CPT codes could or should be used by providers, and (2) the role of the outpatient therapist in delivering services during a crisis. We developed search terms to guide the scan and searched Google, Google Scholar, PubMed, and site-relevant websites, focusing on identifying English-language peer-reviewed and grey literature published since the CPT codes became available (2013). We reviewed bibliographies of resources found in our initial search to find additional resources. After identifying a set of potential resources to draw from, we reviewed abstracts and summary information to select those most relevant for further analysis. Most of the 22 resources selected for analysis addressed the Psychotherapy for Crisis CPT codes, and primarily comprised billing guidance directed to providers, coders, or payers. The scan yielded few resources on the role of outpatient therapists in responding to crises or engaging with the broader crisis services system. We excluded resources focused primarily on specialty crisis-services (e.g., mobile crisis and crisis stabilization) and specific psychotherapeutic interventions. Using a structured abstraction tool, we extracted information relevant to the study's research questions, such as the payers and provider types discussed, descriptions of circumstances warranting and factors guiding the use of 90839 and 90840, potential incentives for or barriers to use of codes, and information on the outpatient therapist role in addressing crisis situations. Using findings from the scan and targeted internet searches, we also identified and conducted key informant interviews with four experts in behavioral health billing and crisis service delivery. Through these interviews we sought to better understand the role of outpatient behavioral health providers in the crisis services system and explore how providers use the Psychotherapy for Crisis codes. We recruited key informants through email outreach, then audio-recorded and took notes for each virtual interview. Participants were offered \$100 in acknowledgment of their contributions to the study.

B. Claims analyses

1. Data sources

We used the 2018-2022 Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) Research Identifiable Files (RIF) to examine Medicaid enrollee characteristics and claims. We assessed Medicaid enrollee demographic information (age, sex, race/ethnicity, geographic area, and Medicaid eligibility group) using the TAF RIF demographics and eligibility (DE) files. We used the 2018-2022 TAF RIF other services (OT) and inpatient (IP) files to identify claims using codes 90839 and 90840 and enrollees with behavioral health conditions.

We also used Medicare enrollee demographic and eligibility information and claims data from the 2018-2022 Master Beneficiary Summary File (MBSF) and Medicare Fee-For-Service (FFS) Claims, accessed via the Virtual Research Data Center (VRDC). We assessed Medicare enrollee demographic information (age, sex, race/ethnicity, and enrollment information for Medicare Parts A and B) using the MBSF. We used the 2018-2022 Medicare FFS Claims outpatient (OP), carrier (PHY), and inpatient (IP) files to identify claims that use billing codes 90839 and 90840 and enrollees with behavioral health conditions.

Finally, we used 2018–2022 commercial claims and enrollment data from the MarketScan® data set, which was analyzed by a separate contractor, Merative. This data set consists of a convenience sample of commercial insurance plans and includes fee-for-service claims and managed care encounters. Demographic and enrollment data are from the 2018–2022 MarketScan® annual enrollment files, and crisis service claims were identified in the Inpatient and Outpatient services files.

We included data for all 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands for all three payors.

2. Study population

This analysis included the following enrollees, by payor:

- **Medicaid:** All Medicaid enrollees who were eligible for full, comprehensive, or limited Medicaid benefits in 2018, 2019, 2020, 2021, or 2022. The study population included individuals with enrollment data in the TAF RIF DE file or claims in the OT or IP files. We excluded DE records representing enrollee IDs that are present on claims but are not included in the eligibility records submitted by the state (those with MISG_ELGLTY_DATA_IND = 1).
- **Medicare:** All Medicare enrollees who were eligible for FFS Medicare Part A or Part B for at least one month in the year and were not enrolled in Medicare Advantage plans (Part C) in 2018, 2019, 2020, 2021, or 2022. The study population included individuals with enrollment data in the MBSF.
- **Commercial:** All commercial enrollees included in the MarketScan® data set.

The population for the analyses of existing enrollee-provider relationships is limited to enrollees who had six months of continuous enrollment in a payor's data prior to their first crisis claim, to allow a reasonable amount of time to observe a potential existing relationship in the claims data.

3. Analytic methodology

For each payor, we examined by year and state the number of claims with code 90839, the number and percent of enrollees with at least one claim with code 90839, and the rate of claims with code 90839 per 10,000 enrollees. We repeated this analysis by demographic characteristics, among all enrollees, among those with at least one claim with code 90839, and among those with at least one claim with code 90839 and who had an existing relationship with the provider from their first claim with code 90839 during the analytic period.

We assessed demographic distributions of the analytic populations. We examined by year the number and percent of enrollees with a claim with code 90839 who had an existing relationship with the provider from their first claim with code 90839 during the analytic period. We examined use of the add-on billing code 90840 in conjunction with billing code 90839 and calculated descriptive statistics on duration of services billed using these codes. Finally, we examined the diagnosis codes associated with claims that included billing code 90839.

4. Enrollee demographic characteristics

We stratified by the following demographic characteristics:

	Medicaid	Medicare	Commercial
Geographic location	Urban, rural, unknown		
Age group	11 or younger; 12-17; 18-25; 26-35; 36-45; 46-55; 56-64; 65 and older	17 or younger, 18-34, 35-64, 65-74, 75-84, 85 or older	12 or younger; 13-18; 19-29; 30-39; 40-49; 50-59; 60-64; 65 and older
Sex	Male; female		
Race/ethnicity	White, non-Hispanic; Black, non-Hispanic; Hispanic; Asian, non-Hispanic; Other, non-Hispanic; Missing	White, non-Hispanic; Black, non-Hispanic; Hispanic; Asian or Pacific Islander; American Indian or Alaskan Native; Other race; Unknown race	N/A
Disability based on enrollment data	Not disabled; disabled		N/A
Dual eligibility status	Not dually enrolled in Medicaid and Medicare; dually enrolled		N/A
Behavioral health conditions	Anxiety disorders; mood disorders; other mental health disorders; personality disorders; schizophrenia and other psychotic disorders; alcohol use disorder; opioid use disorder; other drug use disorders; co-occurring disorder; none		

Note: Race and ethnicity data and disability data were not included in the commercial data set. Dual Medicare and Medicaid eligibility status does not apply to commercial enrollees.
 Disability based on enrollment data does is not inclusive of all Medicaid or Medicare enrollees with a disability.

To assess geographic location for Medicaid and Medicare enrollees, we used the U.S. Department of Education's Education Demographic and Geographic Estimates (EDGE) data to assign a geographic indicator based on the enrollee's zip code. Urban location included enrollees who reside in areas designated as City, Suburban, Town (Fringe) and Rural (Fringe) by the EDGE data. Rural location included enrollees residing in areas designated as Town or Rural (Distant or Remote) by the EDGE data. This data was not available for 2022. For analyses of commercial data, geographic area is derived from the Metropolitan Statistical Area.

To identify enrollees with behavioral health conditions, we adopted the standardized approach used by CMS and available from the Chronic Conditions Data Warehouse (CCW).²⁰ This algorithm aims to classify enrollees in treatment for specific conditions. For most behavioral health conditions, the CCW algorithm requires "at least 1 inpatient claim or 2 other non-drug claims of any service type" during a two-year reference period to identify enrollees considered to have a behavioral health condition during a particular year. For example, an enrollee identified as having ADHD in 2020 had either one inpatient claim with an ADHD diagnosis code or two outpatient claims with an ADHD diagnosis code during 2019 or 2020. The analysis included mental health conditions (anxiety disorders; mood disorders; other mental health disorders; personality disorders; schizophrenia and other psychotic disorders) and substance use disorder conditions (alcohol use disorder; opioid use disorder; other drug use disorders), and those without a behavioral health condition identified in claims data.

²⁰ More information: <https://www2.ccwdata.org/web/guest/condition-categories>.

We stratified enrollees by mental health conditions (anxiety disorders, mood disorders, other mental health disorders, personality disorders, and schizophrenia and other psychotic disorders), substance use disorders (alcohol use disorder, opioid use disorder, and other drug use disorders), and those without a behavioral health condition identified in claims data. We also identified enrollees with a co-occurring disorder, defined as having both a mental health and substance use disorder flag. Categories are not mutually exclusive, with the exception of the “none” category which indicates no behavioral health diagnoses were identified for the enrollee in a particular year of claims data.

5. Existing relationships

We defined existing relationships by (1) identifying for each enrollee their first claim within the analytic period (2018-2022) with code 90839 and identifying the date and provider ID associated with that claim; and (2) examining whether the enrollee had at least one other OT or IP claim with the same provider within one year or five years prior to their first claim with code 90839. We truncated the lookback period to no earlier than January 1, 2018, to align with the data used for the analysis.

6. Duration of service

For claims with code 90839 with and without 90840, we calculated the duration of the Psychotherapy for Crisis service for the claim indicated by use of these codes. For claims with only code 90839, we assigned a duration of 60 minutes. For claims with code 90839 and one or more occurrence of 90840, we assigned a duration of 74 minutes plus 30 minutes for each occurrence of 90840.

7. Place of service

We determined place of service associated with Medicaid claims using the Place of Service Code available on the OT file.²¹ We grouped values into the following categories: telehealth, homeless shelter, office, home, mobile unit, urgent care facility, inpatient or outpatient hospital, emergency room, clinic, psychiatric facility (inpatient or partial hospitalization), community mental health, residential or non-residential substance abuse or psychiatric treatment facility, unknown/missing, and other. The place of service from the header was applied to each line of a claim.

We determined place of service associated with Medicare claims using the Place of Service Code available on the PHY files, Bill Type available on the OP files, and the combination of NCH Claim Type Code and Provider Number available on the IP files. Bill Type is a two-digit concatenation of NCH Claim Type Code and Claim Service Classification Type Code. We identified Place of Service, Bill Type, or NCH Claim Type for each line of a claim, and then assigned a place of service value at the claim level equal to the place of service value of any 90839 claim lines included on the claim. We grouped values of each place of service variable into the following categories: outpatient, emergency services, school-based service, telehealth, residential and intensive outpatient or partial hospitalization, inpatient care, residence, unknown/missing, and other.

²¹ States are known to use different methods and criteria for assigning some data elements, including Place of Service Code. Using this state-added data element to select TAF records may result in identifying a slightly different, non-comparable set of records from each state. However, the Place of Service Code offers granularity about setting that is not available using other methods (especially when attempting to identify homeless shelters and mobile units).

For IP claims, we used the header-level provider number to distinguish between different inpatient facility types (psychiatric facility, residential treatment facility, or inpatient hospital). For OP and PHY claims, the outpatient category includes office, urgent care, outpatient hospital, independent clinic, federally qualified health center (FQHC), community mental health center (CMHC), public health clinic, and rural health clinic places of service from PHY claims, and outpatient home health/critical access hospital (CAH) outpatient services, FQHC, CMHC, and rural health clinic places of service for OP claims. The residential and intensive outpatient or partial hospitalization category includes psychiatric partial hospitalization facilities, residential substance abuse facilities, psychiatric residential treatment facilities, and substance abuse treatment facilities from PHY claims, and non-residential opioid treatment programs from OP claims. The inpatient category includes psychiatric inpatient and non-psychiatric hospital inpatient facilities from PHY claims, and acute inpatient prospective payment system-reimbursed hospital, inpatient CAH, inpatient psychiatric, and inpatient rehabilitation facilities from OP claims. The residence category includes homeless shelters, homes, assisted-living facilities, and group homes from PHY claims.

8. Provider types

We determined provider types associated with Medicaid claims using the provider taxonomy, provider specialty code, and provider type code reported on OT claims for servicing provider. In cases where provider specialty information was not available on claims, we determined provider type using the primary provider taxonomy obtained from NPPES. Providers are classified into the following categories: primary care physicians, non-psychiatric non-primary care physicians, psychiatric physicians, nurse practitioners, psychologists, social workers, physician assistants, other, and facilities. The "other" provider category includes individual provider types such as counselors and marriage and family therapists, and non-individual provider types such as group practices. The "facilities" provider category includes providers such as CMHCs.

We determined provider associated with Medicare claims using the NPI reported on OP claims for rendering provider and on PHY claims for performing provider. For PHY claims, we determined provider type first by using the CMS Provider Specialty Code assigned by the Medicare Administrative Contractor based on the corresponding provider identification number (performing NPI or UPIN), then by linking performing provider NPI to primary provider taxonomy obtained from NPPES, and then by Carrier Line Provider Type Code, and then set to "other" if there was still no provider type value. For OP claims, we determined provider type first by using the CMS Claim or Revenue Center Rendering Physician Specialty Code and then by linking rendering provider NPI to primary provider taxonomy obtained from NPPES and was then set to "facility" if there was still no identified provider type value. Providers are classified into the following categories: primary care physicians, non-psychiatric non-primary care physicians, psychiatric physicians, nurse practitioners, psychologists, social workers, physician assistants, other, and facilities. The "other" provider category includes individual provider types such as counselors and marriage and family therapists, and non-individual provider types such as group practices. The "facilities" provider category includes providers such as community mental health centers.

Data quality concerns. Medicaid results for some states may be an under-count due to data quality concerns in some state-year combinations in variables used in the analysis (in particular, see DQ Atlas for states with procedure code data categorized as unusable or high concern: <https://www.medicaid.gov/dq->

[atlas/welcome](#)).²² In addition, a potential data quality concern for California was identified in the TAF data by data users: approximately 13 million behavioral health-related claims from 2019 to 2023 were not included in the T-MSIS data upon which the version of TAF used in this analysis is based. However, given these claims are spread across California’s large Medicaid population and multiple years of data, we do not expect a significant impact on the analysis and have not excluded the state. Future analyses based on revised TAF data may identify additional crisis services in this state.

C. Key informant interviews

We conducted semi-structured interviews with two groups of key informants: (1) representatives of behavioral health provider associations and (2) individual outpatient behavioral health providers.

1. Recruitment

We identified relevant behavioral health provider associations by reviewing sources from the environmental scan, conducting a targeted web search, and consulting experts in the behavioral health field (i.e., experts who participated in the environmental scan interview and internal Mathematica experts). We conducted email outreach to a total of 12 associations and completed interviews with representatives of six associations. A seventh provider association interview was conducted as part of the environmental scan key informant interviews (described above). Provider associations and individual providers represented marriage and family therapy, professional counseling, psychology, psychiatry, social work, and specialty SUD treatment.

We identified a convenience sample of individual outpatient providers through referrals from behavioral health provider associations, web searches, and through the networks of research team members. In order to gather a broad range of perspectives, we aimed to recruit participants across different provider types, practice settings, states, and with differing levels of experience providing crisis services. We conducted email outreach to a total of 19 individual providers and practices including providers referred by behavioral health association key informants, practices that serve as 988 lifeline regional crisis centers, private practices identified through a web search, and individual providers identified through the environmental scan and connections to Mathematica staff. We completed interviews with nine individual providers (see Table A.1). Participants were provided a \$100 gift certificate in appreciation of their time and contribution.

Table A.1. Key informants – Individual outpatient providers

Provider type	Practice setting	State
Psychologist	Hospital	AZ
Psychiatrist	Hospital	CA
Social worker	Large behavioral health practice	AL

²² One state (Maryland) had data quality categorized as “unusable” for IP procedure codes in 2018-2019 TAF data. Six states and one territory had data quality categorized as “unusable” or “unclassified” for OT institutional procedure codes in at least one year of the analytic period: GA unusable in 2018; IL unclassified in 2018-2020 and unusable in 2021-2022; NY unusable in 2018-2022; PA unusable in 2018; PR unusable in 2018-2022; TX unusable in 2018-2019; and UT unclassified in 2018-2019 and unusable in 2020. UT also had OT professional procedure codes classified as unusable in 2018-2020.

Provider type	Practice setting	State
Licensed Clinical Social Worker	Group practice	MA
Licensed Graduate Social Worker	Group practice	MN
Licensed Professional Counselor	Solo practice	CO
Licensed Professional Clinical Counselor	Group practice	MN
Licensed Marriage and Family Therapist	Group practice	CO
Licensed Clinical Social Worker; Licensed Clinical Addiction Specialist	Group practice (telehealth only)	OH

2. Limitations

Our small sample size and the diversity of respondents limit the findings from the qualitative data. The small number of interviews limits our ability to identify patterns or themes by respondents' characteristics, such as provider type, practice setting, or region. In addition, these findings may have limited generalizability.

Our findings related to the Psychotherapy for Crisis codes were limited by respondents' knowledge of the codes. Some respondents were knowledgeable about the codes and about billing practices, while others were not able to answer specific questions about the use of these codes because they were unfamiliar with the codes or had rarely used them. While the lack of familiarity with the codes is a finding of the study, it resulted in limited qualitative data pertaining to the use of the codes. We were not able to gather detailed information about providers' billing practices, such as whether and how billing practices differ depending on specific payor types.

This page has been left blank for double-sided copying.

Appendix B

Supplemental Tables

This page has been left blank for double-sided copying.

Table B.1. Use of Psychotherapy for Crisis Code in 2022, by State, Among Medicaid Enrollees

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Overall	155,952	101,695	0.09	14.30
Alabama	96	73	0.00	0.60
Alaska	87	66	0.02	3.10
Arizona	301	277	0.01	1.20
Arkansas	255	184	0.02	2.10
California	4,699	3,599	0.02	2.70
Colorado	3,176	2,326	0.13	17.10
Connecticut	904	677	0.05	6.90
Delaware	277	219	0.07	8.30
District of Columbia	400	303	0.10	12.80
Florida	122	101	0.00	0.20
Georgia	522	413	0.01	1.80
Hawaii	601	277	0.06	12.30
Idaho	1,119	788	0.15	22.00
Illinois	1,079	843	0.02	2.70
Indiana	15,811	9,027	0.39	68.90
Iowa	3,322	2,325	0.25	35.70
Kansas	2,371	1,538	0.27	41.80
Kentucky	3,948	2,456	0.14	21.70
Louisiana	4,070	2,374	0.11	19.40
Maine	1,983	889	0.19	41.30
Maryland	1,103	767	0.04	6.00
Massachusetts	1,304	930	0.04	5.30
Michigan	2,896	2,078	0.06	8.90
Minnesota	13,959	9,816	0.66	93.70
Mississippi	21	17	0.00	0.20
Missouri	2,413	1,799	0.12	15.50
Montana	3,218	2,213	0.64	93.20
Nebraska	1,627	1,326	0.31	38.20
Nevada	2,698	1,735	0.17	26.10
New Hampshire	2,931	1,274	0.44	100.30
New Jersey	427	336	0.01	1.80
New Mexico	2,398	1,711	0.16	23.10
New York	6,566	3,489	0.04	7.70
North Carolina	2,264	1,560	0.05	7.40
North Dakota	575	364	0.25	39.80
Ohio	40,952	25,585	0.70	111.80

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Oklahoma	1,798	1,507	0.11	12.70
Oregon	10,470	7,100	0.45	66.40
Pennsylvania	32	25	0.00	0.10
Puerto Rico	73	73	0.00	0.50
Rhode Island	1,560	1,011	0.25	38.20
South Carolina	39	35	0.00	0.20
South Dakota	137	108	0.07	8.40
Tennessee	479	407	0.02	2.40
Texas	942	604	0.01	1.40
Utah	2,089	1,298	0.23	37.60
Vermont	668	455	0.21	31.30
Virgin Islands	31	24	0.06	7.90
Virginia	3,756	2,582	0.12	16.80
Washington	869	736	0.03	3.60
West Virginia	430	381	0.05	6.10
Wisconsin	2,003	1,535	0.09	12.40
Wyoming	81	59	0.06	8.40

Source: Mathematica analysis of Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) Research Identifiable Files (RIF), 2022.

Notes: This table presents, in 2022, overall and by state, 1) the number of claims that have the Psychotherapy for Crisis code 90839 (Psychotherapy for crisis; 60 minutes (time range 30-74 minutes)), 2) the number of enrollees that have at least one claim with this code, 3) the percentage of enrollees that have at least one claim with this code, and 4) the rate of claims with this code per 10,000 enrollees. The denominator for the percentage and rate columns is all enrollees, not just those with the Psychotherapy for Crisis code 90839.

Results for some states may be an under-count due to data quality concerns in some state-year combinations in variables used in the analysis (in particular, see DQ Atlas for states with procedure code data categorized as unusable or high concern: <https://www.medicaid.gov/dq-atlas/welcome>).

DS = Data suppressed due to sample size (number based on cell size <11).

Table B.2. Use of Psychotherapy for Crisis Code in 2022, by State, Among Medicare Enrollees

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Overall	22,008	13,751	0.03	5.52
Alabama	47	42	0.01	0.80
Alaska	129	84	0.07	11.20
Arizona	425	321	0.04	4.93
Arkansas	215	165	0.04	4.63
California	1,642	1,006	0.03	4.17
Colorado	553	389	0.07	9.50
Connecticut	547	337	0.08	13.44
Delaware	33	30	0.02	1.79
District of Columbia	35	23	0.03	4.65
Florida	705	460	0.02	2.60
Georgia	191	112	0.01	1.78
Hawaii	22	14	0.01	1.32
Idaho	137	100	0.04	5.78
Illinois	1,918	955	0.06	11.84
Indiana	908	630	0.07	10.69
Iowa	148	120	0.02	2.96
Kansas	279	196	0.04	6.27
Kentucky	276	169	0.03	4.75
Louisiana	251	151	0.03	4.74
Maine	505	220	0.11	24.80
Maryland	1,285	620	0.06	13.35
Massachusetts	709	440	0.04	6.69
Michigan	912	507	0.04	7.97
Minnesota	1,007	794	0.14	17.40
Mississippi	33	24	0.01	0.72
Missouri	163	103	0.01	2.10
Montana	378	232	0.11	18.70
Nebraska	78	44	0.02	2.70
Nevada	146	118	0.03	4.12
New Hampshire	748	401	0.16	29.64
New Jersey	534	383	0.03	4.50
New Mexico	130	92	0.03	4.71
New York	2,183	1,364	0.06	9.68
North Carolina	301	203	0.02	2.39
North Dakota	65	43	0.04	5.75
Ohio	1,120	720	0.05	8.10

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Oklahoma	62	41	0.01	1.09
Oregon	418	282	0.05	8.12
Pennsylvania	473	261	0.02	2.82
Puerto Rico	DS	DS	DS	DS
Rhode Island	77	62	0.05	6.12
South Carolina	79	67	0.01	1.01
South Dakota	DS	DS	DS	DS
Tennessee	75	67	0.01	0.87
Texas	448	298	0.01	1.67
Utah	221	91	0.03	8.16
Vermont	385	238	0.19	30.61
Virgin Islands	DS	DS	DS	DS
Virginia	393	299	0.03	3.29
Washington	215	151	0.02	2.27
West Virginia	52	45	0.02	1.91
Wisconsin	264	168	0.02	3.77
Wyoming	73	57	0.05	6.21

Source: Mathematica analysis of Medicare Fee-For-Service Claims files, 2022.

Notes: This table presents, in 2022, overall and by state, 1) the number of claims that have the Psychotherapy for Crisis code 90839 (Psychotherapy for crisis; 60 minutes (time range 30-74 minutes)), 2) the number of enrollees that have at least one claim with this code, 3) the percentage of enrollees that have at least one claim with this code, and 4) the rate of claims with this code per 10,000 enrollees. The denominator for the percentage and rate columns is all enrollees, not just those with the Psychotherapy for Crisis code 90839.

DS = Data suppressed due to sample size (number based on cell size <11).

Table B.3. Use of Psychotherapy for Crisis Code in 2022, by State, Among Commercial Enrollees

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Overall	24,575	13,697	0.06	11.20
Alabama	DS	DS	DS	DS
Alaska	571	399	0.09	12.80
Arizona	47	34	0.04	6.04
Arkansas	1,907	751	0.04	11.20
California	439	297	0.10	15.35
Colorado	278	164	0.10	17.14
Connecticut	DS	DS	DS	DS
Delaware	1,939	594	0.04	12.26
Florida	830	295	0.04	10.73
Georgia	DS	DS	DS	DS
Hawaii	DS	DS	DS	DS
Idaho	871	525	0.09	14.43
Illinois	622	473	0.12	15.65
Indiana	108	75	0.05	7.10
Iowa	293	191	0.09	13.54
Kansas	118	97	0.04	4.58
Kentucky	139	78	0.04	7.16
Louisiana	125	60	0.10	20.71
Maine	256	180	0.06	8.26
Maryland	575	342	0.09	14.61
Massachusetts	152	80	0.13	23.72
Michigan	767	600	0.21	26.37
Minnesota	42	DS	DS	3.35
Mississippi	351	268	0.06	7.49
Missouri	30	DS	DS	11.40
Montana	41	37	0.05	5.56
Nebraska	71	41	0.03	4.68
Nevada	212	103	0.16	33.19
New Hampshire	670	370	0.06	10.64
New Jersey	40	31	0.08	9.88
New Mexico	1,732	1,096	0.11	16.62
New York	555	282	0.04	7.22
North Carolina	DS	DS	DS	DS
North Dakota	1,653	1,176	0.14	20.07
Ohio	94	49	0.04	6.74
Oklahoma	476	321	0.10	14.25

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Oregon	467	271	0.04	6.53
Pennsylvania	DS	DS	DS	DS
Puerto Rico	176	75	0.16	37.40
Rhode Island	136	41	0.02	7.76
South Carolina	DS	DS	DS	DS
South Dakota	300	113	0.03	7.79
Tennessee	2,273	1,069	0.06	12.21
Texas	131	89	0.05	7.16
Utah	DS	DS	DS	DS
Vermont	DS	DS	DS	DS
Virgin Islands	603	389	0.05	7.89
Virginia	581	282	0.06	13.05
Washington	44	33	0.09	12.22
Washington DC	33	DS	DS	5.26
West Virginia	228	158	0.08	11.70
Wisconsin	DS	DS	DS	DS
Wyoming	3,317	1,916	0.05	8.38
Unknown/Unreportable	3,544	1,968	0.05	8.95

Source: Merative™ MarketScan® Commercial Data, 2022.

Notes: This table presents, in 2022, overall and by state, 1) the number of claims that have the Psychotherapy for Crisis code 90839 (Psychotherapy for crisis; 60 minutes (time range 30-74 minutes)), 2) the number of enrollees that have at least one claim with this code, 3) the percentage of enrollees that have at least one claim with this code, and 4) the rate of claims with this code per 10,000 enrollees. The denominator for the percentage and rate columns is all enrollees, not just those with the Psychotherapy for Crisis code 90839.

DS = Data suppressed due to sample size (number based on cell size <= 30).

Table B.4. Demographic Characteristics, 2022, Among Medicaid Enrollees

	All enrollees		Enrollees with at least one claim with psychotherapy for crisis code	
	Number of enrollees	Percentage of enrollees	Number of enrollees	Percentage of enrollees
Overall	108,788,135	100.00	101,695	100.00
Age group				
11 or younger	27,589,836	25.36	6,986	6.87
12-17	13,793,186	12.68	24,823	24.41
18-25	13,746,314	12.64	15,986	15.72
26-35	15,204,312	13.98	20,377	20.04
36-45	11,633,186	10.69	15,571	15.31
46-55	8,508,842	7.82	9,465	9.31
56-64	8,000,878	7.35	6,059	5.96
65 or older	10,311,581	9.48	2,428	2.39
Sex				
Male	49,167,949	45.20	42,061	41.36
Female	59,532,004	54.72	59,634	58.64
Race/ethnicity				
White, non-Hispanic	38,469,980	35.36	58,410	57.44
Black, non-Hispanic	19,389,336	17.82	16,437	16.16
Hispanic	26,599,862	24.45	11,360	11.17
Asian, non-Hispanic	4,394,200	4.04	1,075	1.06
Other, non-Hispanic	19,934,757	18.32	14,413	14.17
Geographic area^a				
Urban	81,868,417	79.12	74,978	74.80
Rural	19,509,707	18.86	23,838	23.78
Unknown	2,089,172	2.02	1,428	1.42
Disability based on enrollment data^b				
Not disabled	105,792,369	97.24	95,999	94.40
Disabled	2,995,766	2.75	5,696	5.60
Dual enrollee status				
Not dually enrolled in Medicaid and Medicare	94,532,993	86.89	91,022	89.50
Dually enrolled	14,255,142	13.10	10,673	10.50
Behavioral health condition				
Mental health	16,357,502	15.04	93,999	92.43
Anxiety disorders	9,507,273	8.74	70,362	69.19
Mood disorders	9,071,771	8.34	72,641	71.43
Other mental health disorders	4,687,856	4.31	38,703	38.06
Personality disorders	748,882	0.69	13,983	13.75
Schizophrenia and other psychotic disorders	1,464,252	1.35	17,838	17.54

	All enrollees		Enrollees with at least one claim with psychotherapy for crisis code	
	Number of enrollees	Percentage of enrollees	Number of enrollees	Percentage of enrollees
Substance use disorder	4,537,022	4.17	33,308	32.75
Alcohol use disorder	1,763,796	1.62	15,830	15.57
Opioid use disorder	1,389,512	1.28	6,984	6.87
Other drug use disorders	2,764,100	2.54	27,087	26.64
Co-occurring disorder	2,621,579	2.41	31,432	30.91
None	90,515,190	83.20	5,820	5.72

Source: Mathematica analysis of Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) Research Identifiable Files (RIF), 2021 and 2022.

Notes: This table presents, for 2022, the number and percentage of enrollees with each demographic characteristic for 1) all enrollees and 2) enrollees with at least one claim with the psychotherapy for crisis code 90839.

Geographic location uses the U.S. Department of Education's Education Demographic and Geographic Estimates (EDGE) data to assign a geographic indicator based on the enrollee's zip code. Urban includes enrollees who reside in areas designated as City, Suburban, Town (Fringe) and Rural (Fringe) by the EDGE data. Rural includes enrollees residing in areas designated as Town or Rural (Distant or Remote) by the EDGE data.

Within the "Behavioral health condition" category, the "Co-occurring disorder" subcategory includes enrollees who have both a mental health and substance use disorder as identified in claims data and the "None" subcategory includes enrollees who did not have a mental health or substance use disorder as identified in claims data.

^a Data reported for urban/rural are for 2021; data are not available for 2022.

^b Disability based on enrollment data is not inclusive of all Medicaid enrollees with a disability.

Table B.5. Demographic Characteristics, 2022, Among Medicare Enrollees

	All enrollees		Enrollees with at least one claim with psychotherapy for crisis code	
	Number of enrollees	Percentage of enrollees	Number of enrollees	Percentage of enrollees
Overall	39,869,910	100.00	13,751	100.00
Age group				
17 or younger	1,493	0.00	DS	DS
18-34	476,533	1.20	1,579	11.48
35-64	4,214,459	10.57	5,734	41.70
65-74	20,639,290	51.77	3,673	26.71
75-84	10,202,367	25.59	1,970	14.33
85 or older	4,335,768	10.87	DS	DS
Sex				
Male	18,827,138	47.22	5,637	40.99
Female	21,042,761	52.78	8,114	59.01
Race/ethnicity				
White, non-Hispanic	30,467,541	76.42	10,559	76.79
Black, non-Hispanic	3,540,805	8.88	1,502	10.92
Hispanic	2,940,087	7.37	742	5.40
Asian or Pacific Islander	1,385,422	3.47	226	1.64
American Indian or Alaska Native	191,120	0.48	153	1.11
Other race	337,116	0.85	74	0.54
Unknown race	1,007,819	2.53	495	3.60
Geographic area^a				
Urban	30,987,522	75.77	13,316	81.42
Rural	9,907,504	24.22	3,038	18.58
Unknown	3,193	0.01	0	0.00
Disability based on enrollment data^b				
Not disabled	35,278,019	88.48	6,452	46.92
Disabled	4,591,891	11.52	7,299	53.08
Dual enrollee status				
Not dually enrolled in Medicaid and Medicare	33,721,108	84.58	5,654	41.12
Dually enrolled	6,148,802	15.42	8,097	58.88
Behavioral health condition				
Mental health	2,028,728	5.09	7,387	53.72
Anxiety disorders	1,192,174	2.99	5,016	36.48
Mood disorders	1,384,131	3.47	5,713	41.55
Other mental health disorders	315,861	0.79	4,062	29.54
Personality disorders	43,791	0.11	1,228	8.93
Schizophrenia and other psychotic disorders	267,695	0.67	3,690	26.83

	All enrollees		Enrollees with at least one claim with psychotherapy for crisis code	
	Number of enrollees	Percentage of enrollees	Number of enrollees	Percentage of enrollees
Substance use disorder	811,260	2.03	3,241	23.57
Alcohol use disorder	264,828	0.66	1,594	11.59
Opioid use disorder	522,305	1.31	1,602	11.65
Other drug use disorders	238,996	0.60	1,935	14.07
Co-occurring disorder	309,384	0.78	2,793	20.31
None	37,339,306	93.65	5,916	43.02

Source: Mathematica analysis of Medicare Fee-For-Service Claims files, 2021 and 2022.

Notes: This table presents, for 2022, the number and percentage of enrollees with each demographic characteristic for 1) all enrollees and 2) enrollees with at least one claim with the psychotherapy for crisis code 90839.

Geographic location uses the U.S. Department of Education's Education Demographic and Geographic Estimates (EDGE) data to assign a geographic indicator based on the enrollee's zip code. Urban includes enrollees who reside in areas designated as City, Suburban, Town (Fringe) and Rural (Fringe) by the EDGE data. Rural includes enrollees residing in areas designated as Town or Rural (Distant or Remote) by the EDGE data.

Within the "Behavioral health condition" category, the "Co-occurring disorder" subcategory includes enrollees who have both a mental health and substance use disorder as identified in claims data and the "None" subcategory includes enrollees who did not have a mental health or substance use disorder as identified in claims data.

^a Data reported for urban/rural are for 2021; data are not available for 2022.

^b Disability based on enrollment data is not inclusive of all Medicare enrollees with a disability.

DS = Data suppressed due to sample size (number based on cell size <11).

Table B.6. Demographic Characteristics, 2022, Among Commercial Enrollees

	All enrollees		Enrollees with at least one claim with psychotherapy for crisis code	
	Number of enrollees	Percentage of enrollees	Number of enrollees	Percentage of enrollees
Overall	21,936,321	100.00	13,697	100.00
Age group				
12 or younger	3,478,493	15.86	1,253	9.15
13-18	1,863,425	8.49	3,494	25.51
19-29	4,086,298	18.63	3,409	24.89
30-39	3,746,354	17.08	2,305	16.83
40-49	3,490,321	15.91	1,682	12.28
50-59	3,607,559	16.45	1,220	8.91
60-64	1,663,871	7.59	334	2.44
65 or older				
Sex				
Male	10,686,443	48.72	4,637	33.85
Female	11,249,878	51.28	9,060	66.15
Geographic area				
Urban	19,637,661	89.52	12,474	91.07
Rural	2,223,885	10.14	1,177	8.59
Unknown	74,775	0.34	46	0.34
Behavioral health condition				
Mental health	2,733,699	12.46	7,846	57.28
Anxiety disorders	1,710,669	7.80	5,771	42.13
Mood disorders	1,355,954	6.18	5,626	41.07
Other mental health disorders	1,163,001	5.30	4,669	34.09
Personality disorders	103,110	0.47	760	5.55
Schizophrenia and other psychotic disorders	38,203	0.17	479	3.50
Substance use disorder	218,897	1.00	935	6.83
Alcohol use disorder	104,930	0.48	449	3.28
Opioid use disorder	78,930	0.36	273	1.99
Other drug use disorders	119,321	0.54	641	4.68
Co-occurring disorder	140,648	0.64	883	6.45
Missing	5,748,027	26.20	2,622	19.14
None	13,376,508	60.98	3,177	23.19

Source: Merative™ MarketScan® Commercial Data, 2022.

Notes: This table presents, for 2022, the number and percentage of enrollees with each demographic characteristic for 1) all enrollees and 2) enrollees with at least one claim with the psychotherapy for crisis code 90839.

Geographic area is derived from the Metropolitan Statistical Area.

Within the "Behavioral health condition" category, the "Co-occurring disorder" subcategory includes enrollees who have both a mental health and substance use disorder as identified in claims data and the "None" subcategory includes enrollees who did not have a mental health or substance use disorder as identified in claims data.

Table B.7. Psychotherapy for Crisis Service Utilization in 2022, by Enrollee Demographic Characteristics, Among All Medicaid Enrollees

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Overall	155,952	101,695	0.09	14.30
Age group				
11 or younger	9,709	6,986	0.01	0.90
12-17	35,350	24,823	0.02	3.20
18-25	24,236	15,986	0.01	2.20
26-35	32,881	20,377	0.02	3.00
36-45	25,889	15,571	0.01	2.40
46-55	15,303	9,465	0.01	1.40
56-64	9,261	6,059	0.01	0.90
65 or older	3,323	2,428	0.00	0.30
Sex				
Male	63,799	42,061	0.04	5.90
Female	92,153	59,634	0.05	8.50
Race/ethnicity				
White, non-Hispanic	91,415	58,410	0.05	8.40
Black, non-Hispanic	24,572	16,437	0.02	2.30
Hispanic	16,429	11,360	0.01	1.50
Asian, non-Hispanic	1,596	1,075	0.00	0.10
Other, non-Hispanic	21,940	14,413	0.01	2.00
Geographic area^a				
Urban	117,285	74,978	0.07	11.30
Rural	36,590	23,838	0.02	3.50
Unknown	2,170	1,428	0.00	0.20
Disability based on enrollment data^b				
Not disabled	146,167	95,999	0.09	13.40
Disabled	9,785	5,696	0.01	0.90
Dual enrollee status				
Not dually enrolled in Medicaid and Medicare	139,093	91,022	0.08	12.80
Dually enrolled	16,859	10,673	0.01	1.50
Behavioral health condition				
Mental health	146,112	93,999	0.09	13.40
Anxiety disorders	112,887	70,362	0.06	10.40
Mood disorders	115,454	72,641	0.07	10.60
Other mental health disorders	62,623	38,703	0.04	5.80
Personality disorders	25,805	13,983	0.01	2.40

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Schizophrenia and other psychotic disorders	31,087	17,838	0.02	2.90
Substance use disorder	56,501	33,308	0.03	5.20
Alcohol use disorder	28,708	15,830	0.01	2.60
Opioid use disorder	12,177	6,984	0.01	1.10
Other drug use disorders	46,247	27,087	0.02	4.30
Co-occurring disorder	53,353	31,432	0.03	4.90
None	6,692	5,820	0.01	0.60

Source: Mathematica analysis of Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) Research Identifiable Files (RIF), 2022.

Notes: This table presents, by enrollee characteristic, in 2022, 1) the number of claims that have the Psychotherapy for Crisis code 90839 (Psychotherapy for crisis; 60 minutes (time range 30-74 minutes)), 2) the number of enrollees that have at least one claim with this code, 3) the percentage of enrollees that have at least one claim with this code, and 4) the rate of claims with this code per 10,000 enrollees. The denominator for the percentage and rate columns is all enrollees, not just those with the Psychotherapy for Crisis code 90839.

Geographic location uses the U.S. Department of Education's Education Demographic and Geographic Estimates (EDGE) data to assign a geographic indicator based on the enrollee's zip code. Urban includes enrollees who reside in areas designated as City, Suburban, Town (Fringe) and Rural (Fringe) by the EDGE data. Rural includes enrollees residing in areas designated as Town or Rural (Distant or Remote) by the EDGE data.

Within the "Behavioral health condition" category, the "Co-occurring disorder" subcategory includes enrollees who have both a mental health and substance use disorder as identified in claims data and the "None" subcategory includes enrollees who did not have a mental health or substance use disorder as identified in claims data.

^a Data reported for urban/rural are for 2021; data are not available for 2022.

^b Disability based on enrollment data is not inclusive of all Medicaid enrollees with a disability.

Table B.8. Psychotherapy for Crisis Service Utilization in 2022, by Enrollee Demographic Characteristics, Among All Medicare Enrollees

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Overall	22,008	13,751	0.03	5.52
Age group				
17 or younger	DS	DS	DS	DS
18-34	2,557	1,579	0.00	0.64
35-64	9,453	5,734	0.01	2.37
65-74	5,903	3,673	0.01	1.48
75-84	2,973	1,970	0.00	0.75
85 or older	DS	DS	DS	DS
Sex				
Male	8,768	5,637	0.01	2.20
Female	13,240	8,114	0.02	3.32
Race/ethnicity				
White, non-Hispanic	17,037	10,559	0.03	4.27
Black, non-Hispanic	2,389	1,502	0.00	0.60
Hispanic	1,106	742	0.00	0.28
Asian or Pacific Islander	336	226	0.00	0.08
American Indian or Alaska Native	244	153	0.00	0.06
Other race	90	74	0.00	0.02
Unknown race	806	495	0.00	0.20
Geographic area^a				
Urban	21,030	13,316	0.03	5.14
Rural	4,497	3,038	0.01	1.10
Unknown	0	0	0.00	0.00
Disability based on enrollment data^b				
Not disabled	10,012	6,452	0.02	2.51
Disabled	11,996	7,299	0.02	3.01
Dual enrollee status				
Not dually enrolled in Medicaid and Medicare	9,232	5,654	0.01	2.32
Dually enrolled	12,776	8,097	0.02	3.20
Behavioral health condition				
Mental health	11,476	7,387	0.02	2.88
Anxiety disorders	7,960	5,016	0.01	2.00
Mood disorders	8,877	5,713	0.01	2.23
Other mental health disorders	6,640	4,062	0.01	1.67

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Personality disorders	2,334	1,228	0.00	0.59
Schizophrenia and other psychotic disorders	5,877	3,690	0.01	1.47
Substance use disorder	5,312	3,241	0.01	1.33
Alcohol use disorder	2,543	1,594	0.00	0.64
Opioid use disorder	2,782	1,602	0.00	0.70
Other drug use disorders	3,237	1,935	0.00	0.81
Co-occurring disorder	4,592	2,793	0.01	1.15
None	9,812	5,916	0.01	2.46

Source: Mathematica analysis of Medicare Fee-For-Service Claims files, 2022.

Notes: This table presents, by enrollee characteristic, in 2022, 1) the number of claims that have the Psychotherapy for Crisis code 90839 (Psychotherapy for crisis; 60 minutes (time range 30-74 minutes)), 2) the number of enrollees that have at least one claim with this code, 3) the percentage of enrollees that have at least one claim with this code, and 4) the rate of claims with this code per 10,000 enrollees. The denominator for the percentage and rate columns is all enrollees, not just those with the Psychotherapy for Crisis code 90839.

Geographic location uses the U.S. Department of Education's Education Demographic and Geographic Estimates (EDGE) data to assign a geographic indicator based on the enrollee's zip code. Urban includes enrollees who reside in areas designated as City, Suburban, Town (Fringe) and Rural (Fringe) by the EDGE data. Rural includes enrollees residing in areas designated as Town or Rural (Distant or Remote) by the EDGE data.

Within the "Behavioral health condition" category, the "Co-occurring disorder" subcategory includes enrollees who have both a mental health and substance use disorder as identified in claims data and the "None" subcategory includes enrollees who did not have a mental health or substance use disorder as identified in claims data.

^a Data reported for urban/rural are for 2021; data are not available for 2022.

^b Disability based on enrollment data is not inclusive of all Medicare enrollees with a disability.

DS = Data suppressed due to sample size (number based on cell size <11).

Table B.9. Psychotherapy for Crisis Service Utilization in 2022, by Enrollee Demographic Characteristics, Among All Commercial Enrollees

	Number of claims with code 90839	Number of enrollees with at least one claim with code 90839	Percentage of enrollees with at least one claim with code 90839	Rate of claims with code 90839 per 10,000 enrollees
Overall	24,575	13,697	0.06%	11.20
Age group				
12 or younger	1,881	1,253	0.04%	5.41
13-18	5,019	3,494	0.19%	26.93
19-29	5,644	3,409	0.08%	13.81
30-39	4,770	2,305	0.06%	12.73
40-49	3,737	1,682	0.05%	10.71
50-59	2,703	1,220	0.03%	7.49
60-64	821	334	0.02%	4.93
65 or older				
Sex				
Male	7,973	4,637	0.04%	7.46
Female	16,602	9,060	0.08%	14.76
Geographic area				
Urban	22,696	12,474	0.06%	11.56
Rural	1,816	1,177	0.05%	8.17
Unknown	63	46	0.06%	8.43
Behavioral health condition				
Mental health	15,107	7,846	0.29%	55.26
Anxiety disorders	10,849	5,771	0.34%	63.42
Mood disorders	11,062	5,626	0.41%	81.58
Other mental health disorders	9,153	4,669	0.40%	78.70
Personality disorders	1,319	760	0.74%	127.92
Schizophrenia and other psychotic disorders	913	479	1.25%	238.99
Substance use disorder	1,587	935	0.43%	72.50
Alcohol use disorder	699	449	0.43%	66.62
Opioid use disorder	468	273	0.35%	59.29
Other drug use disorders	1,127	641	0.54%	94.45
Co-occurring disorder	1,515	883	0.63%	107.72
Missing	4,368	2,622	0.05%	7.60
None	5,028	3,177	0.02%	3.76

Source: Merative™ MarketScan® Commercial Data, 2022.

Notes: This table presents, by enrollee characteristic, in 2022, 1) the number of claims that have the Psychotherapy for Crisis code 90839 (Psychotherapy for crisis; 60 minutes (time range 30-74 minutes)), 2) the number of enrollees that have at least one claim with this code, 3) the percentage of enrollees that have at least one claim with this code, and 4) the rate of claims

with this code per 10,000 enrollees. The denominator for the percentage and rate columns is all enrollees, not just those with the Psychotherapy for Crisis code 90839.

Geographic location uses Metropolitan Statistical Area to compute Rurality.

Within the "Behavioral health condition" category, the "Co-occurring disorder" subcategory includes enrollees who have both a mental health and substance use disorder as identified in claims data and the "None" subcategory includes enrollees who did not have a mental health or substance use disorder as identified in claims data.

This includes claims from inpatient and outpatient services tables where PAY > 0.

Table B.10. Provider Characteristics Among Those Who Billed Using Psychotherapy for Crisis Code, 2022, Medicaid^a

	Number of claims with code 90839	Number of providers with at least one claim with code 90839	Percentage of providers with at least one claim with code 90839
Overall	155,952	18,671	100.00
Place of service^{b,c}			
Telehealth	19,922	4,719	25.27
Homeless shelter	32	20	0.11
Office	44,909	9,723	52.08
Home	4,066	874	4.68
Mobile unit	169	35	0.19
Urgent care facility	115	11	0.06
Inpatient or outpatient hospital	5,340	633	3.39
Emergency room	25,197	1,160	6.21
Clinic	3,357	595	3.19
Psychiatric facility (inpatient or partial hospitalization)	242	33	0.18
Community mental health center	13,531	813	4.35
Residential or non-residential substance abuse or psychiatric treatment facility	4,862	260	1.39
Unknown/missing	22,265	2,491	13.34
Other	11,945	3,241	17.36

Source: Mathematica analysis of Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) Research Identifiable Files (RIF), 2022.

Notes: This table presents provider characteristics by setting associated with claims with the Psychotherapy for Crisis code 90839. Specifically, the table reports 1) the number of claims with code 90839 with each setting, 2) the number of providers with at least one claim with code 90839 with each setting, and 3) the percentage of providers with at least one claim with code 90839 with each setting.

The denominator for the percentage column is the overall number of providers with at least one claim with code 90839. Note that providers may be included in multiple rows; they are included in a row if they have at least one claim line that includes a particular setting. Note that providers that only had a claim with 90840 but not 90839 were not included in the table.

^a This table is limited to providers and claims included in the OT file because claims with code 90839 were not found in the IP file and the place of service variable is not included in the IP file.

^b The table includes individual, group, and facility servicing provider IDs.

^c States are known to use different methods and criteria for assigning some data elements, including Place of Service Code. Using this state-added data element to select TAF records may result in identifying a slightly different, non-comparable set of records from each state for their analysis. However, the Place of Service Code offers a degree of granularity regarding the setting that is not available using other methods (especially when attempting to identify homeless shelters and mobile units).

Table B.11. Provider Characteristics Among Those Who Billed Using Psychotherapy for Crisis Code, 2022, Medicare^a

	Number of claims with code 90839	Number of providers with at least one claim with code 90839	Percentage of providers with at least one claim with code 90839
Overall	17,345	4,095	100.00
Place of service^b			
Outpatient	13,627	2,597	63.42
Emergency services	5,677	352	8.60
School-based services	0	0	0.00
Telehealth	2,222	811	19.80
Residential and intensive outpatient or partial hospitalization	DS	DS	DS
Inpatient care	256	91	2.22
Residence	846	258	6.30
Other	2,321	744	18.17
Unknown/missing	0	0	0.00

Source: Mathematica analysis of Medicare Fee-For-Service Claims files, 2022.

Notes: This table presents provider characteristics by setting associated with claims with the Psychotherapy for Crisis code 90839. Specifically, the table reports 1) the number of claims with code 90839 with each setting, 2) the number of providers with at least one claim with code 90839 with each setting, and 3) the percentage of providers with at least one claim with code 90839 with each setting.

The denominator for the percentage column is the overall number of providers with at least one claim with code 90839 (4,095 in 2022). Note that providers may be included in multiple rows; they are included in a row if they have at least one claim line that includes a particular setting. Note that providers that only had a claim with 90840 but not 90839 were not included in the table.

^a This table primarily shows providers and claims included in the OP and PHY files because fewer than 11 claims with code 90839 were found in the IP file.

^b The table includes individual, group, and facility servicing provider IDs.

The outpatient category includes office, urgent care, outpatient hospital, independent clinic, federally qualified health center (FQHC), community mental health center (CMHC), public health clinic, and rural health clinic places of service from carrier claims, and outpatient home health/critical access hospital (CAH) outpatient services, FQHC, CMHC, and rural health clinic places of service for outpatient claims.

The residential and intensive outpatient or partial hospitalization category includes psychiatric partial hospitalization facilities, residential substance abuse facilities, psychiatric residential treatment facilities, and substance abuse treatment facilities from carrier claims, and non-residential opioid treatment programs from outpatient claims.

The inpatient care category includes psychiatric inpatient and non-psychiatric hospital inpatient facilities from carrier claims, and acute IPPS reimbursed hospital, inpatient CAH, inpatient psychiatric, and inpatient rehabilitation facilities from outpatient claims.

The residence category includes homeless shelters, homes, assisted-living facilities, and group homes from carrier claims.

DS = Data suppressed due to sample size (number based on cell size <11).

Table B.12. Provider Characteristics Among Those Who Billed Using Psychotherapy for Crisis Code, 2022, Commercial^a

	Number of claims with code 90839	Number of providers with at least one claim with code 90839	Percentage of providers with at least one claim with code 90839
Overall	16,958	6,552	100
Place of service			
Telehealth	4,856	2,317	35.36
Homeless shelter			
Office	8,266	3,251	49.62
Home	99	63	0.96
Mobile unit	32	6	0.09
Urgent care facility	15	10	0.15
Inpatient or outpatient hospital	1,570	499	7.62
Emergency room	1,166	554	8.46
Clinic	18	9	0.14
Psychiatric facility (inpatient or partial hospitalization)	13	9	0.14
Community mental health center	547	274	4.18
Residential or non-residential substance abuse or psychiatric treatment facility	42	24	0.37
Unknown/missing			
Other	334	235	3.59

Source: Merative™ MarketScan® Commercial Data, 2022.

Notes: This table presents provider characteristics by setting associated with claims with the Psychotherapy for Crisis code 90839. Specifically, the table reports 1) the number of claims with code 90839 with each setting, 2) the number of providers with at least one claim with code 90839 with each setting, and 3) the percentage of providers with at least one claim with code 90839 with each setting.

The denominator for the percentage column is the overall number of providers with at least one claim with code 90839. Note that providers may be included in multiple rows; they are included in a row if they have at least one claim line that includes a particular setting.

^a The table uses only claims from the MarketScan outpatient and inpatient services table for claims that have a valid NPI with a payment > 0.