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CRISIS SERVICES BILLED TO MEDICAID: LESSONS LEARNED FROM EIGHT STATES AND CONSIDERATIONS FOR FUTURE ANALYSES

BRIEF HIGHLIGHTS

- Crisis services rely on a patchwork of funding, including federal, state, and local grants; public and commercial insurance; and other state and local funds. The Substance Abuse and Mental Health Services Administration (SAMHSA) recommends that all insurers cover three core crisis services--24/7 clinically staffed regional crisis call centers, mobile crisis teams, and crisis receiving and stabilization facilities--and adopt universal billing codes for claims-based reimbursement of these services.
- As part of a broader study of claims-based reimbursement for crisis services, Mathematica interviewed state officials and crisis services providers in Arizona, California, Louisiana, Montana, North Carolina, Ohio, Utah, and Washington State to identify billing codes authorized by Medicaid for crisis services. We then analyzed Medicaid claims data to examine the use of these codes between 2020 and 2022.
- Of the eight states in our study, all authorized at least two of the SAMHSA-recommended crisis services billing codes. The states also authorized a variety of other billing codes for crisis services; in some cases, they used different definitions for billing codes not typically intended for crisis services or required specific modifiers to indicate that services were provided during a crisis encounter. Crisis codes included in our analyses may not be inclusive of all services delivered during a given crisis care encounter (including case management, evaluation, counseling, and peer services) if the provider bills for these services using non-crisis-specific codes.
- In all but one state, less than 1% of Medicaid enrollees had a claim for a crisis service between 2020 and 2022. Arizona, which has an established history of using Medicaid for crisis services, had a higher rate of these claims (about 5% of enrollees).
- Although states in our study commonly used SAMHSA-recommended codes, these were not the only crisis services codes they used. Researchers conducting analyses of crisis services based on Medicaid claims data should use caution when comparing rates of crisis services billing across states given variation in state contexts, including Medicaid coverage and billing practices. Researchers should also avoid conflating claims billed to Medicaid using the SAMHSA-recommended crisis codes with total crisis service use among Medicaid enrollees, as crisis services may not be consistently billed to Medicaid using these codes.

INTRODUCTION

The National Guidelines for Behavioral Health Crisis Care, issued by the Substance Abuse and Mental Health Services Administration (SAMHSA), call for the availability of three core crisis services: (1) 24/7 clinically staffed regional crisis call centers, (2) mobile crisis teams, and (3) crisis receiving and stabilization facilities. To fund these services, states and providers rely on a patchwork of funding, including federal, state, and local grants; public and commercial insurance; and other state and local funds. SAMHSA's national guidelines urge all insurers to cover crisis services and adopt universal billing codes from the Healthcare Common Procedure

Coding System (HCPCS) to support reimbursement (using codes H0030, H2011, S9484, and S9485) (SAMHSA 2020).

Coverage for crisis services varies across insurers. As of 2022, 33 state Medicaid programs covered mobile crisis teams, 28 covered crisis receiving and stabilization facilities, and 12 covered crisis call center (hotline) services; however, only 12 states covered all three of these services (Saunders, Guth, and Panchal 2023). Findings from previous exploratory analyses show that billing Medicaid for crisis services also varies greatly across states, both in terms of the billing codes that providers use and the volume of crisis services billed (Natzke, et al. 2023). Medicare and commercial insurance generally provide less generous coverage for crisis services relative to Medicaid. As of January 2024, Medicare only covers crisis psychotherapy services delivered by certain types of providers (such as psychiatrists, psychologists, and clinical social workers) (CMS 2023). Commercial insurers also vary in their coverage of crisis services and allowable codes, even between providers in the same state or community.

A greater reliance on billing insurance for crisis services might help expand and sustain the continuum of these services (Shaw 2020). Because policy researchers often use claims data to track the use of specific health services (Ferver, Burton, and Jesilow 2009), examining rates of billing for crisis services could support understanding of how these services are being provided, highlight needs and gaps in the crisis system, and offer policymakers insights on which parts of the crisis service continuum may need additional resources. However, given variation in state Medicaid coverage of crisis services and provider billing practices for these services, as well as the limited role that claims-based reimbursement plays in funding crisis services, claims analyses alone cannot currently provide a full picture of crisis services use among Medicaid enrollees.

Mathematica interviewed crisis services providers and payors and analyzed Medicaid claims for crisis services in eight states between 2020 and 2022 to better understand the extent to which Medicaid was billed for crisis services and the billing codes used. This brief summarizes our findings and presents considerations for future work using crisis services claims.

METHODS

As part of a larger study examining financing of crisis services through public and commercial insurance, our team interviewed state officials and crisis services providers in Arizona, California, Louisiana, Montana, North Carolina, Ohio, Utah, and Washington State. During these interviews, we discussed provider and payor experiences with billing codes for crisis services. Before each interview, we shared a list of known billing codes, including SAMHSA-recommended codes, to facilitate discussions about how providers currently bill for crisis services. During the interviews, we asked interviewees if their states authorized any other crisis services billing codes not on the list we shared. The interviews focused on codes authorized by state Medicaid agencies, given the limited role of Medicare and commercial insurance in funding crisis services.

We then analyzed Transformed Medicaid Statistical Information System Analytic Files (TAF) Research Identifiable Files (RIF) to examine the rate of crisis services billed to Medicaid per 10,000 enrollees and the share of enrollees with any Medicaid crisis claim between 2020 to 2022. To identify crisis services, we used billing codes that we confirmed were authorized by each state as of 2024 through our interviews and state provider manuals available online. We also examined the diagnostic characteristics of Medicaid enrollees with crisis service claims. To identify enrollees with behavioral health conditions in claims data, we used the Centers

for Medicare & Medicaid Services (CMS) Chronic Conditions Data Warehouse algorithm to classify enrollees who had received treatment for specific conditions.[a]

KEY FINDINGS

SAMHSA-recommended billing codes represent only a portion of codes used to bill Medicaid for crisis services. State Medicaid programs vary in their authorization of the four SAMHSA-recommended HCPCS billing codes for crisis services (H0030, H2011, S9484, and S9485). Among the eight states in our study, all state Medicaid programs reimburse crisis services using S9484, seven reimburse for S9485, six reimburse for H2011, and two reimburse for H0030 (***Exhibit 1***). Some state Medicaid programs also authorize additional, state-specific HCPCS and Current Procedural Terminology® (CPT) codes to cover certain aspects of crisis service delivery. These state-specific codes, which might reflect state efforts to ensure comprehensive billing code coverage of crisis services, can be used to bill for services such as assessments, nursing, case management, transportation, and psychotherapy delivered during a crisis encounter.

We confirmed 21 distinct crisis codes authorized across the states in this study, 8 of which are authorized by two or more states (***Exhibit 1***). The codes used by two or more states include the four SAMHSA-recommended HCPCS billing codes; two additional HCPCS billing codes for therapeutic behavioral (H2019) and registered nurse services (T1002); and two CPT billing codes for psychotherapy for crisis (90839 and 90840). It should be noted that codes 90839 and 90840 may be used outside of the context of crisis call center, mobile crisis team and crisis receiving and stabilization services, and ***Exhibit 1*** shows the most common codes used in these contexts. Below, we describe codes authorized by case study states that correspond to the three core crisis services:

- Crisis call center services. As of 2022, Medicaid covered crisis call center services in three of the states in this analysis.[b] Two states (Arizona and Washington) authorize use of H0030 (behavioral health hotline service) to bill for crisis call center services. H0030 was one of the most frequently billed codes in Arizona but was billed less frequently in Washington (1.6 to 2.8 services per 10,000 enrollees from 2020 to 2022). Montana covered crisis call centers in 2022 but does not designate billing codes specifically for them.
- Mobile crisis team services. As of 2022, Medicaid covered mobile crisis team services in all but one of the eight states (Montana) in this analysis. Six states authorize use of H2011 (crisis intervention service, per 15 minutes) for mobile crisis team services. However, this code was billed infrequently in some states (California and Montana) and more frequently in others (Arizona, Louisiana, North Carolina, and Washington). Two states do not authorize use of H2011 and instead used state-specific codes for mobile crisis team services: Utah authorizes H2000 and Ohio authorizes H2019 for these services.
- Crisis receiving and stabilization services. As of 2022, Medicaid covered crisis receiving and stabilization services in all but one of the eight states (Ohio) in this analysis. All seven states that covered these services authorize providers to bill S9484 or S9485 (crisis intervention mental health services, per hour or per diem, respectively). The per diem code (S9485), which provides a daily

[a] For most behavioral health conditions, the Chronic Conditions Data Warehouse 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. Our analysis included people with mental health conditions (anxiety disorders, mood disorders, other mental health disorders, personality disorders, and schizophrenia and other psychotic disorders), people with SUD conditions (alcohol use disorder, opioid use disorder, and other drug use disorders), and those without a behavioral health condition identified in claims data.

[b] Montana covered crisis call center services as of 2022, but this coverage was not reflected in lists of authorized billing codes.

bundled rate for all crisis receiving and stabilization services, was used more frequently than the per hour code (S9484) in five states (Arizona, Louisiana, Montana, Utah, and Washington). Multiple providers from the states that frequently used S9485 indicated that per diem codes help simplify billing and more accurately capture the costs of delivering care.

Although some providers reported billing Medicaid for additional services--such as case management, evaluation, counseling, and peer services--delivered during crisis encounters, the associated billing codes are also commonly used for non-crisis encounters. Use of these codes in our Medicaid analysis would likely overstate claims for crisis services. For this reason, our Medicaid claims analysis used only the codes specific to crisis services.

Exhibit 1. Most frequently authorized Medicaid billing codes for crisis services in case study states

Code	Description	AZ	CA	LA	MT	NC	OH	UT	WA
H0030[a]	Behavioral health hotline service (short description: Alcohol and/or drug hotline)	X							X
H2011[a]	Crisis intervention service, per 15 minutes	X	X	X	X	X			X
H2019	Therapeutic behavioral services, per 15 minutes						X		X
S9484[a]	Crisis intervention mental health services, per hour	X	X	X	X	X	X	X	X
S9485[a]	Crisis intervention mental health services, per diem	X		X	X	X	X	X	X
T1002	Registered nurse services, up to 15 minutes	X					X		
90839	Psychotherapy for crisis; 60 minutes (time range 30–74 minutes)		X		X	X	X	X	
90840	Psychotherapy for crisis; add-on code with 90839 for each additional 30 minutes beyond the first 74 minutes		X		X	X	X	X	

a. Recommended by SAMHSA as part of a universal code set for crisis services claims-based reimbursement.

Note: This exhibit lists codes authorized by at least two states. Additional billing codes authorized by only one state include 90791, H0031, H0038, and T1016 (authorized in Arizona); A0140 and T2007 (authorized in California); H0045 (authorized in Louisiana); T2025 and T2034 (authorized in North Carolina); 90832, H0004, and H2017 (authorized in Ohio); and H2000 (authorized in Utah). Codes used by only one state were included in our Medicaid claims analysis.

Providers reported using non-crisis-specific billing codes during crisis encounters. Non-crisis-specific codes include 90791 (Montana), 90832 (Montana), H0007 (Ohio), H0038 (California and Montana), H2017 (North Carolina), T1016 (North Carolina), and T1017 (California). These codes are also used for non-crisis encounters. We did not include these codes in our Medicaid claims analysis because we could not use the codes to differentiate between crisis and non-crisis encounters.

Some states use their own billing code definitions or code modifiers to indicate crisis services. Several states considered in this study use definitions for crisis services billing codes that differed somewhat from the standard definitions presented in ***Exhibit 1***. For example, in Arizona, code H2011 is specified for use by multidisciplinary mobile teams (rather than for broader crisis intervention services). Other states defined codes that may typically be used for non-crisis care differently compared with the standard code description. For example, Utah authorizes code H2000, which has the standard definition "comprehensive multidisciplinary evaluation" but which the state defined as "crisis mobile response." In addition, some states require providers to submit claims with modifiers to indicate a crisis encounter. For example, Ohio requires the modifier "KX" for approved billing codes with descriptions that do not specify they are for use during crisis encounters, as other providers might use the same billing codes to provide non-crisis services.

Few Medicaid enrollees had claims for crisis services, but crisis service rates varied somewhat across states. In most states considered in this study, less than 1% of Medicaid enrollees had a claim for a crisis service between 2020 and 2022 (***Exhibit 2***). However, 5%-6% of enrollees in Arizona had a claim for crisis services, depending on the year. The largest share of Arizona's crisis claims were for mobile crisis team services. Greater

billing of Medicaid for crisis services in Arizona was likely driven by the state's established history of Medicaid reimbursement for crisis services. The state is a leader in crisis services delivery, and it developed and refined its Crisis Now model, which is used to deliver coordinated, community-based crisis care across the state.

We also examined changes in the overall rate of claims for crisis services from 2020 to 2022. The rate changed in various ways across states during this period: it increased in two states (California and North Carolina), decreased in four states (Ohio, Louisiana, Utah, and Montana), and changed minimally in two states (Arizona and Washington).

Exhibit 2. Claims for crisis services, 2020-2022

State	2020		2021		2022	
	Percentage of enrollees with claim	Rate per 10,000 enrollees	Percentage of enrollees with claim	Rate per 10,000 enrollees	Percentage of enrollees with claim	Rate per 10,000 enrollees
Arizona	5.1	2,530	5.9	3,123	5.6	2,479
California	0.35	97	0.38	107	0.38	109
Louisiana	0.24	205	0.16	77	0.16	77
Montana	0.92	183	0.85	186	0.75	136
North Carolina	0.43	139	0.40	141	0.38	144
Ohio	0.97	222	0.91	199	0.88	188
Utah	DQ	DQ	0.75	151	0.67	133
Washington	0.05	13	0.05	16	0.04	14

Source: Mathematica's analysis of TAF RIF, 2020–2022.

Note: Percentages and rates for each state are based on authorized crisis procedure codes in Medicaid claims. For each state, the analyses utilized SAMHSA-recommended crisis procedure codes according to states which authorized each code, as well as state-specific crisis codes that we confirmed were authorized in each corresponding state. Where applicable, procedure code modifiers and place of service restrictions were also applied. See ***Exhibit 1*** and corresponding exhibit note for procedure codes used in each state.

DQ = Data not reported due to concerns with data quality.

Crisis services providers do not bill for all services delivered during crisis encounters. In interviews, providers cited several reasons for not billing for crisis services, including problems collecting the personally identifiable client information needed to file a claim, use of alternative funding sources, or restrictions on billing codes (for example, insurers might reimburse only for services provided to certain groups, such as adults ages 21 and older).

In all but one of the eight study states, most Medicaid enrollees who used crisis services in 2022 had a claim that indicated a mental health or substance use disorder (SUD) diagnosis (***Exhibit 3***). In most states, only a small share of overall claims for crisis services did not have a mental health or SUD diagnosis (between 2% and 22% in all states except California, where 52% of claims did not have a mental health or SUD diagnosis).

Exhibit 3. Percentage of claims for crisis services with each diagnosis category, 2022			
State	Primary MH diagnosis	Primary SUD diagnosis	Claims without MH or SUD diagnosis
Arizona	72	10	14
California	46	1	52
Louisiana	85	5	8
Montana	85	5	7
North Carolina	57	23	18
Ohio	71	15	9
Utah	70	7	22
Washington	93	4	2

Source: Mathematica's analysis of TAF RIF, 2022.

Note: Diagnosis categories are based on the CMS Chronic Conditions Data Warehouse algorithm. For claims in the "Primary MH diagnosis" and "Primary SUD diagnosis" columns, the primary diagnosis in the claim was a mental health or SUD diagnosis, respectively. Claims in the "Claims without MH or SUD diagnosis" column did not have a mental health or SUD diagnosis in any diagnosis field in the claim that matched the Chronic Conditions Data Warehouse algorithm, inclusive of claims with no diagnosis code. While it is possible that someone without a formal mental health or SUD diagnosis may utilize crisis services, it is also possible for someone to receive a diagnosis after using crisis services, which would not be reflected on the associated crisis service claim.

CMS = Centers for Medicare & Medicaid Services; MH = mental health; SUD = substance use disorder.

Most crisis claims had an associated mental health or SUD diagnosis. Although many crisis programs are designed to be available to anyone who needs crisis services, in likely rare cases in two states, some types of claims submitted for crisis receiving and stabilization services were only Medicaid reimbursable for clients with a primary mental health diagnosis or receiving mental health services; in these states, providers would not be reimbursed for crisis services involving substance use disorder care. Where providers might not be able to bill for all clients who receive services, such restrictions may financially burden crisis services providers.

CONSIDERATIONS FOR FUTURE WORK

Providers and payors interviewed for this study described several areas of misalignment in how crisis services are delivered and how claims are reimbursed. This included how the collection of insurance information from clients could impede care and how billing code definitions could limit reimbursement for some crisis services. Providers cited low Medicaid reimbursement rates for crisis services and the administrative burden of billing for these services as disincentives to billing insurance. Providers may also opt to use other established non-crisis billing codes (for example, CPT codes for psychiatric diagnostic evaluation or individual psychotherapy) when billing for crisis services due to challenges accessing information about recommended crisis billing codes or concerns about payor coverage or rates of reimbursement for crisis billing codes. For these reasons, it is difficult to make inferences about the use of crisis services in a state based on analysis of its Medicaid claims data alone. Policymakers and researchers should note these limitations when interpreting our findings.

Furthermore, differences in Medicaid coverage and billing practices might make it difficult to conduct national analyses of crisis services billing using the same methods or compare findings across states. Researchers analyzing crisis services claims might want to study crisis services on a state-by-state basis, with consideration of state policy contexts that may influence service use patterns. These include changes in Medicaid coverage of crisis services, authorization of state-specific crisis services billing codes, and development of crisis services systems throughout the state. Moreover, because the crisis services landscape is evolving, states might

approve additional billing codes or phase codes out, which could affect future analyses using the billing codes identified by this study.

Finally, interviewees highlighted that many crisis services providers need support to develop their capacity to collect and submit data for reimbursement. Strategies to reduce the administrative burden of billing for providers are particularly important given the workforce pressures and financial constraints these providers commonly face. States and communities could also consider developing insurance-based alternatives to traditional claims-based reimbursement, such as indirect billing arrangements where an entity like a Regional Behavioral Health Authority coordinates billing and payments between providers and payors. Many state Medicaid agencies offer resources to help crisis organizations submit and troubleshoot claims, which could promote Medicaid claims-based reimbursement for crisis services.

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