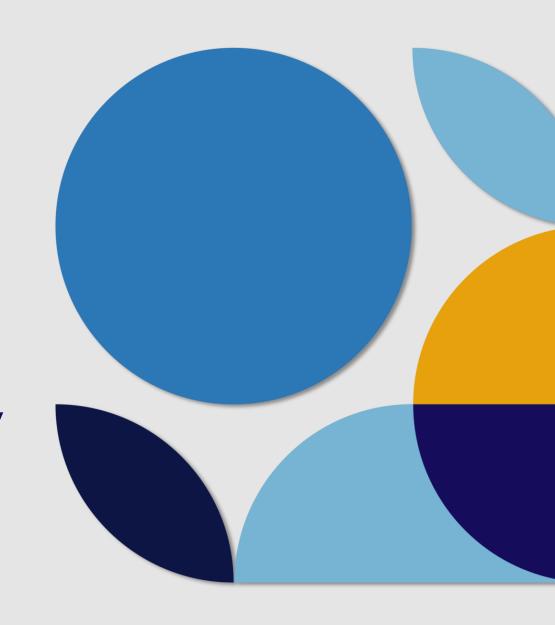


Measuring Progress: Data Collection and Evaluation for 911/988 Interoperability

Lunch & Learn



Housekeeping











We'd love to know who is here!
Please introduce yourself using the chat function

Ask questions at any time using the Q&A function

Share your comments or "aha" moments via the chat box

A recording and sides will be available



Mission + Vision

- Mission: assist local, state, and national partners with accelerating implementation of best practice crisis response to reduce reliance on jails and hospitals, ensuring adults in behavioral health crises have a clear path to getting personcentered help.
- **Vision:** for people experiencing behavioral health crises to have a path to help, across Ohio and the nation.



3-Part Series

April June August

- Brief and
 Webinar Part 1:
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Interoperability

Interoperability formalizes interconnectedness between systems so that the connection extends beyond simple coordination to include formal protocols, procedures, or agreements that allow for the transfer of calls between 911 and 988

(Brooks Holliday, 2024).



Crisis Response Pilot

Strategy Focus

Governance and Standard Operating Procedures (SOPs) for warm transfers from 911 to 988

Pilot Participants & Timeline

12 months across 5 diverse Ohio sites, each minimally including: PSAPs, 988 crisis centers, behavioral health boards

Preliminary Findings

Strategy improvements that Clear Pathways will test with future sites to build evidence for interoperability best practices



1

Clear Pathways' measurement framework

Topics

Metrics development and reporting

3

Implications for interoperability

4

Implications for broader crisis system research and evaluation





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Meet Our Evaluation Team



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To help Clear Pathways and others understand the following:



How does the working group development strategy advance the governance component of 911/988 interoperability?



How does the policy and procedure development strategy advance the standard operating procedures (SOP) component of 911/988 interoperability?



How does advancing the governance and SOP components of interoperability impact call transfers from 911 to 988?



Evaluation Activities

Multi-stage mixed methods design

Informed

Phase 1: Pre-pilot

- Interoperability interviews with PSAP, 988, and ADAMHS board coordinators
- Document review: Behavioral health SOPs

PSAP and 988 data interviews

Informed

Phase 2: Pilot period

- Interoperability metrics crosssite calls
- Practice collecting and reporting administrative data for Interoperability metrics

Phase 3: Post-pilot

- PSAP, 988, ADAMHS board interviews
- Document review: Behavioral health SOPs, governance documents, Clear Pathways templates, workgroup meeting minutes
- Group interview with Clear Pathways team

• Administrative data for interoperability metrics







Clear Pathways Measurement Domains

Desired Outcome	Potential Data Sources	Current Data Sources
Decreased 911 BH-related calls	PSAP data	Data reported by Crisis Response Pilot PSAPs and 988 call centers
Decreased law enforcement involvement in BH-related incidents	 Aggregate state and national data Law enforcement jurisdictional data Jail jurisdictional data 	 911 response data National Incident-based Reporting System (NIBRS) Ohio Incident-based Reporting System (OIBRS)
Decreased BH-related ED visits and hospitalizations	 Medicaid, Medicare, and other health insurance claims data 	Transformed Medicaid Statistical Information System (T-MSIS)
Decreased deaths by suicide	 Centers for Disease Control and Prevention (CDC) Vital Statistics CDC Suicide Data and Statistics 	N/A
Improved patient and family experience with crisis incidents	 Surveys and qualitative data collection with patients, families, program staff, or advocates 	 Interviews and focus groups with peer-run and advocacy organizations and organizations serving populations



The Need for Metrics Development

Quality standards, data, and performance monitoring for a high-quality system of care

- Emerging 911/988 interoperability field is still figuring out implementation, best practices, and crisis system integration
- Continuous quality improvement (CQI) processes that use metrics can strengthen implementation to produce better outcomes
- PSAPs and 988s have industry-specific quality metrics and standards but no interoperability metrics





Principles for Metrics Development¹



Data should be feasible for call takers to collect during emergency situations



Metrics should be developed in collaboration with experts from 911 and 988



Metrics should provide actionable insights to help improve coordination



Metrics Development Process

- Prior to Crisis Response Pilot:
 - Metrics conceptualized within measurement framework
- During Pilot:
 - Interviews with data points of contact to understand current data collection and reporting
 - Used input from sites to finalize the proposed set of metrics
 - Collaborated with sites to determine appropriate categories for 988 referrals and transfers to other services (for example: outpatient treatment)



911/988 Interoperability Metrics

Call Flow Step	PSAP Metrics	988 Metrics
Initiation	911 calls received	988 calls received
Processing 911 calls that were BH-related		
Transfer	911 calls transferred to 988*	988 calls received through transfer from 911*
	911 calls transferred to 988 that 988 transferred back to 911*	988 calls received from 911 that 988 transferred back to 911*
		988 calls received from 911 that were resolved by 988
Additional response		988 calls received from 911 that 988 referred or transferred elsewhere

^{*}Complementary metrics to compare the number of transfers to total calls received by each agency and identify whether calls were being dropped during transfer.



Preparation for Metrics Reporting

Data workbooks

- Customized tool to:
 - report aggregate data
 - track data system challenges, potential solutions and progress,
 - guide future CQI processes

4 Cross-site calls

- Technical assistance to:
 - prepare for data collection
 - discuss common challenges and potential solutions
 - report data at the end of the pilot
 - plan for doing CQI together

2 Road tests

- Opportunity to:
 - practice collecting and reporting data,
 - troubleshoot
 challenges prior to
 final data
 submission



Metrics Reporting Results

	Site 1	Site 2	Site 3	Site 4	Site 5
PSAP metrics					
911 calls received	448,718	215,194	5,919	NA	13,327
911 calls that were behavioral health-related	9,602 (2)	3,790 (2)	192 (3)	NA	119 (1)
911 calls transferred to 988	0	58	0	NA	0
911 calls transferred to 988 that 988 transferred back to 911	0	NA	0	NA	0
988 metrics					
988 calls received	13,254	6,241	7,338	5,426	2,891
988 calls received through transfer from 911	0	7 (<1)	0	0	22 (1)
988 calls received from 911 that were resolved by 988	0	5 (71)	0	0	22 (100)
988 calls received from 911 that 988 transferred back to 911	0	2 (29)	0	0	0
988 calls received from 911 that 988 referred or transferred elsewhere	0	0	0	0	0



Reporting on the Metrics

Call Flow Step	Metrics Included	Degree of Difficulty
Initiation	911 calls received988 calls received	 PSAP and 988 data systems already tracked these calls The data were easy for them to report
Processing	911 calls that were BH-related	• It was hard for PSAPs to identify BH-related calls in existing data systems.
Transfer	 911 calls transferred to 988* 988 call received from 911 that 988 transferred back to 911* 988 calls received from 911 that were resolved by 988 	 PSAPs and 988s made minor changes to their data systems to track these Some sites manually identified call transfers within their data files, which was time consuming
Additional response	 988 calls received from 911 that 988 referred or transferred elsewhere 	988s could track these with no or minor changes to their data systems

^{*}The overlapping PSAP and 988 metrics have been consolidated in this table.



Metrics Reporting Challenges

- PSAPs identifying behavioral health-related calls
 - Likely underreported during the pilot
 - Limited available classification "nature" codes in computer-assisted dispatch (CAD) system does not capture nuance and level of risk
 - Narrow range of codes initially limited PSAP thinking about transfers to 988
- Technology and data system limitations
 - Field-specific and regional variation in call system software
 - o Pilot sites spent a lot of time figuring out how to navigate system differences
 - Manual processes like "backdoor" numbers are more burdensome and error prone
 - Limited information about caller characteristics and the call transfer process
- Differences in data protections
 - o 988 emphasis on confidentiality, lack of geocoding
 - PSAP requirements for public transparency, liability concerns





Recommendations for 911/988 Interoperability





Call Identification Recommendations

- Improve protocols for identifying behavioral health-related calls to 911
 - Including when a behavioral health condition may underly the primary call reason
- Develop standardized 911 primary codes that capture a range of behavioral health risk levels





Interoperability Process Recommendations

- Capture and report additional metrics and data that may further support interoperability
 - Duration of 911 BH calls compared to other 911 calls
 - Total duration between 911 call initiation, transfer to 988, and 988 call completion
 - Types of 911 to 988 call transfers
 - Call abandonment rate
- Explore ways to systematically record caller characteristics given unique 911 and 988 barriers to obtaining information
- Provide guidance on how 988s can manage partnering with multiple PSAPs



Technology and Data System Recommendations

- Introduce metrics early to identify data gaps, as well as technology and data system limitations
- Engage with 911 technology vendor community to develop 911/988 interoperability software
- Allocate resources to PSAPs and 988s to support uptake of new technology and data systems



Data Linkage Recommendations

- Standardize data collection and reporting on quality metrics and costs
- Build data linkages within and across the crisis services continuum
- Allocate resources to support local uptake of systems to support statewide data linkages





Benefits for Research & Evaluation



Standardized call codes and definitions enable better assessment of behavioral health-related call volume and produce higher quality data



Improved data quality enables accurate performance measurement for continuous quality improvement processes and the evaluation of outcomes



Improved assessment of service access through interoperability sets the stage for understanding the effects on other services in the crisis care continuum



Improved data linkages supports assessment of service access and utilization across the crisis services continuum and outcomes in multiple domains





Benefits for PSAPs & 988s



Standardized call codes and metrics reduce burden on local jurisdictions and promotes consistency, especially if 988s partner with more than one PSAP



Discussing the data needed for the metrics helps to advance call identification and transfer protocol development



Improved data quality and monitoring helps to identify areas for improvement so that client outcomes are achieved



Accurate reporting helps to assess and secure the funding and resources needed to implement interoperability protocols





Benefits for Systems



Standardization supports a comprehensive performance measurement and evaluation framework



A comprehensive performance measurement and evaluation framework supports a coordinated and high-quality behavioral health system of care



Improved data quality allows for accurate examination of needs, service delivery, costs, and potential savings in multiple systems



Improved data linkages allow for rigorous evaluations to support program expansion and policy development









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New Brief -Measuring and Evaluating 911/988 Interoperability



August 2025 | Crisis Response Pilot Brief 3 of 3

Measuring and Evaluating 911/988 Interoperability

By supporting 911 public safety answering points (PSAPs) and 988 call center coordination, Clear Pathways is working to ensure that people experiencing behavioral health crises have a path to help across Ohio and the nation. Since 2022, Clear Pathways has developed and continuously refined an Interoperability Strategy. This brief, the third in a three-part series, focuses on performance measurement and evaluation in 911/988 interoperability.



The Need for Measurement and Evaluation

Quality standards, data and mechanisms to monitor performance, and continuous quality improvement (CQI) processes are necessary as communities expand 911/988 partnerships as part of a coordinated and high-quality behavioral health system of care. Additionally, the recent and rapid evolution of these partnerships increases the need to understand how to support best practices in 911/988 interoperability and evaluate the impact on individuals and communities.



Advancing Quality Metrics and Evaluation

To better integrate CQI processes across PSAPs and 988 crisis centers, the Crisis Response Pilot evaluation examined how the Clear Pathways Interoperability Strategy impacted call transfers from 911 to 988. Our evaluation partners at Mathematica developed interoperability metrics with input from the five pilot sites and Clear Pathways consultants. These included separate but complementary metrics for PSAPs and 988

During the pilot, PSAPs and 988 crisis centers reported their metrics in

aggregate. They documented challenges with collecting and reporting the data and strategies to overcome these challenges. The data sites reported were limited because most sites had not yet implemented

their standard operating procedures for transfers from 911 to 988. However, their documentation of challenges, combined with findings on the early implementation of interoperability workflows, provided key insights about interoperability metrics. These included promising practices for implementing the metrics and implications for evaluating the effectiveness of interoperability over time.

What Is CQI?

CQI is a process that aims to monitor quality metrics, identify underlying problems, and develop solutions to produce better outcomes, 911 and 988 have quality metrics and standards for CQI in their own operations separately but they currently do not have metrics for their work together.

911 and 988 Standards

- * Association of Public-Safety Communications Officials (APCO)/NENA standards for PSAPs
- Substance Abuse and Mental Health Services Administration (SAMHSA) standards for 988

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PSAP Metrics	988 Crisis Center Metrics
•911 calls received	•988 calls received
 •911 calls that were behavioral health- related •911 calls transferred to 988 •911 calls transferred to 988 that 988 transferred back to 911 	•988 calls received through transfer from 911 •988 calls received from 911 that were resolved by 988 •988 calls received from 911 that 988 transferred back to 911 •988 calls received from 911 that 988 referred or transferred elsewhere

¹ Committee on Psychiatry and Group for the Advancement of Psychiatry (2021). Roadmap to the ideal crisis system: Essential elements, measurable standards and best practices for behavioral health crisis response. National Council for Mental Wellbeing. https://www.thenationalcouncil.org/wp-content/uploads/2025/02/042721_GAP-CrisisReport_ExecutiveSummary.pdf



August 28. 2025

Evaluation Report -Findings from the Crisis Response Pilot











Advancing 911/988 Interoperability

Findings from the Clear Pathways Crisis Response Pilot Evaluation

July 23, 2025

Robin Lindquist-Grantz, Natalie Porter, and Katie Hancock



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- Please complete a brief survey to:
 - Let us know what feedback you have for us
 - Suggest future Lunch & Learn topics or speakers







Thank You! Contact Us



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