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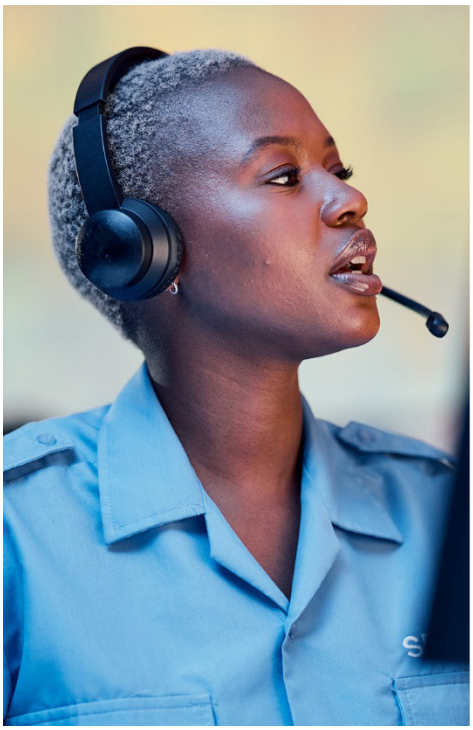

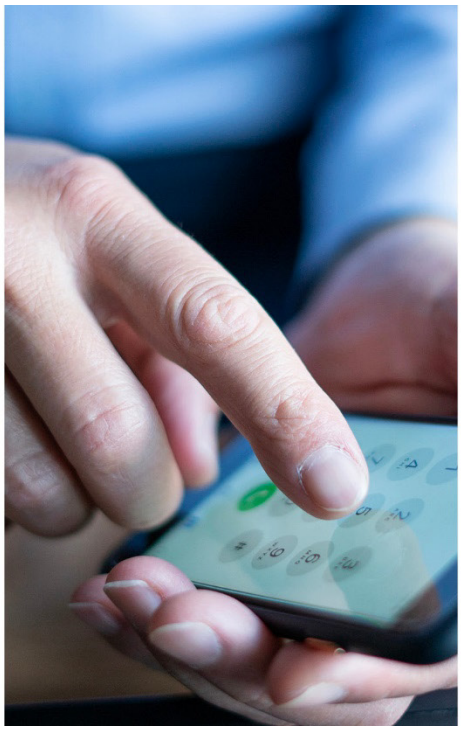

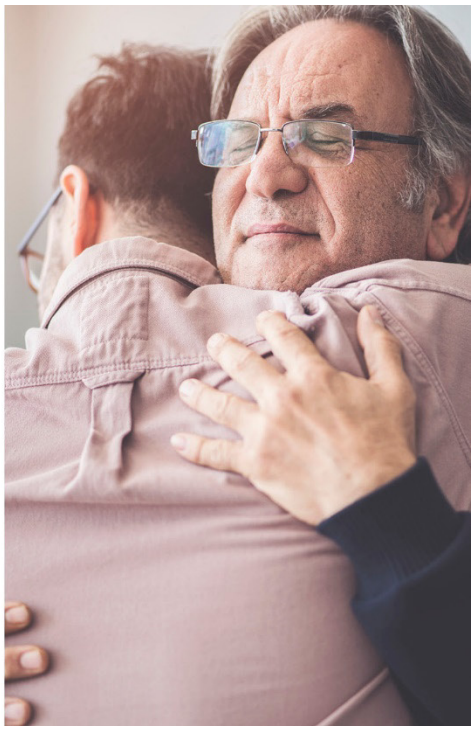

Advancing 911/988 Interoperability

Findings from the Clear Pathways Crisis Response Pilot Evaluation

July 23, 2025

Robin Lindquist-Grantz, Natalie Porter, and Katie Hancock

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Acknowledgments

We sincerely appreciate the contributions of those who made this report possible.

We especially thank the public safety answering points; 988 call centers; and alcohol, drug addiction, and mental health services boards that participated in the pilot and offered their time for the evaluation activities. They are among the early innovators of 911/988 interoperability and the field will greatly benefit from their ideas, insights, and strategies to overcome challenges. These organizations have a deep commitment to improving the lives of individuals in their communities and it was a privilege to learn from them.

We wish to thank Peg's Foundation and its Clear Pathways team for supporting the evaluation and this report. We especially appreciate the thoughtful guidance provided by Cal Jenkins; Crystal L. Brandow, PhD; Alicia D. Smith; Rob Jackson; and Matthew Goldman, MD. We also want to thank the Dignity Best Practices team—Mary Naoum, Samantha Bunecke, Diana Flora, Margo Kulkarni, Daniel Kornfield, and Sherrell Hendrix—for providing important background information about the activities and tools used during the pilot and for their willingness to help facilitate positive change between public safety and behavioral health partners. We are deeply thankful for the support provided by The Pew Charitable Trusts, especially the guidance provided by Kati Habert, Julie Wertheimer, Connie Utada, and the Research Quality and Support team. The views expressed herein are those of the author(s) and do not necessarily reflect the views of The Pew Charitable Trusts.

Finally, we would like to thank our Mathematica colleagues, Crystal Blyler and Jonathan Brown, for serving as quality assurance reviewers throughout the evaluation and lending their behavioral health expertise to this work.

Contents

Exhibits

Executive Summary

The 988 Suicide and Crisis Lifeline (commonly referred to as 988) launched on July 16, 2022, as part of the U.S. federal government's efforts to expand services for behavioral health crises. Since then, states and local partners have started to operationalize 988 and strengthen its linkages with other services and systems. Links between 988 and public safety answering points (PSAPs)—commonly termed 911 call centers—can help divert non-emergency calls about behavioral health, reduce unnecessary hospitalizations, and conserve law enforcement resources.

Clear Pathways, an initiative of Peg's Foundation, "catalyzes efforts throughout Ohio to build sustainable and scalable behavioral health emergency response systems that meet the needs of adults" (Clear Pathways n.d.). In fall 2023, Clear Pathways initiated its Crisis Response Pilot (referred to here as the pilot) based on a 911/988 interoperability strategy derived from the SAFECOM Interoperability Continuum. The pilot took place at five sites, each of which included a work group with representatives from local 988 providers; PSAPs; and Ohio's alcohol, drug addiction, and mental health services (ADAMHS) county boards. Each participating ADAMHS board served as the convener for its pilot site. The pilot lasted one year.

Mathematica evaluated the pilot using a multistage mixed methods design that incorporated interviews, document review, and 911/988 interoperability metrics. The purpose of the evaluation was twofold: (1) examine the progress pilot sites made in establishing 911/988 interoperability during the pilot period and (2) help sites develop and implement common metrics for quantifying 911/988 call transfers.

This report synthesizes the findings of the post-pilot evaluation and shares some examples from sites. Clear Pathways will use the findings to inform a 911/988 interoperability toolkit and more strategies to help other communities develop and sustain their interoperability efforts.

We begin with four overarching findings from the evaluation of the pilot, followed by key recommendations.

A. Takeaways: Work group development and governance

The activities and discussions of the work group advanced PSAP and 988 collaboration and fostered a deeper understanding of the philosophy, operation, and intentions of each agency. Participants said the structured activities led by the Clear Pathways team helped them overcome some initial hesitance about transferring behavioral health calls from 911 to 988. The activities enabled open and transparent discussions that built trust between the agencies to support their decisions about call procedures. During the pilot, sites engaged in consensus decision making and said that having work group participation from agency leadership helped them move forward. By the end of the pilot, participants believed they had established a collaborative relationship within their work group and appreciated each agency's role in addressing the behavioral health crisis. Participants were satisfied with the amount of progress their work group made toward interoperability goals, but they noted that it took several months to establish the trusting relationship between the PSAPs and 988.

B. Takeaways: Call transfer policy and procedure development

Sites progressed from relying on individual agency procedures to address behavioral health crises to jointly developing procedures for transferring some calls from 911 to 988. Participants recognized the importance of formalizing the relationships and documenting the procedure changes they developed during the pilot. At the end of the pilot, most sites were still working on finalizing memoranda of understanding and updating their standard operating procedures (SOPs). Sites generally preferred to update their existing individual agency SOPs with call transfer procedures jointly decided by the PSAP and 988 instead of drafting a single joint SOP document. They said this would allow them to use familiar language and the right level of detail to instruct their staff on new call transfer procedures.

All participants planned to continue working together to develop and document SOPs for behavioral health crises after the pilot formally ended. For most sites, their next step was to bring in other entities involved in responding to behavioral health crises—including first responders, mobile crisis units, local law enforcement, and other PSAPs—to review the SOPs and make further connections across the crisis care continuum.

PSAPs and 988s agreed on the type of response needed for low-risk and high-risk behavioral health calls, but they needed support with deciding how to handle calls with an intermediate level of risk. PSAPs differed in their tolerance for transferring these types of calls. However, by the end of the pilot, most sites arrived at similar strategies encompassing the four main steps followed by behavioral health calls that originate at 911: initiation, processing, transfer, and additional response.

- **Initiation** involves assessing the caller's level of risk, including suicidality, level of danger, location, and service request. Sites benefitted from in-depth discussions about differences in how 911 and 988 define commonly used terms such as harm, potential weapons, and first- and second-party callers.
- **Processing** includes identifying calls eligible for transfer from 911 to 988. Sites identified specific types of non-emergency behavioral health–related calls—such as callers who request a clinical referral or those who just want to talk—and nonviolent calls regarding suicidal ideation as appropriate for 988 transfers.
- **Transfer** included Clear Pathways' focus on developing SOPs for warm transfers from 911 to 988, but the pilot sites identified four methods for 911 to engage 988. By the end of the pilot, most sites planned to conduct warm transfers, three-way conference calls, or both to allow 911 and 988 to address higher risk situations jointly and coordinate their emergency response in real time.
- **Additional responses** included options aside from transfers to 988. They included additional responses requested by 911, such as in-person dispatch of first responders; 988 follow-up calls within 24 to 48 hours; and 988 transfers and referrals to other services, such as mobile response units or outpatient treatment.

C. Takeaways: Interoperability metrics

Most sites spent the full pilot period developing their interoperability strategy and did not start implementing call transfers; therefore, data for the Clear Pathways interoperability metrics are limited. The data sites submitted for January 1, 2024, through August 31, 2024, are preliminary and reflect

the sites' early stages of working together as well as differences in site size, service population, context, and call volume. Sites' documentation of challenges with reporting data for the metrics included technology and data field limitations that required them to manually sift through call data to compile the numbers. Although the evaluation included a series of cross-site calls to help sites identify data system changes needed to accurately report data for the metrics, sites struggled to simultaneously develop new partnerships and joint SOPs along with needed data system improvements during the pilot period. PSAPs' ability to report on the number of 911 calls that were behavioral health–related was especially affected by 911 call takers' limited assessment of behavioral health risk and fields that accurately captured the full range of non-emergency and emergency behavioral health situations they could encounter. This was not unexpected because the primary function of a 911 call taker is directing the appropriate first responders to emergencies, not assessing behavioral health risk.

D. Turning points in 911/988 interoperability

During interviews, participants described five activities that had a positive impact on PSAP and 988 collaboration and on the development of SOPs and data to track the implementation of call transfers. These activities prompted turning points in sites' development of 911/988 interoperability:

1. Conducting call center visits between 911 and 988 allowed call takers to learn firsthand how they respond to behavioral health calls, the technology used, and call documentation requirements. These visits strengthened their appreciation and respect for each other's work and accelerated their partnership.

2. Holding peer learning activities allowed sites to share their ideas and learn from each other. Sites enjoyed hearing about challenges other sites faced and the strategies they used to overcome challenges. Having access to real-world examples made interoperability seem feasible when sites were hesitant.

3. Discussing risk assessment helped PSAPs align interoperability with existing National Emergency Number Association standards by treating transfers to 988 the same way they treat transfers to other PSAPs. This allowed PSAPs to shift from thinking transfers to 988 were at odds with their existing procedures to seeing 988 as an additional resource to boost their 911 response.

4. Reviewing PSAP and 988 call log data prompted discussions about potential calls that 911 could transfer to 988. The data also revealed that very few 988 calls required transfers back to 911, which alleviated PSAPs' concerns about liability and expanded their thinking about call transfers.

5. Assessing current practices for identifying behavioral health–related 911 calls highlighted that options in 911 computer-aided dispatch systems limited how PSAPs thought about the types of calls that could be appropriately transferred to 988. This realization furthered discussions about assessing risk levels in behavioral health calls, revising emergency medical dispatch (EMD) protocols, and improving data systems to accurately record the full range of calls.

E. Key recommendations

The Crisis Response Pilot guided by the Clear Pathways strategy successfully facilitated significant advances in 911/988 interoperability in five sites in Ohio. However, given the early stages of interoperability, there are many opportunities to improve the strategy, scale up interoperability, and generate evidence for the field. Exhibit ES.1 shows the report's recommendations, which are based on participant responses; lessons learned while conducting the evaluation; and literature related to crisis lines.

Exhibit ES.1. Recommendations to advance interoperability efforts

Clear Pathways interoperability strategy	Scaling up 911/988 interoperability	Data collection and evaluation
• Provide continued support and accountability • Tailor support and interoperability goals • Prioritize peer learning and call center visits • Provide guidance on when and how to include other partners • Plan for a longer time frame to develop interoperability	• Advance interoperability through leadership approval • Expand funding and resources to support staff capacity • Prioritize technology investments • Improve behavioral health call identification by 911 staff, including revised EMD protocols for behavioral health assessment • Develop a behavioral health interoperability continuum	• Improve behavioral health call coding by 911 staff, including assessing existing nature codes and how they have been applied during calls • Expand interoperability metrics • Introduce metrics early to support the development and implementation of call transfers • Examine the effectiveness of difference types of transfers from 911 to 988 • Establish data linkages and enhance data collection across the crisis care continuum

EMD = emergency medical dispatch.

I. Introduction

A. Establishing 988 within the crisis care continuum

Rising rates of anxiety, depression, suicidality, substance use, and drug overdose deaths (Patrick et al. 2023; Goodwin et al. 2020; Kantor et al. 2015; U.S. Centers for Disease Control and Prevention [CDC] 2024; Ahmad et al. 2025) have highlighted the need to improve behavioral health services and the community safety net in the United States. In response, behavioral health crisis services have rapidly expanded in the United States since the publication of the National Guidelines for Behavioral Health Crisis Care (Substance Abuse and Mental Health Services Administration [SAMHSA] 2020) and Medicaid provisions in the American Rescue Plan Act of 2021 (Musumeci 2021). In addition, the 988 Suicide and Crisis Lifeline—the national behavioral health emergency hotline known as *988*—launched July 16, 2022. Although the national suicide prevention hotline was initiated in 2001,[1] 988 adds to the existing behavioral health services infrastructure by providing a universal three-digit number that is easy for people to remember so they can get access to the care they need regardless of whether it is an emergency. Since the rollout of 988, states and local partners have operationalized 988 and strengthened 988 linkages to other services and systems (Saunders 2024), including public safety answering points (PSAPs) that operate 911 call centers (Brooks Holliday et al. 2024).

Coordination between 988 and PSAPs creates an opportunity to connect individuals with trained behavioral health care providers so they can receive the appropriate level of care. Studies have shown that individuals often call 911 when they or a loved one experience a behavioral health emergency (Cantor et al. 2022), yet a survey of PSAPs highlighted that 911 call centers do not have adequate resources to address behavioral health crises and 911 dispatchers do not have adequate training to handle behavioral health emergencies (Pew Charitable Trusts 2021). The same survey found that even when 911 call centers had the option to dispatch law enforcement officers trained in crisis intervention to some calls, they often did not know whether the responding paramedics had crisis intervention training. In addition, less than half said they had a mobile crisis team available to support the response.

As a result of the limited training about behavioral health in emergency response, individuals experiencing a crisis have historically been subjected to punitive and short-term measures instead of receiving ongoing care and support. For instance, individuals with behavioral health conditions, especially individuals in marginalized groups or those experiencing an acute behavioral health crisis who come into contact with law enforcement, are at greater risk of arrest and incarceration (Pew Charitable Trusts 2023; Spolum et al. 2023). They are also at greater risk of having lethal and nonlethal force used against them (Morabito et al. 2017; Fuller et al. 2015; Laniyonu and Goff 2021). Even when responders connect individuals with emergency department (ED) services instead of criminal sanctions, studies have found that less than 16 percent of ED visits include an evaluation by a behavioral health professional (Bommersbach et al. 2024) and only about 2 percent of ED visits involved care from a behavioral health service provider (Cairns and Kang 2023), which puts individuals at risk of not getting the care they need. Furthermore, there are often limited discharge procedures and aftercare following hospitalization, which may lead to higher risk of

[1] The history of the 988 Suicide and Crisis Lifeline is described by the Substance Abuse and Mental Health Services Administration at https://www.samhsa.gov/sites/default/files/988-timeline.pdf. Accessed May 16, 2025.

suicidality, relapse, and unplanned readmissions (Chung et al. 2019; Marcus et al. 2017; Sfetcu et al. 2017), creating a costly, vicious cycle for individuals and the systems that serve them.

B. Description of the Clear Pathways Crisis Response Pilot

Clear Pathways, an initiative of Peg's Foundation, is "designed to sustainably align systems for improved care to individuals experiencing a behavioral health emergency. Clear Pathways catalyzes efforts throughout Ohio to build sustainable and scalable behavioral health emergency response systems that meet the needs of adults … to reduce the use of jails and emergency departments as the default response" (Clear Pathways n.d.). In 2022, Clear Pathways conducted a 911 call system assessment and 988 call center scan to support the scaling up of 988 implementation. At the time, a limited number of communities across the state had formal partnerships between 911 and 988 or other local behavioral health crisis lines, a finding mirrored in an Ohio crisis systems landscape analysis published in 2023.[2] Crisis lines often had protocols for contacting 911 in an emergency, but 911 rarely had protocols for contacting crisis lines or did so sparingly. Thus, Peg's Foundation identified an opportunity to advance interconnectedness between the two systems through a 911/988 interoperability strategy that would account for Ohio's diverse service, funding, and geographic landscape. Peg's Foundation invested in the Clear Pathways Crisis Response Pilot and invited counties to submit applications to participate as pilot sites.

What is interoperability?

Interoperability formalizes interconnectedness between systems that extends beyond simple coordination to include formal protocols, procedures, or agreements that allow for the transfer of calls between 911 and 988 (Brooks Holliday et al. 2024). ◢

The pilot started in fall 2023 and included five sites (Appendix A). The pilot operationalized Clear Pathways' 911 and 988 interoperability strategy, which is based on their previous work and the SAFECOM Interoperability Continuum (Clear Pathways 2025 and Cybersecurity and Infrastructure Security Agency 2021). The pilot focused on two components of the SAFECOM interoperability continuum: (1) establishing governance structures to allow 911 and 988 personnel to collaborate regularly and (2) developing joint policies and procedures between 911 and 988.

Clear Pathways worked closely with the pilot sites using tools and activities to support the development of interoperability strategies that meet the specific needs and circumstances of each site (Exhibit 1). Sites formed an interoperability work group as part of the pilot. Work groups comprised representatives from at least one 988 call center and one PSAP to which 911 calls are routed, along with representatives from their local alcohol, drug addiction, and mental health services (ADAMHS) board. Each ADAMHS board served as

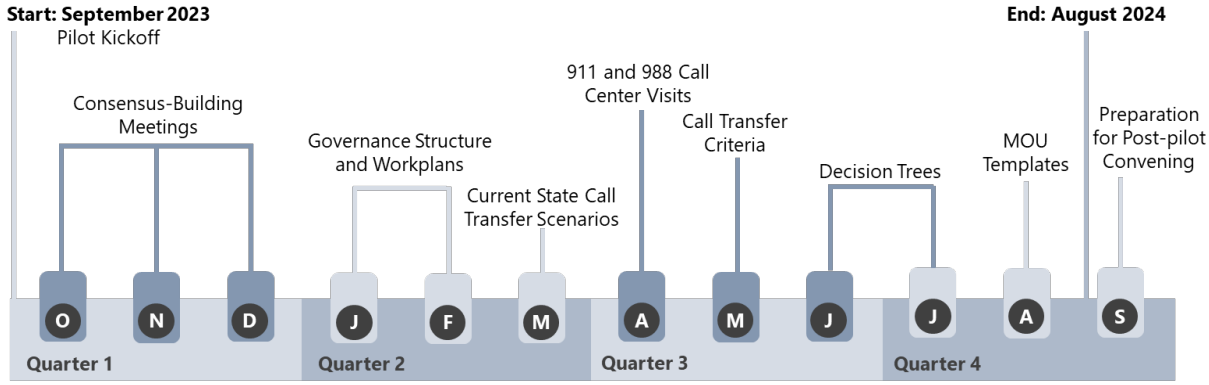
Partners in the pilot

- The Pew Charitable Trusts supported the Crisis Response Pilot with Peg's Foundation.
- Dignity Best Practices served as an implementation partner. This role included project planning, facilitating discussions, and developing worksheets and templates to support local planning efforts.
- Mathematica evaluated the pilot and provides research support on other Clear Pathways activities. ◢

[2] Ohio Department of Mental Health and Addiction Services. "Crisis Systems Landscape Analysis 2023." https://mha.ohio.gov/get-help/crisis-systems/landscape-analysis. Accessed October 8, 2024.

the convener for its respective pilot site and coordinated with the Clear Pathways team to incorporate the tools and activities into their work group meetings.

Exhibit 1. Timeline of Crisis Response Pilot activities



MOU = memorandum of understanding.

C. Road map for this report

This report synthesizes common themes and examples across sites involved in the Crisis Response Pilot. The chapters are not comprehensive descriptions of each site's interoperability efforts and progress, although we highlight some site-specific details that may be most interesting to readers.

- Chapter II provides a brief overview of the evaluation design and methods, including analysis, and a high-level description of the pilot sites.
- Chapter III discusses key findings related to the Clear Pathways work group strategy and the governance component of 911/988 interoperability.
- Chapter IV discusses key findings from the Clear Pathways strategy to develop 911/988 interoperability policies and procedures.
- Chapter V describes the call transfer metrics used in the evaluation and sites' ability to report on these metrics.
- Chapter VI summarizes key lessons learned from the pilot, including facilitators and barriers to 911/988 interoperability.
- Chapter VII concludes the report and offers recommendations to improve the Clear Pathways interoperability strategy, scale up interoperability efforts, and evaluate interoperability. The chapter describes the evaluation study's limitations.
- The appendices provide additional details about the pilot sites, evaluation methods, and interview protocols.

II. Evaluation Overview and Participating Sites

A. Evaluation design and methods

This is the first evaluation study of the Clear Pathways 911/988 interoperability strategy. Findings will inform state-level policy recommendations to encourage more effective coordination between call center systems. The purpose of the evaluation was twofold: (1) examine the progress that pilot sites made in establishing 911/988 interoperability during the pilot period and (2) assist sites in developing and implementing common metrics for quantifying 911/988 call transfers.

The evaluation aimed to answer three questions about the Clear Pathways interoperability strategy:

A. How does the Clear Pathways work group development strategy advance the governance component of interoperability?

B. How does the Clear Pathways policy and procedure development strategy advance the standard operating procedures (SOP) component of interoperability?

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

The evaluation used a multistage mixed methods design to answer the research questions. This type of design is common when evaluating the development and implementation of a strategy or intervention because each phase informs the next (Fetters et al. 2013). The use of multiple methods before (pre-pilot), during, and after the pilot (post-pilot) allowed the evaluation to inform the interoperability strategy and development of metrics for 911/988 call transfers and conduct a comprehensive assessment of the strategy's influence on interoperability within participating sites. Each method is listed below:

1. Interoperability interviews with PSAPs, 988s, and ADAMHS boards involved in each site's work group

2. Review of SOPs, governance documents, completed Clear Pathways templates, and minutes from work group meetings

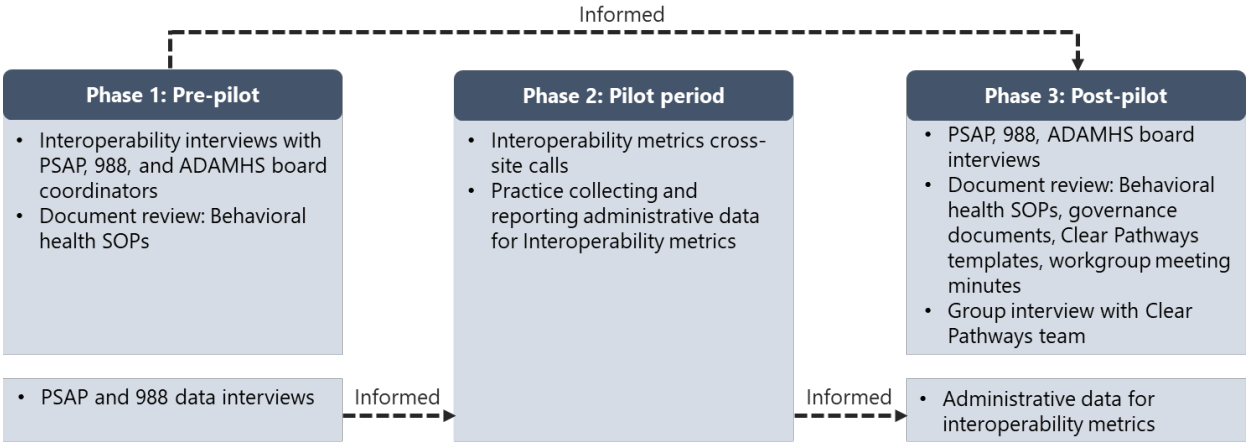
3. Administrative data for the interoperability metrics collected and entered into an Excel workbook by each site[3]

4. Group interview with the Clear Pathways pilot implementation team

Exhibit 2 shows when the evaluation team collected the data and how they were used.

[3] To inform the interoperability metrics, the evaluation team conducted pre-pilot interviews with PSAP and 988 staff who were most familiar with their internal data systems. Their responses informed the development of the metrics and a series of cross-site calls to prepare sites for using their administrative data to report on the metrics. The details of that process are not discussed in this report but may be included a future Clear Pathways product.

Exhibit 2. Multistage mixed methods design used in the evaluation



We analyzed data upon completion of each round of data collection. Using pre- and post-pilot interview data, we developed site-specific summaries to analyze similarities and differences across sites. The Clear Pathways implementation team also used the site-specific summaries developed at the start of the project to support their initiation of consensus discussions with the pilot sites. To support reviewing documents, we developed protocols to summarize their key components and examined similarities and differences across sites. We triangulated these data with interview data to provide a comprehensive understanding of the evaluation's research questions. During the pilot, we analyzed metrics data and documentation of data collection efforts the sites provided during a series of practice rounds called "road tests." The road tests allowed sites to identify and troubleshoot challenges with collecting or reporting the data needed for the metrics. This report includes post-pilot findings, including the final data and documentation submitted by sites upon completion of the pilot.

Appendix A provides additional details about the data collection methods. Appendix B provides copies of the interview discussion guides.

B. Participating sites

The five sites that participated in the pilot represented Ohio's diverse landscape by including a range of service areas, locales, and population sizes and characteristics (Appendix A). The sites varied in the extent of previous PSAP and 988 collaboration—most had little to no prior collaboration with each other—and collaboration with other community partners. At four pilot sites, there was just one 988, one PSAP, and the ADAMHS board for the county. At one pilot site, there were the primary 988, backup 988, three PSAPs, and the ADAMHS board. Although the exact titles of participants varied across the sites, representatives typically included PSAP directors, 988 directors, and the ADAMHS board executive or clinical services directors. Appendix A describes the pilot sites and the characteristics of the counties represented by the pilot sites.

III. Work Group Development as a Strategy to Advance Interoperability Governance

This chapter describes the implementation of the Clear Pathways work group development strategy and how it advanced governance between PSAPs and 988s. It includes findings about concrete aspects of governance, such as work group membership and the development of formal agreements, and changes in collaboration between the entities.

A. Work group members and operations

Along with the PSAP directors, 988 directors, and the ADAMHS board executive or clinical services directors, work groups sometimes included other individuals in their operations. For instance, PSAPs and 988s sometimes included the 988 coordinator or supervisor that worked directly with frontline staff and managed day-to-day operations. ADAMHS boards frequently involved a range of staff who were involved in different aspects of behavioral health system coordination and collaboration, although the participation of these staff frequently varied over time.

Sites differed in whether they involved other community partners in their work group. Participants understood the value of involving partners, but most participants were uncertain about when and how to involve others because the detailed work for developing call transfers primarily involves the PSAP and 988. Two sites involved community organizations that had staff with behavioral health lived experience, but their involvement waned over time because the PSAP and 988 ultimately had to determine the procedures for 911/988 call transfers. Another site involved a mobile crisis team organization and said this perspective was particularly helpful for understanding potential call transfer dispositions, but the interviewees noted that decisions about call transfers were determined by the PSAP and 988. In addition to involving people with lived experience and mobile crisis staff, sites thought it might be useful to involve first responders, crisis stabilization staff, 911 and 988 call takers, and information technology (IT) staff in the early stages to inform SOP development or at a later stage to review draft SOPs. Either way, they did not think these individuals needed to be involved in detailed SOP discussions within the work group.

Clear Pathways conducted monthly virtual meetings with the work groups where they primarily facilitated these meetings using the tools and templates developed for the pilot. ADAMHS board members served as conveners and helped with scheduling, coordination, and preparing work group meeting agendas. Participants said the work group structure promoted accountability among the partners and progress toward their goals, but they still believed their site could move at its own pace. Some sites communicated via email or held additional one-on-one meetings outside of work group meetings. They thought these meetings were less formal and helped deepen the relationship between the PSAP and 988.

Overall, participants thought the roles and responsibilities of work group members were clear, but sometimes members experienced uncertainty. For example, participants in a couple of sites said they were sometimes unclear about next steps and action items resulting from meeting discussions. This uncertainty sometimes slowed down the group's progress because members did not follow up on tasks between meetings.

"I think people understood their role, the 988 versus 911. The responsibilities part, I think, was not as clear …. I almost wonder if it's because there are so many people on the [virtual meeting] screen that it seems like lots of other people to do stuff, [but] it really comes down to the PSAP and the crisis line … really the work is just two people, and needing those two people to sit down and hammer it out."

~ ADAMHS board participant

B. PSAP and 988 collaboration

Across the sites, participants said that PSAP and 988 collaboration evolved as they engaged in work group activities and other discussions that revealed the philosophies, operations, and intentions of each entity. In the beginning stages, the entities were hesitant about working together because of competing priorities and different philosophical approaches to behavioral health crisis response. For instance, PSAP participants stated that they need to prioritize first responder and overall community safety, whereas 988 participants said they prioritize confidentiality and the needs of the individual caller. PSAPs' acute concerns about liability of call transfers and the political implications if something goes wrong contributed a great deal to their hesitation at the start of the pilot. Some PSAP participants said they questioned in the beginning whether interoperability was possible between the two agencies because they did not think they could ever justify transferring a call to another agency.

Participants in every site said that the structured activities and tools provided by Clear Pathways helped them overcome initial hesitation by engaging them in conversations to learn more about each other's operating context, roles, and responsibilities. They thought these conversations promoted transparency, helped them find common ground, and fostered trust in each other's intentions and expertise, which provided an important foundation for collaboration between PSAPs and 988s so they could jointly develop call transfer SOPs. Participants described two pilot activities in particular that sparked a collaboration turning point by reducing their hesitation about liability and expanding their thinking about how to work together: call center visits and peer learning opportunities.

Turning point #1: Call center visits

In each site, 911 and 988 call takers visited each other to learn firsthand how calls are handled, the technology used, and call documentation requirements. Participants repeatedly stated that these visits expanded their understanding and appreciation of each other's skill sets and fostered mutual respect among agency staff. Several participants said they wished they had conducted the visits earlier in the pilot because it created a shift that accelerated their work together. One PSAP participant's comments summarized the experience of many participants:

"The light bulb went off when [988] was talking about how the call flow works: what happens when your phone rings? What do your people say? What do they do? What kind of questions do they ask? And I went through my emergency medical dispatching book and copied the page that [911 call takers] are supposed to use, and I sent that off [to 988]. And so, we were talking about the similarities and differences between the way that we answered the call in 911 and the questions we asked, versus what 988 does …."

Turning point #2: Peer learning activities

Most participants valued learning from other pilot sites about the interoperability challenges they faced and the strategies they used to overcome them. Sometimes Clear Pathways provided examples from other sites during work group meetings, and other times sites reached out to one another, or another non-pilot site, to learn from them. Participants said that having real-world examples helped them see that interoperability is possible and that it can be tailored to their unique setting. One PSAP participant's comments summarized this common turning point across sites:

"[Our] ability to figure this out started out very slowly, and it wasn't until we started meeting jointly with the other counties and we started hearing ideas from people that were maybe a little further along in this process than we were. That made a significant difference."

By the end of the pilot, PSAPs and 988s thought they had established momentum in their work together and they wanted to continue their efforts after the pilot. Most participants said Clear Pathways helped their site break interoperability goals into actionable steps and held them accountable for making progress on goals. Although many participants said their site had not gotten as far in their interoperability efforts as they had hoped, they did not think they would have gotten this far without the work group structure and activities facilitated by Clear Pathways. The progress they made on goals contributed to their confidence that they could collaborate and overcome call transfer challenges. A few sites said they were also looking ahead to how they could involve other community partners after they got through the initial stages of development and decision making.

C. Decision making and formal agreements

Participants primarily used consensus decision making rather than formal decision-making practices within their work groups. They reached consensus by talking through current PSAP and 988 policies and procedures and by debating the pros and cons of different call transfer strategies. The Clear Pathways tools, templates, and meeting facilitation made these discussions possible and moved sites toward decisions about call transfer procedures.

Consensus decision making

Consensus decision making is a group process that helps teams make efficient decisions and reduce unintended consequences. The process is built on several key principles that help decision makers feel united, cohesive, and valued (Harnett 2011):

- Participation and inclusion
- Open mindedness and empathy
- Collaboration and shared ownership

Participants in a few sites appreciated having agency leaders, including program directors, involved as members of the work group because leadership facilitated decision making and progress toward their interoperability goals. These leaders also had a deep understanding of existing agency policies and procedures, which improved the work group's ability to discuss them in detail and determine how to administer new SOPs for call transfers. Participants in two sites also noted that it was especially helpful when leaders had experience working on the front lines because they could consider new SOPs from the lenses of both executive leadership and staff responsible for implementation. Staff in leadership positions are also more familiar with internal processes for seeking approvals and can help expedite the process.

Participants in several sites noted that memoranda of understanding (MOUs) and SOPs would have to be approved by PSAP and 988 agency leadership and county government officials.

Because Clear Pathways discussed MOUs with sites toward the end of the pilot, none of the five sites had fully executed MOUs between 988s and PSAPs when the pilot concluded. During interviews, four sites reported that their MOUs were under development. The fifth did not have an MOU underway despite having already implemented call transfers; however, staff thought they should develop one to ensure the partnership continues regardless of which staff are involved. Three PSAPs noted that they need the MOU in place before they can finalize the details of call transfer SOPs in their sites. Two sites said it would have been better to have the MOU discussion earlier in the work group activities to expedite development and implementation of call transfer SOPs, particularly because MOU approval processes varied across sites, with some being more complex or lengthy than others.

IV. Policy and Procedure Development to Accelerate Call Transfer Implementation

This chapter describes sites' progress during the pilot toward developing SOPs for 911/988 call transfers, including descriptions of their discussions on risk assessment criteria, call types appropriate for transfer, and planned transfer procedures. The Clear Pathways strategy guided sites through the flow of a behavioral health call, with an emphasis on calls originating from 911, and facilitated discussion of each agency's procedures during each step of the call: initiation, processing, transfer, and additional response (including in-person dispatch when necessary). At the end of the chapter, we provide a visual summary of common features across sites for each step in the call flow.

A. Summary of site progress along the SOP continuum

At the start of the pilot, all participating agencies had internal procedures for responding to behavioral health crisis situations, but only one site was conducting call transfers from 911 to 988 governed by a joint SOP. Participating PSAPs at three of the five sites had informal procedures for transferring non-emergency behavioral health–related calls to local resources predating 988, such as hotlines, warmlines, or mobile response units. In many cases, the current 988 provider had an existing relationship with the PSAP because they were also the provider for these other resources.

At the end of the pilot, all sites were developing or updating procedures for transferring calls from 911 to 988, and most had agreed on the types of calls eligible for transfer and the types of transfers call takers could choose from depending on the situation. Two sites were actively transferring calls at the end of the pilot: one used an automated after-hours phone tree option to extend availability outside of an existing 911-mobile crisis strategy, and one was already transferring calls pre-pilot. Two sites were planning to begin transfers shortly after finalizing their MOUs and internal SOP updates. One site was still working on making final decisions about its joint procedure plans. Vibrant policy documents and National Emergency Number Association (NENA) standards include procedures that all 988s follow for contacting 911 and requesting active rescue when needed, and these did not change because of the pilot.

All sites recognized the importance of maintaining documentation of the procedures developed collaboratively during the pilot. Most sites opted to update their individual agency SOPs with jointly developed procedures rather than draft joint SOPs. Because of the emphasis on transfers from 911 to 988, PSAPs generally needed to make more extensive changes to their SOPs to reflect the new option to transfer to 988, whereas 988 SOPs generally stayed the same. Some planned PSAP SOP updates were minimal, such as changing the referral number listed in the manual from a 1-800 hotline to 988, but others required more expansive procedural changes and staff training.

As described in Chapter III, most sites were working to formalize the 911/988 relationship by drafting MOUs and expected to have them signed by the end of 2024. Some of these sites were starting to draft SOPs while the MOUs were being signed so they could begin transfers soon after, whereas other sites were not going to draft SOPs until after MOU approval. Four sites said that the next step in developing their joint procedures would be to bring in first responders and mobile crisis to share their decisions on

911/988 interoperability and ensure 911 call takers understand how and when to use each resource. Exhibit 3 compares pre-pilot and post-pilot SOP development and call transfers.

Exhibit 3. Overview of sites' SOP development and call transfer progress

Pilot site	Pre-pilot			Post-pilot		
	911/988 call transfers documented in SOP	911/988 agreement on call transfer criteria	911/988 conducting call transfers	911/988 call transfers documented in SOP	911/988 agreement on call transfer criteria	911/988 conducting call transfers
Site 1	No	No	No—BH calls sent to MCT	In progress	Yes	Yes—after MCT hours only[a]
Site 2	Yes	Yes	Yes	Updating	Yes—expanded	Yes—expanded
Site 3	No	No	No	In progress	Yes	No—will begin after MOU is signed
Site 4	No	Somewhat[b]	Sometimes (informally)	In progress	In progress	No formal transfers yet—still finalizing some transfer decisions
Site 5	No	Somewhat[b]	Sometimes (informally)	In progress	Yes	No formal transfers yet—will begin after SOP updates

[a] The MCT in this county provides crisis support from social workers and licensed clinicians during weekday hours; during evenings and weekends, there is no mobile crisis response available. When callers call the 911 non-emergency line during hours when the MCT is not operating, they will be prompted to press a number if they wish their call to be transferred to 988.

[b] "Somewhat" indicates there was some work done on a certain element.

BH = behavioral health; MCT = mobile crisis team; MOU = memorandum of understanding; SOP = standard operating procedures.

By the end of the pilot, every site had created at least a preliminary decision tree as an outline of their SOPs for assessing risk in 911 behavioral health calls, identifying calls for transfer, and transferring calls to 988 or other emergency responders. Participants in all sites emphasized the significance of creating a decision tree to guide SOPs and attributed their progress to the tools and discussions facilitated by the Clear Pathways team. The sections that follow describe critical discussions among members of the work groups for each step in behavioral health call flows.

Decision trees

The Clear Pathways interoperability strategy uses decision trees to map out process steps, decision points, and the sequential flow of actions to provide a structured approach to decision making and implementation of call transfers. Other tools and activities, such as call scenarios and criteria for eligible calls, helped inform the development of the decision trees. Most PSAPs were planning to incorporate their decision tree graphics into their written behavioral health SOPs. An example decision tree is provided in Appendix C. ◢

B. Call initiation: Risk assessment criteria

At the end of the pilot, all sites had documented their planned approach to 911 risk assessment as a starting point for processing and transferring calls to 988, but three sites were still discussing exactly how

risk assessment would be implemented during call transfers. Sites indicated that the tools and activities used in the Clear Pathways interoperability strategy prompted critical discussions about how 911 and 988 define commonly used terms slightly differently, and these definitions have important implications for how they each respond to crisis calls. A few terms were discussed in detail as part of assessing risk in behavioral health calls so the sites could come to an agreement about which calls to transfer. These terms included suicidal risk, potential weapons, harm, and first- and second-party callers.

When discussing a caller's level of risk for suicidal acts, PSAPs use the term "method" to describe how the person in crisis has decided they will make a suicide attempt and "plan" to describe that the caller has everything they need to carry out their attempt. 988s used the terms "means" and "plan" to differentiate between the materials required for the type of attempt they are contemplating and the caller's specific decisions about when, where, and how to carry out the attempt. As a result of these discussions, Clear Pathways facilitators noted that PSAPs and 988s were using the term "suicidal plan" to mean slightly different things and worked to clarify these definitions across sites.

Similarly, PSAPs and 988s defined "weapon" or "means" differently. PSAPs considered weapons to be anything that could cause harm to a caller or another person, such as a moving car or a gun locked up in a case, and did not usually use the term "means." 988s considered anything that could be used in a suicide attempt, such as a bottle of pills, to be a potential means and a threat to the caller, but they only used the term "weapon" for objects associated with violence such as guns and knives.

"Say I'm somebody driving around in a car, and I say I want to kill myself. A 988 person will say, 'Do you have any weapons?' And [the caller] will say, 'No.' A 911 person will say, 'Yes, you do—it's called the 2,000-pound car that you're driving.'"

~ PSAP participant

PSAPs and 988s both distinguished between first-party callers (people calling on their own behalf) and second-party callers (people calling on behalf of someone else) but had different ways of defining the relationship between the caller and person in crisis. 988s defined second-party callers relationally, as in someone emotionally close to the caller, such as a friend or loved one. However, PSAPs defined second-party callers by proximity, as in someone in the same physical location as the caller, also referred to as a "complainant." Participants reported that it was important for them to distinguish between these two definitions because their differences affected how 911 might assess danger and could limit the calls eligible for transfer to 988.

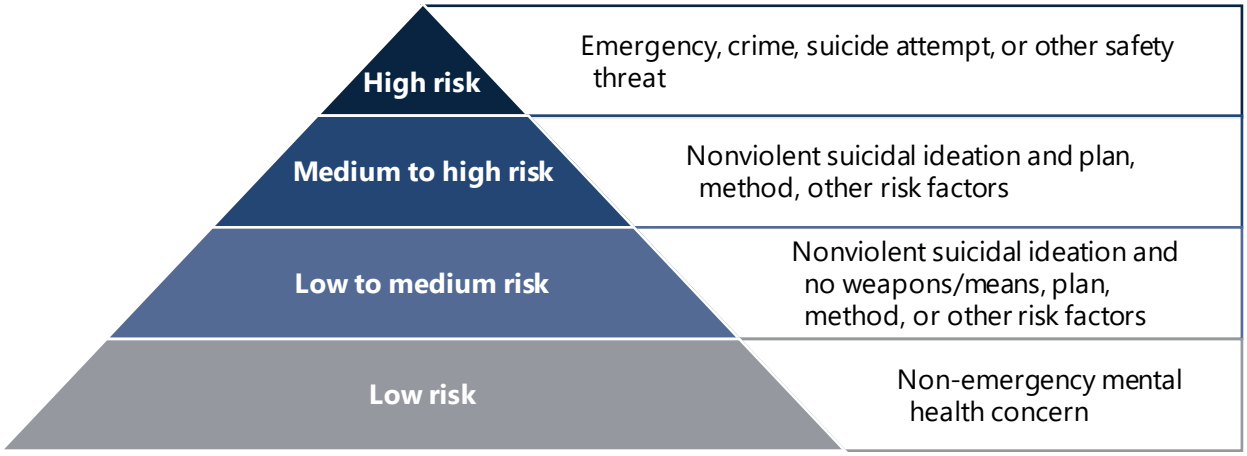
Sites arrived at similar criteria for behavioral health call risk assessment, which included assessing the caller's suicidality, danger, location, and service request. Suicidality assessment (also called "lethality assessment" by some sites) included questions about the caller's suicidal intent, means, and plan and whether an attempt was already in progress. Callers with suicidal ideation but no means or plan were considered lower risk and potentially eligible for transfer to 988. PSAPs were generally unwilling to transfer calls when a weapon was present or when the call taker perceived there was a high risk for violence or injury. 911 call takers considered several factors in determining the level of danger a call presented, including the caller's history of violence (if known and documented in the computer-aided

dispatch [CAD] system) and their current situation and behaviors, including the level of aggression, agitation, or substance use.

911 call takers prioritize the safety of first responders, the general public, and the caller themselves, so they considered factors that increase the risk for any of those people while assessing the level of risk for each call. For example, their location assessment included questions about whether the caller was near other people or in a public or potentially dangerous location such as a bridge or highway. They also consider whether suicidal callers have the potential to commit homicidal or violent acts against others as well as themselves: 911 call takers were unwilling to transfer calls to 988 if there was a public safety risk, such as someone calling from their employer's parking lot after recently being fired or let go. Finally, the risk assessments described by sites consider the caller's reason for calling and whether they requested any specific services. Many callers explicitly ask for police or other emergency response, so PSAPs planned to honor the caller's request for dispatch and were receptive to 988's approach to obtaining caller consent prior to transferring the call to 988. Exhibit 4 shows the risk levels described by participants.

> *"Whenever a 911 call taker is taking a call, our first three priorities are, one, the life and safety of the officer or the firefighters and medics that are responding in the scene; two, is the safety of the general public; and three is when you start getting to the caller. 988 is primarily concerned with the individual who's calling, so we look at it 180 degrees different than each other from that perspective."*
>
> ~ PSAP participant

Exhibit 4. Risk levels described by participants



Turning point #3: Alignment with existing standards

The risk assessment discussion represented a shift for PSAPs, who use NENA standards to categorize all calls as either non-emergency; emergency dispatch (police, fire, or medical); or transfer to another PSAP (9-1-1 Call Processing Working Group 2020). Before the pilot, PSAPs used standardized protocols to determine the correct response to each 911 call and were not sure how 988 transfers would align with their existing requirements. During the pilot, a few PSAP participants recognized that their current protocols included options like transferring to other PSAPs and transferring non-emergency calls to other resources like 211, so they could use these existing options as a starting point for establishing 988 transfer protocols.

C. Call processing: Types of calls eligible for transfer

At the beginning of the pilot, PSAPs and 988s generally agreed on how to respond to high- and low-risk calls, but they expressed uncertainty about whether calls with an intermediate amount of risk should be eligible for transfer from 911 to 988. During the pilot, all sites progressed in describing the components of calls with intermediate risk and developing specific procedures for addressing these calls. Clear Pathways guided these discussions by walking each site through several hypothetical call scenarios and asking each entity to provide detail on how it currently handles specific situations. PSAPs and 988s also shared call log data, which provided an important turning point in their discussions about eligible calls. Participants were able to ask questions about how each entity approaches behavioral health calls and discuss the types of calls they would feel more comfortable addressing within their agency versus transferring them.

Turning point #4: Reviewing call data

PSAPs and 988s pulled call log data for one month and reviewed the data together. These data facilitated critical discussions about potential calls that 911 could transfer to 988 and highlighted that very few 988 calls require transfers to 911. This result greatly alleviated PSAPs' concerns about liability and expanded their thinking about how to approach call transfers. One PSAP participant noted that this process supported their decisions about the types of calls to transfer:

"We landed on calls that would be appropriate for 988, and they were calls that didn't involve violence or weapons or medical issues [and] calls where somebody wasn't explicitly asking for the police. It was more of the types of calls where somebody's feeling upset but not suicidal or maybe somebody just wants to talk. I don't want to say calls we shouldn't be taking, but people call us because we answer the phone, and some calls we could outsource to the more appropriate entity."

988s were mostly willing to accept any calls that PSAPs were comfortable transferring and were not high risk. PSAPs were generally willing to transfer calls they perceived as having a low risk for violence, danger, or public safety concerns as determined by the risk assessment criteria described in the previous section. Sites largely agreed that low-risk callers were eligible for transfer to 988; these would include callers requesting behavioral health clinicians or social services or who "just want to talk." Before the pilot, most participants agreed that these calls usually did not require emergency dispatch.

Sites also generally agreed, at least in principle, that first-party callers expressing suicidal ideation who were assessed by the 911 call taker as nonviolent and not currently in danger or displaying an imminent risk of danger to themselves or others were eligible for transfer to 988. A few sites specified that the caller could have two out of three suicidal risk factors (intent, means, method or plan) and still be transferred to

988. Most sites were comfortable with the idea of transferring second-party callers who are calling on behalf of someone else if they were in the same physical location as the person experiencing a crisis, knew the details of the person in crisis's suicidal thoughts or plans, or were a legal parent/guardian of a minor.

Exhibit 5 outlines the call transfer and emergency response options that pilot sites considered for their SOPs by different levels of risk.

Exhibit 5. Typical SOP call transfer and emergency response options, by risk level

Risk level	Call transfer	Dispatch response	Response type preferences
High risk: Emergency, crime, suicide attempt, or other safety threat	988 to 911	Immediate emergency dispatch	**1.** Dispatch LE, EMS, fire **2.** LE co-response with alternative response team, if available
Medium to high risk: Nonviolent suicidal ideation and plan, method, other risk factors	911 and 988 coordination	Emergency dispatch at 911's discretion 911 and 988 may both stay on the call until in-person response arrives on scene	**1.** 988 takes the lead on de-escalation, safety planning, and building rapport **2.** 911 stays on the line and monitors for signs of escalation **3.** 911 may initiate emergency dispatch if they determine there is a risk of an emergency, crime, or other threat to public safety
Low to medium risk: Nonviolent suicidal ideation and no weapons, means, plan, method, or other risk factors	911 to 988	Emergency dispatch at 911's discretion Dispatch usually not needed	**1.** 988 takes the lead on de-escalation, safety planning, and building rapport **2.** 911 can stay on the line to assess whether the situation changes, or disconnect if they determine there is no emergency, crime, or threat to public safety
Low risk: Non-emergency mental health concern	911 to 988	Dispatch usually not needed	**1.** Safety planning and community referral **2.** LE involvement only if call taker learns of a crime or a safety issue

Note: EMS = emergency medical services; LE = law enforcement.

D. Call transfer: 911 to 988

According to NENA (2025), "warm transfers are a recognized best practice of both 9-1-1 and 988," and they occur "when one employee answers a call and then transfers the call to a different employee or location and passes on any relevant information so that the caller doesn't have to repeat themselves."[4] In alignment with this standard, Clear Pathways' strategy aims to facilitate warm transfers from 911 to 988. Recognizing that not all calls are appropriate for transfer, and that local systems are at different stages of readiness, sites involved in the pilot described four methods for 911 to engage 988 (warm transfer, three-way conference, co-notification, and notification [Exhibit 6]). Only warm transfers and three-way conference calls do not start with a first responder dispatch.

[4] "Warm handoff" is the term commonly used in behavioral health systems when individuals are connected to other service providers. We use the NENA "warm transfers" language throughout this report since the focus of the pilot was primarily on 911 transfers to 988.

1. **Warm transfer.** 911 conducts a risk assessment and requests the caller's permission to transfer their call to 988. If the caller agrees, 911 brings a 988 call taker onto the line, introduces them to the caller, and then disconnects from the call.
2. **Three-way conference call.** 911 begins with the same risk assessment and permission process, but both 911 and 988 call takers stay on the line to coordinate their response to the caller.
3. **Co-notification:** The 911 call taker dispatches an in-person response while 988 provides de-escalation and safety planning support until the first responders arrive on scene.
4. **Notification.** The 911 call taker dispatches an in-person response and tells 988 but does not bring them on the call directly.

Most sites planned to conduct warm transfers or three-way conferencing for low-risk calls. However, they retained the option of elevating a call to a higher level of coordination if the situation warrants it. For example, in a site where warm transfers are the priority, 911 call takers would have the option to do a three-way conference to monitor an uncertain situation for signs of escalation and step in to initiate emergency response if the situation becomes riskier. A site using three-way conference calls could decide to use co-notification if the caller's situation escalates and requires first responder assistance.

PSAPs differed in their tolerance for transferring calls with an intermediate level of risk, such as those with callers expressing suicidal ideation and a vague plan but with no weapons present. A few sites were considering using three-way conference calls to allow 911 and 988 call takers to coordinate their response. Three-way conference calls allow the 911 call taker to hear how the conversation progresses with 988 and intervene, if necessary, based on their own agency's risk criteria. Other PSAPs were more concerned about their liability if the call escalated after transfer to 988 and were only comfortable with involving 988 for the lowest risk calls, such as requests for behavioral health referrals.

"[We discussed] keeping the 911 person on the call until they're comfortable with the risk, and similarly, until we know that the police are on the way. We always do that; try to keep them on the phone until help arrives. But the three-way call, keeping the 911 dispatcher on the phone until they're comfortable, that's fine with us because it's just an added layer of security: I don't actually have to hang up and call you if this goes wrong. [911 is] right there. Those are the medium risk ones. The lowest risk ones, they're just like, 'No I don't want an officer out here, but I need to talk to somebody cause I'm feeling this way,' then [911 is] just going to transfer those ones over."

~ 988 participant

During the pilot, one site added a "transfer to 988" option to their non-emergency line's phone tree to initiate the transfer electronically without the caller needing to speak with 911 directly. Callers who contact the site's 911 non-emergency line during hours when the site's mobile crisis unit is not operating (evenings and weekends) are prompted with the option to press a number and be automatically transferred to 988. This option allows the caller instead of the 911 call taker to decide whether they think

988 could help in their situation. Because this site already had a mobile crisis unit responding to behavioral health–related calls during weekdays, it did not want to create new call transfer procedures for 988 without considering how to integrate them with existing mobile crisis procedures.

In addition to direct transfers and co-notifications, some sites planned to notify each other asynchronously about behavioral health calls that may be relevant to the other agency's work without bringing them on the call directly. Some 988s already notify 911 when they send a mobile crisis team to respond to a caller so 911 is aware of the situation. Some PSAPs planned to deploy a similar approach for 911 callers that did not want to be transferred or calls for which police and emergency medical services were dispatched. These PSAPs thought it was important to notify 988 in case the individual calls 988 later.

E. Additional response: Options for in-person response, transfer, and referrals

Existing PSAP and 988 procedures allow call takers to initiate follow-up responses to calls, including in-person responses for behavioral health emergencies. Emergency responses may include first responders dispatched by 911 or a mobile response unit requested by 911 or 988. Other responses could include referrals or transfers to ongoing services, such as outpatient behavioral health treatment. 988 participants noted that direct transfers to behavioral health services are typically only possible within their agency, whereas connecting callers to other service providers usually occurs through a referral for which the caller must follow up. 988 often conducts follow-up calls with callers referred to other services within 24 to 48 hours of the original call.

Because both PSAPs and 988s have options to call in an additional response, this aspect of call flows was not discussed in great detail during the pilot. However, participants understood the importance of involving other community partners that provide these services in their discussions and planned to do so after the pilot period ended. A few participants also noted police and other first responders needed greater awareness of other resources such as mobile response units to lessen their reliance on emergency departments for care or to deter potential arrests of people experiencing a crisis.

Exhibit 6. Summary of common features of sites' call flows

Initiation	**Risk assessment** • Assess caller's suicidal intent, means, method, and plan • Determine presence of weapons, violence, danger, or medical emergency • Assess caller's service type request—do they want an in-person response or referral? • Ask for caller's consent to transfer to 988
Processing	**Identify 911 behavioral health calls eligible for transfer to 988** **Low-risk calls** • Low-risk wellness checks, frequent callers, someone who just wants to talk • Callers requesting clinical referrals or behavioral health resources **Medium-risk calls** • Non-violent, first-party caller with suicidal ideation • Non-violent, second-party calling on behalf of someone with suicidal ideation
Transfer	**Methods for 911 to engage 988** • **Warm transfer:** 911 brings 988 call taker into the 911 call, stays on the line to introduce 988 and caller, and then 911 disconnects from the call • **Three-way conference:** 911 brings 988 call taker into the 911 call and stays on the line to monitor for escalation while 988 call taker engages caller • **Co-notification:** 911 dispatches first responder and conferences in 988 call taker to help de-escalate the caller while first responder is on the way • **Notification:** 911 receives a call with "mental health nexus" and notifies 988 so they are aware but does not bring them on the call directly (988 may also notify 911)
Additional response	**Additional follow-up options—not available in every jurisdiction** • Mobile crisis dispatch, if available • Mobile crisis unit co-response with police/first responders, if available • Normal 911 dispatch of police/fire/EMS response, if needed • Treatment referrals and 988 follow-up calls within 24 to 48 hours

V. Interoperability Metrics to Improve Call Transfers

This chapter describes findings from the interoperability metrics developed for the Crisis Response Pilot evaluation. The metrics align with the call steps described in the previous chapter. First, we present the data for each metric as reported by each PSAP and 988. We then describe sites' successes and challenges collecting and reporting data for the metrics.

A. Metrics data reported by sites

Most sites spent the full pilot period developing their 911/988 interoperability plans and did not start implementing call transfers by the end of the pilot. The data reported by sites reflect this early stage of working together as well as differences in site size, service population, and context, which all contributed to the differences in their call volume and data systems. The data reported by sites were preliminary and should not be used to compare sites. The following tables display the metrics and data reported for January 1 through August 31, 2024, by PSAPs (Exhibit 7) and 988s (Exhibit 8).

We asked both PSAPs and 988s to report on two complementary metrics that apply to both of them: (1) 911 calls transferred to 988 and (2) 911 calls transferred to 988 that 988 transferred back to 911. Collecting the number of 911–988 transfers reported by PSAPs and 988s allowed sites to compare the number of transfers to total calls received by each agency and identify whether calls were being dropped during transfer. In two sites (Site 2 and Site 5), the number of calls PSAPs reported transferring to 988 differed from the number of calls 988 reported receiving through transfer from 911. Although we do not know the reasons for the discrepancies in these particular cases, higher numbers reported by the PSAP could occur because of incomplete transfers or other disruptions (such as the caller dropping off), calls that were transferred to a different 988 or crisis service, or calls that were not identified as transfers from 911 by the receiving 988. Higher numbers reported by the 988 relative to the PSAP could occur if the 988 accepted transfers from multiple PSAPs in its service area.

Exhibit 7. Number (percentage) of calls reported by PSAPs

	Site 1	Site 2	Site 3	Site 4	Site 5
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

NA = not available.

Exhibit 8. Number (percentage) of calls reported by 988s

	Site 1[a]	Site 2	Site 3	Site 4	Site 5
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[b]	0	0	0	0	0

[a] Site included a primary and backup 988. Data are only reported for the primary 988.

[b] 988s assisted with the development of specific categories of referrals or transfers to other services (for example, referrals to behavioral health outpatient services and transfers to mobile crisis). Given the early stages of 911/988 interoperability in the pilot, very few data were reported by sites for these metrics, and they are not included in the table.

B. Sites' documentation of metrics reporting capabilities

The Crisis Response Pilot evaluation included four cross-site calls and practice data collection to prepare sites for data reporting during the pilot period and beyond. The Excel workbook for interoperability metrics that PSAPs and 988s completed included questions to document challenges, successes, and needs related to collecting data for and reporting on the metrics. The documentation helped them identify changes needed in their data systems and reporting processes as their interoperability efforts evolve, and it provided context for the evaluation findings. Although these tools and activities intended to help sites identify data system changes needed for accurate reporting of data for the metrics, sites struggled to simultaneously develop new partnerships and joint SOPs along with data system improvements during the pilot period.

Across sites, the most challenging metric was "911 calls that are behavioral health–related," which is associated with the processing call step (Exhibit 9). PSAPs reported that they had to manually review call data to identify the full range of behavioral health–related calls because their existing call taker protocols were generally limited to the highest risk calls, such as someone needing active rescue or having plans to harm themselves or others. As sites discussed procedures to assess and differentiate risk levels to identify appropriate 911 calls to transfer to 988, they also discussed the need to accurately capture data on these calls so they could monitor their interoperability efforts over time. These discussions contributed to an important turning point in how the PSAPs and 988s viewed their work together and the use of data in their interoperability efforts.

Exhibit 9. Degree of difficulty reporting metrics for each call flow step

Call flow step	Metrics included[a]	Degree of difficulty
Initiation	• 911 calls received • 988 calls received	PSAP and 988 data systems already track these calls, and these data were easy for the agencies to report.
Processing	• 911 calls that are behavioral health–related	PSAPs said it was difficult to identify behavioral health–related calls in their existing data collection systems.
Transfer	• 911 calls transferred to 988 • 911 calls transferred to 988 that 988 resolved • 911 calls transferred to 988 that 988 transferred back to 911	PSAPs and 988s made some minor changes to their data collection systems to track these. Some sites manually identified call transfers within their data files, which was more time consuming for data staff.
Additional response	• 988 calls received from 911 that 988 referred or transferred elsewhere	988s are able to track these data with no or minor changes to their data collection systems.

[a] The overlapping PSAP and 988 metrics have been consolidated in this table.

Turning point #5: Identifying behavioral health–related 911 calls

During work group discussions, PSAPs discovered a disconnect between the call types they identified as appropriate for transfer to 988 and the data they captured. For example, although sites generally agreed that callers expressing suicidal ideation or intent without a plan or access to the means to carry it out were good candidates for transfer to 988, most CAD systems only included one or two call classification codes (often called "nature codes") for suicidality, one of which was a suicide attempt in progress. The lack of appropriate codes limited their ability to distinguish calls eligible for transfer to 988 from those requiring emergency response, initially limiting their thinking about calls possibly eligible for transfer. Sites determined that an important step in 911/988 interoperability is for PSAPs to identify risk levels and accurately document them in their CAD system so they can monitor whether all eligible calls are transferred to 988.

VI. Lessons Learned About Developing Interoperability Across Sites

This chapter describes aspects of the Crisis Response Pilot that hindered (barrier) and helped (facilitator) the governance and SOP components of 911/988 interoperability across the participating sites. It builds on the previous chapters to succinctly highlight lessons from the pilot that may be useful for future interoperability efforts, drawing particularly from critical discussions between sites related to interoperability challenges and turning points that helped them make progress.

We address the governance and SOP interoperability components simultaneously because of overlap in what participants and work group documents identified for each of them. Where possible, we highlight how a barrier or facilitator specifically affected governance or SOPs. The barriers and facilitators primarily affected governance and the *development* of SOPs because most sites spent all or most of their time in the developmental rather than implementation stage during the one-year pilot.

A. Barriers to 911/988 interoperability

1. **Agency misconceptions.** PSAPs and 988s had limited understanding of each call center's approach to services, which created hurdles early in their partnership. Both PSAP and 988 participants reported that they spent time at the beginning of the pilot explaining the services their agency provides and addressing misconceptions the other work group members shared. This process took a great deal of time but was necessary for participants to fully understand each other's priorities and limitations. For example, 988 prioritizes the least restrictive means to assist a person in crisis, whereas 911 prioritizes community and first responder safety. As a result of transparent discussions, participants realized that they both ultimately aim to ensure people get the help they need.

> *"We're all on the same team, and from the beginning we said, this isn't about us. It's about getting the help for the residents that we serve. When you keep that in mind, it keeps [you] from having conflict."*
>
> ~ PSAP participant

2. **Liability concerns.** PSAPs were especially concerned at the beginning of the pilot that their staff would be held responsible if a caller was transferred to 988 and later harmed themselves or another individual. These concerns were often driven by PSAP misconceptions about 988 and by their limited understanding of how 988 interacts with callers, including existing 988 procedures for initiating active rescue when necessary. PSAPs were also unsure how to interpret liability within existing policy and the political implications of misinterpretation because they are a part of local government. Some of the facilitators described in Section IV.B. helped PSAPs overcome their initial hesitation about call transfers. Considering PSAPs are part of a local government entity, liability must be addressed in any MOU or interoperability agreement.

3. **Staff perceptions and capacity.** During work group discussions, PSAPs were concerned about staff training and their call takers' willingness to perform call transfer procedures because they are used to long-standing and rigid protocols. Work group members also worried that if a problem arose during transfer early in the process, then that situation may dissuade call takers from initiating them in the future and increase their hesitancy. Additionally, sites faced challenges related to limited staff

availability, turnover, and capacity to engage in interoperability development and implementation even though they believed in its value. Scheduling was a big challenge for sites due to staff availability, but they appreciated that the Clear Pathways team helped schedule work group meetings so all members could attend.

4. **PSAP burden of change.** PSAPs were generally more responsible for making changes to their SOPs for 911 call transfers to 988, even though the call transfer procedures were decided jointly with 988. 988s already had procedures for contacting 911 in an emergency as required by 988 policy standards, but PSAPs needed SOPs for calls that originate with them. PSAPs have been around much longer than 988; they have established policies and procedures that take time to change and must be approved by local administrators. PSAPs also needed to draft the SOPs in a way that empowers their 911 call takers to make decisions about which calls to transfer and to feel like those transfers still fit within existing policy.

5. **Behavioral health service context.** The broader behavioral health service environment created unique challenges for both larger and smaller sites. Sites serving larger cities and urban areas often had existing behavioral health crisis services and programs that were already responding to some of the calls 988 could potentially receive. As a result, they needed to consider these existing programs and their procedures, policies, and expectations while developing plans for 911/988 interoperability. On the other hand, sites serving more rural areas had few existing behavioral health resources, meaning that call takers had fewer options when responding to behavioral health crisis situations.

6. **Unclear action steps.** Some work groups noted that there was sometimes a lack of clarity around what the next steps should be and who should be responsible. In a couple of sites this was due to the work group being too large and including other community partners that provide crisis services but who could not make decisions specifically about 911/988 interoperability. In the early stages of their partnership, this uncertainty stalled progress and contributed to hesitation about working together.

7. **Technological limitations.** Early in the pilot, PSAPs in particular were worried about differences in call center technology because the 911 technology, including geolocation, is more advanced than 988s' technology. As of the development of this report, sites are working around differences in technology by contacting each other through direct lines and providing some basic information such as the call time, date, and caller phone number in case a call drops during the transfer. Some participants noted that they would ideally have shared data systems in the future so they can share some additional caller

"I think it would be nice to live in an era where we're all operating and, if not with the same documentation, at least with databases that can talk to one another. I'd like to be able to see, like for someone who's calling us, do they have a history of calling 911…. [But] then you're in a space you probably don't want to be in when you're trying to build alliances with the community. We're almost working in different directions at the same time. Sometimes the better [technology] you have in place for [interoperability] it's almost like a hinderance for someone to call."

~ 988 participant

information to ensure the best access to care and jointly monitor data on eligible calls and call transfers for continuous quality improvement (CQI). However, a few participants noted that they must tread carefully with shared data systems because community members may hesitate to call 988 if they think 988 will share sensitive information from their calls with 911 or the police. As technology related to interoperability evolves, broader federal or statewide efforts to address how to navigate technology integration may reduce the burden on local partnerships.

8. **Regulatory differences and expectations.** PSAPs and 988s both have external standards and requirements that govern their work: PSAPs use Federal Communications Commission (FCC), National Crime Information Center (NCIC), National Fire Protection Association (NFPA), NENA, Association of Public-Safety Communications Officials, and many other state and local standards, whereas 988s follow Health Insurance Portability and Accountability Act (HIPAA) policies and SAMHSA best practices. These existing standards have different expectations, especially related to confidentiality, anonymity, data collection, tracking, and geolocation. For example, one work group was concerned about how to navigate call recording during three-way calls. Normally 911 would record the conversation but the work group was concerned whether information disclosed to 988 could become public record. They also worried about conducting full transfers to 988 because a recording is not available when a call is transferred to 988 and the 911 call taker disconnects, which would represent a gap in the call documentation for PSAPs. Sites were still working on finding the right balance between confidentiality and data completeness at the end of the pilot.

B. Facilitators to 911/988 interoperability

1. **Planning for longevity.** The pilot helped sites understand that 911/988 interoperability is a long-term emergency response strategy that is both necessary and here to stay. Some of the PSAP participants were initially hesitant to be the first to develop 911/988 interoperability in their area. However, they realized 988 is an inevitable addition to the list of available resources for behavioral health crisis calls; and, to best serve individuals in need of care, they would eventually have to determine how to transfer calls to them. By participating in the pilot, these PSAPs learned more about 988 and were able to help educate their peers on the benefits of interoperability. However, participants noted that interoperability requires a culture shift for both 911 and 988. They stressed the importance of staff in both agencies, and staff at all levels, being flexible and adaptable so change can occur.

2. **A neutral third-party facilitator.** Sites attributed their progress during the pilot to having a facilitator who was knowledgeable about the broader crisis response system and able to help PSAPs and 988s find common ground. They also appreciated having a third

> *"I think having [the Clear Pathways] folks that helped us out kind of kept us on track. They were able to work with us to get our virtual meetings set … and then kept us on a routine schedule. I think that that's kind of the benefit of having a third party. Also, given their expertise [and] they've done a lot of these before, and they came up with a lot of good ideas. I would say overall it was a pleasant experience. … I think that we learned as much from each other as we did from [the Clear Pathways team]."*
>
> ~ PSAP participant

party to hold them accountable to their interoperability goals and allow them space to determine strategies that will work best in their unique environments.

3. **Structured tools and activities.** The tools and activities used by the Clear Pathways team allowed sites to account for their unique contexts and expanded their thinking about potential calls to transfer and call transfer procedures. Facilitators provided MOU templates, decision tree examples, and data from other pilot projects for sites to use as guidance. Three facilitated activities, along with their associated tools and templates, were particularly helpful for sites: (1) understanding the differences between 911 and 988 definitions of similar terms (such as risk, harm, and weapons); (2) reviewing 911 call log data; and (3) creating call transfer decision trees.

4. **Call center visits.** Participants said these visits were a particularly enriching activity that helped them understand how their colleagues respond to calls and approach their work. Both PSAPs and 988s found it valuable to observe each other and learn firsthand how the other entity handles calls, the technology they use, and their documentation requirements. The experience also accelerated relationship and trust building among work group members.

> *"Going over and visiting them and them coming and visiting us was absolutely instrumental. I don't think that anybody that's looking to do this should not go visit. It's a necessary thing. You have to see what they go through."*
>
> ~ PSAP participant

5. **PSAP and 988 leadership buy-in.** Involving PSAP and 988 leadership along with staff in supervisory positions made it easier for each agency to learn key details about each other's policies and expedited conversations about SOPs. Several of the leaders who participated in work groups had prior experience as call takers and could describe the process their staff went through in detail when responding to behavioral health crisis calls. Having leaders involved in discussions also helped sites anticipate barriers to developing documentation and proactively develop plans for addressing them – such as identifying subject matter experts who could give input on proposed changes or drafting procedures using language that would be palatable to legal reviewers.

6. **Peer learning activities.** Participants enjoyed hearing how others approached interoperability and learned from their experience. They found it especially helpful to receive SOP examples and hear about strategies others have used to overcome challenges. Peer learning especially helped PSAPs navigate their concerns about liability by understanding how other departments interpreted existing policies and applied them to 911/988 interoperability.

VII. Conclusions and Recommendations

This chapter recommends ways to improve the Clear Pathways 911/988 interoperability strategy, scale up interoperability in other sites, and enhance collection and evaluation of interoperability data. Most recommendations could be applied to advancing the governance and SOP components simultaneously, but we note recommendations that apply to only one of the components when applicable.

A. Recommendations to improve the Clear Pathways interoperability strategy

Overall, participants reported having a positive experience in the Crisis Response Pilot and attributed their progress with 911/988 interoperability to the Clear Pathways strategy. Their recommendations and findings from the pilot reveal several areas where the strategy could be improved.

1. **Provide continued support and accountability.** As a result of their positive experience and progress, pilot participants wanted help with sustaining momentum to ensure call transfers were implemented after the pilot ended. Many participants suggested quarterly check-ins with the Clear Pathways team to provide accountability and have access to the team's expertise. Some participants wanted ADAMHS boards to continue the facilitation between PSAPs and 988s because they coordinate crisis services across the county and understand the broader aims of state and national behavioral health crisis response.

2. **Tailor support and develop goals that are unique to each site.** Participants appreciated that the activities and tools used in the pilot addressed their sites' unique operating environments. However, in two sites, it was suggested that activities and discussions should account for the status and progress of their existing partnerships and interoperability development. These sites thought some of the activities at the start of the pilot required them to revisit old discussions, and they thought this made them lose valuable time that could be spent enhancing interoperability. Related to this, a few participants suggested that Clear Pathways provide more explanation in the beginning of the pilot about the expectations and goals for sites, and help members define clear roles and responsibilities early on.

3. **Prioritize peer learning and call center visits.** Participants recommended improvements in these areas because they served as key turning points in their work together. First, they recommended that Clear Pathways host more in-person gatherings, such as the kickoff meeting, and provide additional peer learning opportunities. They thought cross-site interactions provided an important mechanism to help expand their thinking about a range of potential call transfer strategies and to get feedback from others with similar firsthand experiences. Second, many participants suggested that sites conduct 911 and 988 call center visits earlier in the interoperability development stage. They thought it was a powerful activity that improved their collaboration and accelerated their thinking about how to identify and transfer eligible calls.

4. **Provide guidance on when and how to include other partners.** Many participants knew that first responders, mobile crisis teams, and other community partners have valuable perspectives about responding to behavioral health emergencies. Participants were unsure, though, how or when to involve these partners because many of the call transfer details must be determined by the PSAP and

988. Even sites that involved these partners at some point were unsure about the most appropriate time to engage them in the interoperability plan. A few participants also discussed the need to bring IT staff into conversations for the technology and data components, and said they would benefit from guidance on when to do this.

5. **Plan for a longer interoperability development time frame.** The experiences of sites in this pilot suggest that one year is not enough time to develop a new interoperability strategy and implement it. Only one site had fully initiated this work before the pilot launched and was able to begin implementing call transfers. Findings from the pilot suggest that new sites need more time for the work group activities and additional meetings outside of the work group sessions. They may also benefit from initiating MOUs earlier in the process to secure agreement on partnering together to jointly determine call transfer procedures. Sites may feel less overwhelmed if they focus on low-risk calls first to build trust between the two agencies, and then expand eligibility criteria and transfer procedures over time.

B. Recommendations to scale up interoperability

We asked ADAMHS board participants to recommend ways to scale up 911/988 interoperability because of their broader involvement in developing county and statewide crisis response systems. PSAP and 988 participants also made recommendations that may support efforts to expand interoperability beyond the pilot sites.

1. **Advance interoperability through leadership approval.** Interoperability may be expedited if state or county officials formally approve plans to allow call transfers from 911 to 988. Sites spent a great deal of time during the pilot discussing concerns about PSAPs' liability with transferring 911 calls to 988 and the implications for their required documentation. In addition, the PSAP leadership representatives in the work groups knew they would need to overcome challenges with 911 call taker concerns about liability once they started training on newly developed SOPs. Broader guidance or approvals from officials could assuage these concerns and promote interoperability across locales. Furthermore, legal review of the Ohio Sunshine Laws for three-way calls and the potential to redact confidential medical information could provide definitive guidance for sites considering this approach.

2. **Expand funding and resources to support staff capacity.** PSAPs and 988s would benefit from additional funding and resources to support 911/988 interoperability. Both entities dealt with staff capacity issues, including not enough staff and not enough time for staff to spend on developing new procedures. Additional funding would especially help smaller PSAPs that have less capacity to support procedural changes and work group meetings. The additional funding would help 988s hire more staff or increase staff capacity in other ways so they can coordinate with the multiple PSAPs within their large service areas, manage the different types of call transfer strategies established with each PSAP, and report metrics for each of their PSAP partnerships. 988s will also need resources, potentially including more staff, to manage increasing numbers of calls through direct transfers from 911 or through improved community awareness of 988.

3. **Prioritize technology investments.** 988 is still in the early stages of implementation and continues to evolve. Participants emphasized that current efforts to install geolocation technology in 988 would

significantly advance interoperability but, for now, sharing basic caller information, such as phone number and reason for the call, could improve the caller experience during transfers. Improved technology may also help PSAPs and 988s automate their data collection and reporting instead of relying on hand counting in existing data systems; this automation would reduce the burden on staff and improve the ability to analyze aggregate changes in 911 behavioral health–related calls and 988 use. However, the field also needs to ensure advances with technology and data sharing prioritize individuals' privacy during 988 calls.

4. **Improve 911's ability to identify behavioral health calls by 911.** 911/988 interoperability hinges on 911 call takers' ability to identify behavioral health calls and assess their risk level, including underlying behavioral health conditions that may contribute to a precipitating event. Staff training that consolidates existing best practices and real-world examples from the field may accelerate PSAPs' ability to identify and process eligible calls for warm transfer to 988 and strengthen this entry point to crisis care or other behavioral health services. Revised EMD protocols can further advance a standardized approach to 911 call takers' assessment of behavioral health needs so they can identify and process eligible calls. Pilot participants also emphasized the need for local and state champions to continue prioritizing 911 warm transfers to 988 as a component of comprehensive crisis services.

5. **Develop a behavioral health interoperability continuum.** The SAFECOM Interoperability Continuum provided an important starting point for thinking about 911/988 interoperability, but aspects of the Continuum do not reflect the unique context and operational needs of interoperability for behavioral health calls. The Continuum also does not account for linkages with other behavioral health crisis services, which is especially important given recent advances in 988 and crisis service practices and policies (Saunders 2024). Findings from this evaluation could be used to develop a behavioral health interoperability continuum, accelerate interoperability, and facilitate linkages to other parts of the crisis care continuum.

C. Recommendations for collecting and evaluating interoperability data

The recommendations in this section are informed by the data collected during the evaluation, lessons learned while conducting the evaluation, and literature related to crisis lines.

1. **Improve behavioral health call coding by 911.** PSAPs noted a disconnect between their current nature code options for identifying behavioral health calls in CAD systems and the types of calls they were interested in tracking to improve their ability to monitor transfers to 988. Nature codes could be added or revised to consistently identify behavioral health calls received by 911 that may be eligible for warm transfer to 988 and to distinguish them from calls requiring emergency response or other dispositions. For example, low-risk calls requesting behavioral health referrals could be differentiated from high-risk calls involving active or imminent suicide attempts. However, PSAPs need to exercise caution with the number or type of nature codes in CADs so call takers can still reasonably manage the code list and process all calls efficiently. PSAPs may benefit from more discussion about a standardized set of nature codes and by striking a balance between what is needed to assess calls and what is needed to track and evaluate call transfers. On the front end, incorporating secondary coding is one approach that allows PSAPs to maintain a set of primary nature codes while capturing behavioral health concerns through secondary codes. On the back end, a follow-up incident study

that retrospectively codes behavioral health calls may reveal more areas where call coding could improve.

2. **Expand interoperability metrics.** The metrics used in the Crisis Response Pilot did not include calls that originate at 988 and are transferred to 911 because they were outside the scope of the pilot. (988s already had procedures in place for these high-risk calls.) However, interoperability metrics for broader usage in the field should include these calls to allow for full assessment of 911/988 interoperability regardless of where calls originate.

3. **Introduce metrics early to support the development and implementation of call transfers.** The evaluation team introduced the interoperability metrics early in the pilot to prepare sites for reporting, but many sites struggled to report metrics related to call transfers from 911 to 988 because they were still developing their interoperability SOPs and had not started implementing transfers. However, the metrics provided a road map for the data that sites would need to track once call transfers are initiated and expanded sites' thinking about calls eligible for transfer. Sites need some time to prioritize relationship building and SOP development before they can report on the metrics, but they also benefit from thinking about CQI within their partnership and how they will incorporate the metrics as part of their CQI practice. 988s will need extra support to determine efficient data reporting practices as they expand to working with multiple PSAPs in their service area.

4. **Examine the effectiveness of different types of transfers from 911 to 988.** In Ohio, 988 service areas encompass multiple PSAPs and each PSAP may prioritize different types of call transfer strategies. Examining multiple call transfer strategies within single 988 service areas may help the field identify more best practices in 911 call transfers to 988 and support efforts to scale up interoperability. 988s will need additional guidance on how to manage data sharing and CQI with multiple PSAPs.

5. **Establish data linkages across the crisis care continuum.** Fully understanding the impact of interoperability and other cross-system strategies to improve behavioral health emergency response requires linkages across data systems and enhanced data collection. Future measurement and evaluation activities should consider the following:

   – How to include other data sources, such as police contacts or emergency department visits, to understand what other upstream strategies may be employed by PSAPs and 988s to connect more individuals to less restrictive care when appropriate

   – How to track call flows beyond 911/988 call transfers and into other parts of the crisis care continuum to examine the long-term effects on client-level outcomes, such as improved service access and fewer arrests

   – How to gather the perspectives of first- and second-party callers to understand their experiences with call transfers

D. Study limitations

The evaluation focused on the implementation of the Clear Pathways 911/988 interoperability strategy and is formative in nature. It was not intended to provide evidence of long-term impact because of the

focus on interoperability development and early implementation in pilot sites. Findings from the evaluation are not generalizable, and we cannot make causal statements related to client outcomes for people involved with 911/988 call transfers.

Although the evaluation did not assess client outcomes, pilot sites reported data for 911/988 call transfer metrics developed during the pilot period. However, the metrics data reported by sites are limited. It takes time to develop procedures to identify 911 behavioral health–related calls and SOPs for 911/988 call transfers, and agencies must balance this work with other priorities. Most sites had not implemented 911/988 call transfers by the end of the pilot and were not ready to report those data; however, they made progress on their interoperability efforts.

E. Conclusion

Clear Pathways implemented the Crisis Response Pilot to help five sites in Ohio develop and implement 911/988 interoperability to help divert non-emergency behavioral health calls to service providers with behavioral health expertise. The Clear Pathways interoperability strategy centered on work groups made up of local 988 providers, PSAPs, and ADAMHS boards, although some sites included other community partners in their group meetings.

The findings in this report highlight that the Clear Pathways strategy successfully advanced 911/988 interoperability in five Ohio counties, but sites spent more time on developing their call transfer policies and procedures than they expected to. Sites had to overcome philosophical and operational differences to advance their shared goals and determine the types of call transfers that would work best. They especially needed support to design protocols for call transfers when there was an intermediate level of risk. Compared with high-risk situations requiring an immediate emergency dispatch and low-risk situations that did not require dispatch at all, intermediate-risk situations raised questions about how to determine the suicidal intent of the caller, the caller's means for a suicide attempt, and the presence of weapons. This has implications for how PSAPs code behavioral health calls and determine calls eligible for warm transfer from 911 to 988.

The findings and recommendations discussed in this report will help Clear Pathways improve its 911/988 interoperability strategy so it can support more communities in Ohio. The report may also help local communities overcome common collaboration barriers so they can accelerate their own interoperability efforts. Lastly, the discussion of metrics used in this evaluation, challenges and successes with reporting the metrics, and recommendations for future evaluation of 911/988 interoperability and linkages to other parts of the crisis care continuum can help address some of the limitations in current crisis services studies.

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Appendix A. Methods for Collecting and Analyzing the Evaluation Data

This appendix supplements the evaluation information presented in Chapter II. It includes additional information about the sites that participated in the Crisis Response Pilot, data collection methods, and data analysis.

A. Participating sites

The evaluation included data collected from all five sites participating in the pilot. Clear Pathways informed sites of their participation in the evaluation as part of joining the pilot, and Mathematica discussed the data collection steps and timing in the pilot kickoff meeting. Clear Pathways selected pilot sites that represented Ohio's diverse service and geographic landscape, as well as varying stages of collaboration and interoperability between public safety answering points (PSAPs) and 988s.

Two sites represented a single city or township, two sites represented an entire county, and one site focused on a single city and the county in which that city is located. Involving a range of sites provided an opportunity to learn how the Clear Pathways strategy affected interoperability in a range of community contexts and different levels of interoperability readiness. Exhibit A.1 outlines some characteristics of the communities represented in the pilot.

Exhibit A.1. Characteristics of participating sites

	Site 1[a]	Site 2	Site 3	Site 4	Site 5
Service area	Single city/ countywide	Single city	Countywide	Countywide	Single township
Locale[b]	Metro county	Large city	Nonmetro county	Metro county	Large suburb
Total population	1,318,149	308,870	30,622	313,101	35,908
Younger than 18	23.1%	21.0%	23.0%	21.7%	16.1%
Age 18 and older	76.9%	79.0%	77.0%	78.3%	83.9%
Race					
White alone	62.1%	50.4%	94.1%	81.2%	85.9%
Black or African American alone	23.0%	39.6%	1.2%	7.5%	7.1%
Asian alone	5.4%	2.6%	0.8%	1.3%	0.6%
Other race alone	2.8%	1.7%	1.1%	1.8%	1.4%
Two or more races	6.8%	5.6%	2.8%	8.2%	5.0%
Hispanic or Latino (all races)	6.0%	4.6%	2.1%	10.6%	5.6%
Median household income	$65,999	$49,191	$55,876	$67,272	$53,897
Households with children	29.7%	23.2%	29.4%	27.9%	21.6%
Unemployment rate	4.8%	6.9%	4.7%	4.4%	5.1%
Post-pilot 911/988 conducting call transfers	Yes—after MCT hours only	Yes—expanded on existing transfers	Not yet—will begin after MOU is signed	Not yet—still finalizing some transfer decisions	Not yet—will begin after SOP updates

Source: Unless otherwise noted, data from U.S. Census Bureau (2022). 2018–2022 American Community Survey 5-Year Data Profiles. Median household income and unemployment rate only available for 2021. https://data.census.gov/table?d=ACS+5-Year+Estimates+Data+Profiles. Accessed October 8, 2024.

MCT = mobile crisis team; MOU = memorandum of understanding: SOP = standard operating procedure.

[a] County-level data are reported although the site focused on a single city and the whole county.

[b] Locale data for counties from U.S. Department of Agriculture Economic Research Service 2023 Rural-Urban Continuum Codes, https://www.ers.usda.gov/data-products/rural-urban-continuum-codes/. Locale data for single cities or townships from National Center for Educational Statistics, https://nces.ed.gov/programs/maped/LocaleLookup/. Accessed October 8, 2024.

B. Data collection

The evaluation used a multistage mixed methods design that collected primary data from sites at multiple points in the study. Although this report focuses on post-pilot findings, we describe the methods used in all stages of the evaluation.

Interoperability interviews. We conducted individual interviews with the PSAP; 988; and alcohol, drug, and mental health services (ADAMHS) board representatives listed as the primary point of contact in each work group. We first notified sites about the interviews in the pilot kickoff meeting, then reached out to potential interviewees via email to schedule a time for their interview. In some cases, these individuals invited other members of their team to participate in their interview because of their knowledge of specific aspects related to interoperability or existing collaborations. We conducted pre-pilot interviews before sites started engaging in the first pilot activity, the consensus-building meetings. Twenty-nine individuals participated in these interviews (some individually and some as a group). We conducted interviews at the end of the pilot (post-pilot) to assess the sites' progress on the governance and standard operating procedure (SOP) interoperability components. Twenty-one individuals participated in these interviews. Most of the post-pilot interviewees had participated in the pre-pilot interviews.

We used a semistructured interview guide for each data collection (Appendix B). The interview protocol for post-pilot interviews was different than the pre-pilot protocol to allow for further exploration of site progress during the pilot and to include additional questions for ADAMHS board participants to comment on broader sustainability and efforts to scale up interoperability. The Clear Pathways team provided input on the protocols and reviewed them prior to use. We conducted all interviews virtually, and each lasted about one hour. We took detailed notes to document the discussions and used recordings to check our notes.

Clear Pathways team group interview. We conducted a one-hour post-pilot interview with the Clear Pathways team to gather their perspectives on the pilot's implementation to supplement data from the sites. We used a semistructured interview guide that asked about successes and challenges with implementing the Clear Pathways interoperability strategy, additional supports or resources that sites may need after the pilot, and suggestions for how Clear Pathways could continue to advance 911/988 interoperability after the pilot ended. We documented the discussion in detailed notes.

Document review. During the pre-pilot, we requested that PSAPs and 988s share behavioral health–related SOPs. Three sites shared individual agency SOPs and two sites shared SOPs related to partnerships between the PSAP and behavioral health provider (only one of the sites included an existing relationship with 988).

During the post-pilot, we requested each site's work group meeting minutes, memoranda of understanding or other agreements, SOPs, and their completed pilot templates. The completed templates focused on developing a governance structure, developing a strategic work plan, current behavioral

health crisis response practices, designing call transfer criteria, and designing a decision tree to direct call flows. We used these documents to deepen our analysis of site's progress in the pilot and to understand the range of strategies sites used for identifying behavioral health calls, risk assessment, and call transfers. We summarized information from the documents in a document review protocol, with categories focused on work group logistics, work group discussions, and call transfer procedures.

Administrative data. We developed an Excel workbook for each site to report on the interoperability metrics described in Chapter V. The workbook contained two tabs each for PSAPs and 988s. In the first tab, sites entered aggregate data for each metric using data from their own internal systems. In the second tab, sites documented in open text fields aspects of their data systems or internal data processes that affected their ability to report on the metrics. The workbook also had fields to identify work group decisions that were still needed so sites could report on the data. We asked each PSAP and 988 to submit its workbook on a secure transfer site managed by the project; however, sometimes an entity chose to email its workbook to the evaluation team instead.

This report uses data entered by sites for January 1 through August 31, 2024. Sites had until September 30, 2024, to report these data. Prior to the final data submission, the evaluation team conducted a series of four calls with the sites to discuss the metrics, identify challenges with reporting these data and with data related to interoperability in general, and start planning for the use of CQI as part of their work together. We asked sites to submit workbooks in two practice rounds prior to the submission of final data to help them prepare for the submission by identifying potential issues early. Not all sites submitted data for the practice rounds.

C. Data analysis

Interoperability interviews. For interviews, we conducted analysis in two stages. First, we used the detailed notes from each interview to develop a summary for each site. The structure of the site summary aligned with the interview protocol questions, although some questions were consolidated so that the information would be contained under a single section. The sections functioned much like thematic codes in a qualitative codebook to organize the main elements of the interview protocol, so we combined each section into a single document that contained all sites. For example, we put the section labeled as "work group operations" for all sites into a single document. We did that for all labeled sections. Second, we conducted a thematic analysis in an Excel spreadsheet. We generated descriptions for each site for each thematic code and identified emergent subthemes across all sites for each section. We synthesized sections that addressed similar topics to describe the subthemes in the report. Quotes related to subthemes were imported from the site summaries.

Document review. For the document review, we conducted a similar process. First, we summarized information from the documents in the document review protocol using the categories described in Appendix A, Section B. Next, we entered the summaries for each review category into an Excel spreadsheet to do thematic analysis. We examined the summaries for each category across sites and identified emergent subthemes. We documented these in the Excel spreadsheet. Finally, we compared the subthemes to the subthemes identified from the interview data to triangulate the data. In some instances, data from the documents provided additional detail not included in the interviews, such as specifics about

the call transfer process the sites developed. Findings from both sources were synthesized in to describe the subthemes in the report.

Administrative data. For the evaluation metrics, we compiled the aggregate quantitative administrative data reported by PSAPs and 988s; we did not conduct any additional analysis of these data. We conducted thematic analysis of sites' data documentation entries in Excel. We examined the open text field entries across sites and developed summaries of their common challenges and concerns, and the next steps for data collection.

Appendix B. Interview Discussion Guides

Interoperability Pre-Pilot Interviews

I'm _____ and I work for Mathematica, an independent research firm. Thank you for taking the time to speak with me today.

We are working with the Peg's Foundation on their Clear Pathways Initiative to create more efficient and sustainable crisis response systems in Ohio to meet the needs of community members experiencing a behavioral health crisis or emergency. Behavioral health generally refers to mental health and substance use disorders, and may include life stressors and stress-related physical symptoms.

As part of this effort, we are conducting interviews with sites participating in the Crisis Response Pilot to better understand how 9-1-1 and 9-8-8 systems interface. We are especially interested in (1) the governance structures sites develop during the pilot and (2) the policies and standard operating procedures that are developed for addressing behavioral health-related emergencies. We will conduct one round of interviews with working group members now and one round of interviews at the end of the pilot to understand the changes that have occurred during the year.

Your responses will be combined with those of your colleagues and respondents from other sites in a report that summarizes insights across all the pilot sites. The purpose of the report is to help Peg's Foundation and others understand how to improve cross-system collaboration and coordination to meet the needs of people experiencing a behavioral health crisis or emergency. The report will not quote you or other individuals by name, but it may be possible for readers familiar with your site to guess who said what. If we later decide we would like to share site-specific results publicly, we will contact you again for your consent.

We expect the current interview to take up to an hour. We have a lot to cover, so I will keep us moving quickly through the questions. Your participation is voluntary, and you can decline to answer any questions or to discontinue participation if you wish. Being part of this discussion will not affect your future involvement in Clear Pathways, the Crisis Response Pilot, or your employment.

[IF SMALL GROUP INTERVIEW, ADD THE FOLLOWING]: Please keep these discussions confidential outside of the group.

With your permission, I would like to record the interview to make sure I accurately capture your comments when I write up my notes. Only members of our team and the Clear Pathways support team will have access to this recording, and we will destroy it after we complete the project. If you want to say something that you don't want recorded, please let me know, and I will pause the recorder. Do we have permission to record this conversation? [OBTAIN PERMISSION AND START RECORDING IF PERMISSION GRANTED.]

I have turned on the recorder. Now that I have the recorder on, I need to ask you again, is it okay if I record this conversation? [GET PERMISSION TO RECORD ON THE RECORDING]

Before we start, do you have any objections to being part of this discussion? Do you have any questions?

Introduction and site description

1. Please state the name of your organization/entity, describe your role there, and how long you have been in that role.
   - [IF IN ROLE LESS THAN A YEAR, ASK "What was your role and/or entity before this one?]
2. What is your entity's role for the Crisis Response Pilot?
3. How would you describe your organization/entity (the organizations and entities in the pilot typically include the ADAMHS Board, 9-8-8 provider, and participating PSAPs)?
   a. Probe on size, approximate budget, staffing level, location, urbanicity, areas your organization services (for example, counties, towns, or zip codes)

Understanding governance

We will now ask a few questions about the interoperability of 9-1-1 and 9-8-8 in your area. That is, how 9-1-1 and 9-8-8 collaborate, communicate, and coordinate to meet the needs of community members experiencing a behavioral health crisis or emergency. We know that some sites may be early in the process, so it's possible that your site has not started on some of the activities we will ask about, and that's ok.

The Crisis Response Pilot is focused on two core components of interoperability—governance structure (that is, how decisions are made and implemented) and standard operating procedures (SOPs). Let's start by talking about some aspects of governance first.

4. Describe the history of collaboration between 9-1-1, 9-8-8, first responders, and behavioral health providers related to behavioral health crisis response within your site's service area.
   a. What have previous collaborations addressed, and who has been involved? (Probe: Have these collaborations included current working group member organizations and which ones?)
   b. Were any of these entities involved in 9-8-8 planning and rollout? If so, how?
   c. Were any other entities involved in 9-8-8 planning and rollout? If so, how?
5. What processes or procedures for making decisions about addressing behavioral health-related emergencies were in place before the Crisis Response Pilot?
   a. How and by whom are decisions made about protocols for addressing behavioral health-related emergencies within your entity?
   b. How and by whom are decisions made about protocols for addressing behavioral health-related emergencies across entities? (Probe for 988 participants: How are protocol decisions made between the primary 988 and backup 988?)

6. How well do existing collaborations and governance structures work for addressing behavioral health-related emergencies?
    a. Do you have existing MOUs with other organizations working to improve how 9-1-1 and 9-8-8 collaborate and coordinate?
    b. To what extent do existing collaborations and governance structures address data sharing? (Probe: Do any MOUs address data sharing between entities? How was data sharing addressed during planning and development? How is data sharing addressed between the primary 988 and backup 988?)
    c. How could existing collaborations and governance structures for addressing behavioral health-related emergencies be improved?
    d. Who else needs to be involved in collaborations and governance structures for addressing behavioral health-related emergencies?
7. What types of challenges do you anticipate in developing a 9-1-1 and 9-8-8 working group?
    a. What types of challenges do you anticipate in your site's ability to develop an effective 9-1-1 and 9-8-8 governance structure?
    b. What external influences might affect the development or implementation of an 9-1-1 and 9-8-8 governance structure at your site?
    c. Do you have ideas about how your site will try to prevent governance challenges from arising or how your site will address governance challenges if they do arise?
8. What factors do you anticipate will help facilitate the ability of your site to develop an effective 9-1-1 and 9-8-8 governance structure?
    a. *What kind of support do you most hope to receive from Clear Pathways during this process, related to the formation of governance structures?*

Understanding SOPs

Now, let's talk about policies and standard operating procedures (SOPs) related to behavioral health crisis services. By SOP, we mean any standardized written protocols, guidance, general orders, or procedures that your staff are trained in and expected to follow during their work.

9. Does your entity you have any existing SOPs related to behavioral health crisis services?
    a. If yes, describe the most important SOPs related to behavioral health crisis services used in your entity and why these are the most important. Do they intersect with other entities?
    b. If yes and PSAP, is behavioral health crisis response addressed in your emergency medical dispatch protocol (EMD)? What emergency medical dispatch (EMD) protocol does your PSAP use and can you provide a copy of it?

10. [If they have SOPs] How do the SOPs in your entity intersect with the policies and procedures of other entities involved in behavioral health crisis response?
    a. Describe any shared SOPs among PSAPs and behavioral health crisis service providers.
    b. How were these shared SOPs developed for behavioral health crisis response?
    c. Have there been specific work processes established among the primary 988 and backup 988 (e.g. to determine which calls to the backup)?
    d. Have there been specific work processes established among PSAPs and behavioral health crisis service providers to carry out these SOPs? (Probe: Do your work processes include PSAPs embedded as 9-8-8 call takers? Do you have clinicians embedded within your PSAP?)
    e. Do all PSAPs within the county have the same SOP for addressing behavioral health issues?
    f. Do the primary and backup 988 have the same SOP for addressing behavioral health issues?
11. [If they have SOPs] How well do existing SOPs for handling behavioral health-related emergencies work across PSAPs, first responders, and behavioral health service providers?
    a. How easy are the SOPs to follow? How consistently are the SOPs followed by the entities? (Probe: How is communication done between the entities? How frequent is the communication?)
    b. How appropriate do you think 9-1-1 dispatches and transfers to 9-8-8 currently are?
    c. How effective do you think current SOPs for behavioral health emergencies are at keeping the individuals and community involved safe?
    d. How could the SOPs be improved?
12. [If they do not have SOPs] Does your entity have a plan for developing behavioral health crisis response SOPs in the future?
    a. How do the behavioral health policies and procedures of other entities impact your processes for responding to behavioral health crises, if at all?
    b. What elements would be helpful to include in an SOP?
    c. [If board] Do you audit or review cases from the agencies you work with? Do you have a process for reviewing SOPs from local 9-8-8 and 9-1-1 providers?
    d. [If board] How do you see the board's role in supporting joint SOP development? (probe on: existing network/relationships, funding, convening, BH regulations, liability)
    e. [If board] How do you see the board's role in scaling up 9-1-1 and 9-8-8 working group best practices during/after the Pilot? (probe on: state authorities like AG, sustaining the relationship, bringing in additional PSAPs/entities, advocacy at the state level)

13. What types of challenges do you anticipate in your site's ability to develop effective joint SOPs between 9-1-1 and 9-8-8?

    a. What external influences might affect the development or implementation of joint SOPs between 9-1-1 and 9-8-8 agencies participating in the pilot?

    b. Do you have ideas about how your site will try to prevent SOP challenges from arising or how your site will address SOP challenges if they do arise?

14. What factors do you anticipate will help facilitate the ability of your site to develop effective joint SOPs between 9-1-1 and 9-8-8?

    c. *Who else needs to be involved in developing joint SOPs between 9-1-1 and 9-8-8 within your site?*

    d. *What kind of support do you most hope to receive from Clear Pathways during this process, related to the development of joint SOPs?*

Wrap up

15. Is there anything else you would like to add about your site's development of 9-1-1 and 9-8-8 response to behavioral health emergencies that we haven't asked about?

[Interviewer: Ask for copies of SOPs, if not already collected.]

[Interviewer: Ask about data points of contact for the site, if not already identified.]

Thank you for your time!

Interoperability Post-Pilot Interviews

Study overview and permissions

I'm _____ and I work for Mathematica, an independent research firm. Thank you for taking the time to speak with me today.

As a reminder, we are working with the Peg's Foundation on their Clear Pathways Initiative to create more efficient and sustainable crisis response systems in Ohio to meet the needs of community members experiencing a behavioral health crisis or emergency. Behavioral health generally refers to mental health and substance use disorders and may also include life stressors and stress-related physical symptoms.

As part of this effort, we are conducting interviews with sites participating in the Crisis Response Pilot to better understand how 911 and 988 systems interface. We are especially interested in (1) the governance structures sites developed during the pilot and (2) the policies and standard operating procedures that sites developed. We are conducting this second round of interviews at the end of the pilot to understand the changes that have occurred during the pilot year.

Your responses will be combined with those of your colleagues and respondents from other sites in a report that summarizes insights across all the pilot sites. The purpose of the report is to help Peg's Foundation and others understand how to improve cross-system collaboration and coordination to meet the needs of people experiencing a behavioral health crisis or emergency. The report will not quote you or other individuals by name, but it may be possible for readers familiar with your site to guess who said what. If we later decide we would like to share site-specific results publicly, we will contact you again for your consent.

We expect the current interview to take up to an hour. We have a lot to cover, so I will keep us moving quickly through the questions. Remember that your participation is voluntary, and you can decline to answer any questions or to discontinue participation if you wish. Being part of this discussion will not affect your future involvement in Clear Pathways, the Crisis Response Pilot, or your employment.

[IF SMALL GROUP INTERVIEW, ADD THE FOLLOWING]: Please keep these discussions confidential outside of the group.

With your permission, I would like to record the interview to make sure I accurately capture your comments when I write up my notes. Only members of our evaluation team and will have access to this recording, and we will destroy it after we complete the project. If you want to say something that you don't want recorded, please let me know, and I will pause the recorder. Do we have permission to record this conversation?

[OBTAIN PERMISSION AND START RECORDING IF PERMISSION GRANTED]

I have turned on the recorder. Now that I have the recorder on, I need to ask you again, is it okay if I record this conversation? [GET PERMISSION TO RECORD ON THE RECORDING]

Before we start, do you have any objections to being part of this discussion? Do you have any questions?

Warm up

1. Please state the name of your organization/agency and describe your role there.
2. What was your role in the Crisis Response Pilot for [organization/agency]?
3. Did other individuals from [organization/agency] participate in the Crisis Response Pilot? If yes, please describe who was involved and their role in the pilot.

Understanding governance

We will now ask some questions about your experience during the Crisis Response Pilot (over the past year) in how 988 and the public safety answering points (PSAPs) that operate 911 collaborate, communicate, and coordinate to meet the needs of community members experiencing a behavioral health crisis or emergency. We will also ask about your experiences with the activities and tools provided by the Clear Pathways team (represented by Peg's Foundation, Dignity Best Practices, and other consultants).

Each site began the pilot with a different level of collaboration among working group members and made progress in different areas. It's possible your site hasn't yet finished developing or implementing some of the items we will ask about and that's okay.

The Crisis Response Pilot was focused on two core components of 911/988 interoperability—governance structure (that is, how decisions are made and implemented) and standard operating procedures (SOPs). Let's start by talking about some aspects of governance first.

Description of the working group

4. Describe the purpose of the Crisis Response Pilot working group at your site.
5. Who has been involved in the working group at your site? (Probe on involvement of organizational/agency leadership and frontline staff; and community partners besides PSAPs, 988s, ADAMHS boards)
    a. How clear have the roles and responsibilities of individual members in your working group been? (Probe: To what extent did this change over time?)
    b. Looking back, who else should have been involved that wasn't? [If applicable,] explain why.
6. How often did your site's working group meet during the pilot period?
    a. When did the working group begin meeting (before/after Clear Pathways pilot began)?
    b. Who was responsible for convening and facilitating the meetings? (Probe: To what extent did this change over time?)
    c. How well did the meetings help your working group coordinate on shared interoperability goals?
    d. Were there any other types of communications outside of meetings that helped your working group coordinate on shared interoperability goals?

e. Is there anything you would change about your working group's meeting structure or other communications?

Collaboration between PSAPs, 988s, and other community partners

7. Describe the extent of collaboration between the PSAP(s) and 988(s) in your working group at the end of the pilot.

   a. How did this collaboration change, if at all, over the course of the pilot?

   b. What contributed most to the current state of collaboration between the PSAP(s) and 988(s)? (Probe: How did the working group structure help or hinder collaboration? How did the ADAMHS board help or hinder collaboration? How did the Clear Pathways team help or hinder collaboration?)

   c. What were the biggest challenges to PSAP and 988 collaboration?

      i. How did your working group overcome these challenges? (Probe: Was there anything the Clear Pathways team did to help you overcome challenges?)

   d. What else would have helped the PSAP(s) and 988(s) collaborate in your pilot site?

   e. What is needed to ensure PSAP and 988 collaboration after the Crisis Response Pilot ends?

8. Describe how you collaborated with other community partners as part of your working group (if at all).

   a. To what extent did the involvement of other community partners in the working group (if applicable) help or hinder PSAP and 988 collaboration?

   b. What other entities might you want to involve (additional PSAPs, other call centers, other service providers, first responders)? Explain why.

Working group documents and decision-making

[Interviewer: If they mention SOPs, remind them that we will be discussing them in the next section and for now are focused on other working group documents. Feel free to skip sub-questions if they were already answered in the section above.]

9. Describe any documents your working group developed to govern 911/988 interoperability (for example, MOUs, charters, or other agreements).

   a. At what point in the pilot were the documents developed? (Probe: When were these documents finalized?)

   b. Who was involved in developing the documents? (Probe: How was organizational/agency leadership involved in the development or signing off on the documents?)

   c. What were critical discussion points in the development of the documents?

   d. What were the biggest challenges in developing the documents?

      i. How did your working group overcome these challenges? (Probe: Was there anything the Clear Pathways team did to help you overcome challenges?)

e. What helped your working group the most in developing the documents? (Probe: Was there anything the Clear Pathways team did that was particularly helpful?)

f. What do you think are the most essential elements of the documents?

g. Would you make any changes to the documents to support 911/988 interoperability after the Crisis Response Pilot? Explain why.

10. Describe the key decision-making processes reflected in the governance document(s) we just discussed (for example, group consensus, votes, approval processes).

    a. To what extent did these processes help your working group make decisions about call transfer policies and procedures during the pilot period?

    b. Did your working group have to adjust any decision-making processes during the pilot? If so, please explain. (Probe: Was there anything the Clear Pathways team did to help you make these adjustments?)

    c. Would you make any changes to your working group's decision-making processes to support 911/988 interoperability after the pilot?

    d. How would you describe the barriers to effective coordination within the working group?

    e. What helped your working group effectively coordinate?

Understanding SOPs

Now we're going to ask about policies and standard operating procedures (SOPs) related to 911/988 call transfers. By SOP, we mean any standardized written protocols, guidance, general orders, or procedures that your staff are trained in and expected to follow during their work.

Development of joint SOPs between 911 and 988

[Interviewer: If we hear from Clear Pathways about the site's joint SOP status, we can rephrase Question #1 to ask for their confirmation of our understanding of their status.]

11. How would you describe your site's joint SOP status as of the end of the pilot:

    a. Created a decision tree but have not started drafting a joint SOP

    b. Completed a decision tree and started drafting a joint SOP

    c. Have drafted a joint SOP and are seeking leadership approval

    d. Have an approved joint SOP but have not started call transfers [enter approval MM/YY]

    e. Have an approved joint SOP and started call transfers [enter approval MM/YY]

12. Who contributed to the joint SOP development process at your Crisis Response Pilot site (or helped develop the joint SOP in your site, if complete)?

    a. Who were the key staff involved at your agency? How did they contribute?

    b. Who were the key staff involved at your partnering [PSAP/988] agency? How did they contribute?

    c. Who were the key staff involved at the ADAMHS board? How did they contribute?

    d. Was there anyone else who should have been involved but wasn't? If so, explain why.

13. What were critical discussion points in the development of the joint SOP?
    a. Probe on the following:
        i. Procedures for identifying behavioral health-related calls
        ii. Procedures for determining 911 calls that meet the criteria for transfer to 988
        iii. Procedures for 911 call transfers to 988
        iv. Procedures for 988 call transfers to 911
        v. Procedures for 988 call transfers to other organizations
        vi. Procedures for recording and sharing call information between 911/988
    b. How well did the activities and tools offered by the Clear Pathways team help with these critical discussion points?
14. What were the biggest challenges in developing a joint SOP?
    a. How did your working group overcome these challenges? (Probe: Was there anything the Clear Pathways team did to help you overcome challenges?)
15. What helped the most in developing a joint SOP? (Probe: Was there anything the Clear Pathways team did that was particularly helpful?)
16. What do you think are the most essential elements of the joint SOP you developed/are developing?
17. Did the joint SOP development process prompt any changes to your agency's individual SOPs?

Implementation of joint SOPs between 911 and 988

[FOR SITES CONDUCTING CALL TRANSFERS]

18. How long has your site been conducting 911/988 call transfers?
19. How do 911/988 call transfers work in your site? (For example, 988 clinicians embedded in your PSAP, three-way calls)
    a. Why did your site select this type of process or procedure?
    b. Did this process or procedure change at all during the pilot period?
20. How do you plan to prepare staff to implement changes in call transfer procedures based on SOPs developed (or implemented) during the pilot?
21. Describe any challenges staff have had with implementing the current call transfer procedures.
    a. How have you or the working group helped them overcome these challenges?

[FOR SITES NOT CONDUCTING CALL TRANSFERS YET]

22. Is your agency planning to begin 911/988 call transfers in the future? (Probe: When do you anticipate starting call transfers?)

23. Have you decided on a process for how call transfers will work in your site (For example, 988 clinicians embedded in your PSAP, three-way calls)? If yes, please explain.
    a. Why did your site select this type of process or procedure?
24. How will you prepare staff in your agency to implement the call transfer procedures included in the joint SOP?
25. What do you think will be the biggest challenges with implementing the call transfer procedures in the joint SOP?
26. Are there any external factors that might affect your implementation of the joint SOPs?

Greater behavioral health system context [ADAMHS Board only]

27. Did your board incorporate any working group recommendations into its crisis service community planning process?
28. Has your board participated in any efforts for creating state guidelines and standards for coordinated crisis response?
    a. If yes, how much has your experience in the Crisis Response Pilot informed your recommendations to the state?
29. Has your board interacted with the attorney general or other state-level leadership regarding 911/988 interoperability issues?
    a. If yes, how much has your experience in the Crisis Response Pilot informed your recommendations to the state?
30. Do you have plans for future local or state-level advocacy efforts related to 911/988 interoperability?
31. What are your board's identified priority issues related to 911/988 interoperability?
32. What else is needed to advance 911/988 interoperability in your county?

911/988 Interoperability experiences and sustainability

33. How would you describe your experience with the Clear Pathways Crisis Response Pilot overall? (Probe on the role of Peg's Foundation, Dignity Best Practices, other consultants, and Mathematica)
34. Approximately how much of the progress your site made over the last year related to 988/911 interoperability was a result of Clear Pathways activities?
    a. Would you attribute any of your site's progress to other factors, such as just talking to each other more or other external factors?
35. What else could Clear Pathways do to support 911/988 interoperability in local sites?
36. What else could Clear Pathways do to support 911/988 interoperability on a larger scale?

Wrap up

37. Is there anything else you would like to add about your site's development of 911 and 988 response to behavioral health emergencies that we haven't asked about?

38. Do you have any specific advice for other sites that may want to develop 911/988 interoperability in the future, based on your experience in the pilot?

[Interviewer: Ask for copies of joint SOPs, if not already collected]

Thank you for your time!

Clear Pathways Team Group Interview

Exhibit B.1. List of activities and tools used during the Crisis Response Pilot (2023–2024)

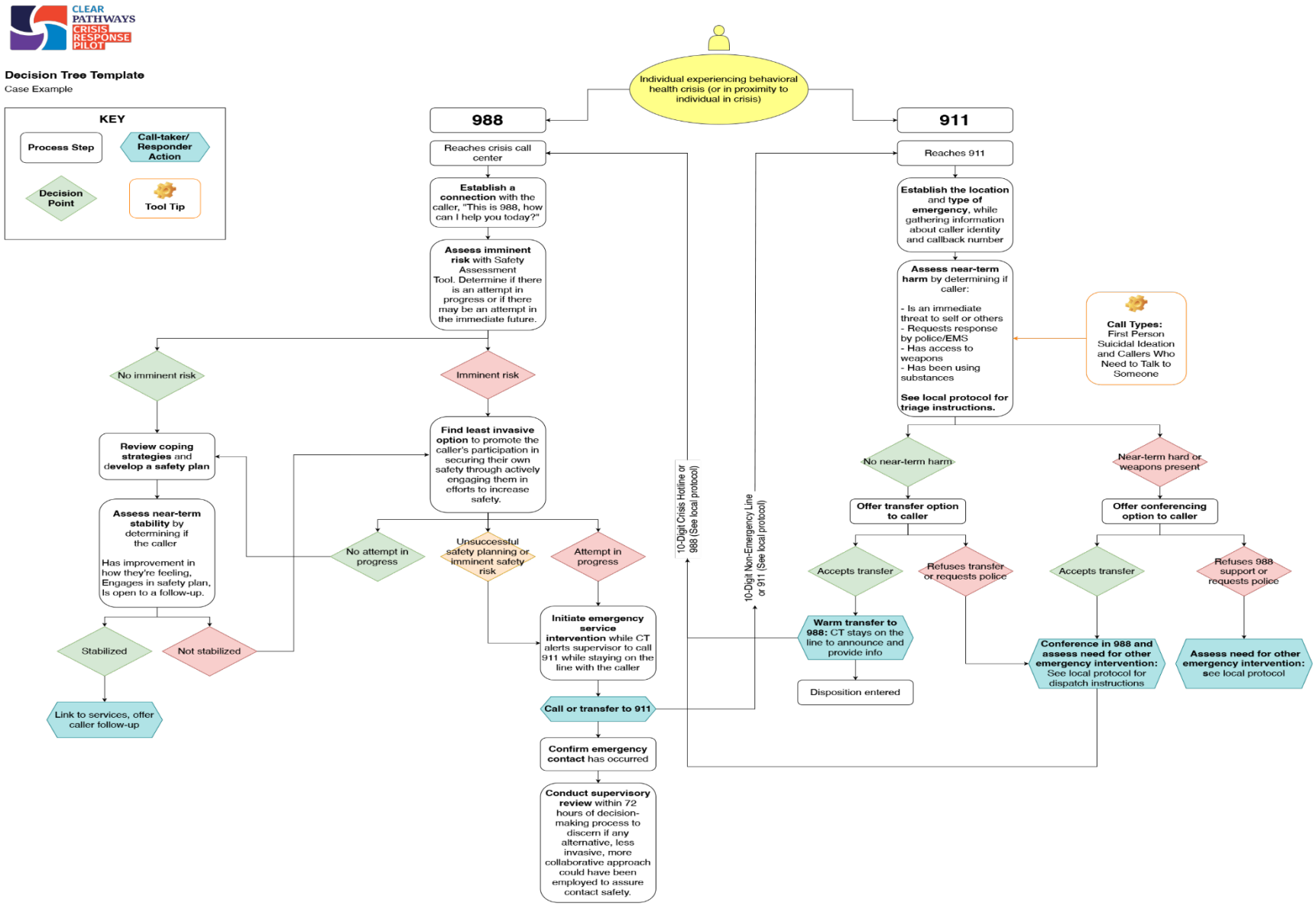
Activities	Tools
Consensus building (October–November 2023)	• Pilot launch survey and results * 2-hour facilitated discussion
Governance structure and workplan development (January–February 2024)	• Governance structure template • Workplan template * 1-hour facilitated discussion to review and edit governance structure and workplan documents
SOP Development (March-Aug 2024)	
Understand call flow (March–April)	• Guidance Worksheet #1 – Current State Scenarios Exercise, Clear Pathways Scenarios Exercise • Dialogue #1 public agenda and facilitator agendas * 1.5-hour facilitated discussion to move through the agenda and use worksheet #1
Identify call types of transfer (April–May)	• Data request (sample CAD and 988 data for the month of January 2024) • Dashboard (required coding of the sample data) • Guidance Worksheet #2 - Designing a Criteria for Transferring Behavioral Health Calls • Dialogue #2 public agenda and facilitator agendas * 1.5-hour facilitated discussion to move through the agenda and use worksheet #2
Decision tree development (June–July)	• Decision tree template • Guidance Worksheet #3 – Designing a Decision Tree • Dialogue #3 public agenda and facilitator agendas * 1.5-hour facilitated discussion to move through the agenda, use worksheet #3, and design decision tree
Final meeting	• Final meeting public and facilitator agenda • MOU Template + Crisis Response Pilot Appendix

1. What do you think has gone really well in your work with Crisis Response Pilot sites?
    a. What surprised you in a good way?
    b. Was there anything unexpected that you were able to build on or adapt to advance 911/988 interoperability?
2. What were some of the biggest challenges in your work with Crisis Response Pilot sites?
    a. What challenges surprised you the most?
    b. How did you and/or pilot sites overcome these challenges?

3. Think about the activities and tools delivered as part of the strategic work plan.
    a. Were there any activities and tools that pilot sites were particularly receptive to?
    b. Were there any activities and tools that pilot sites struggled with?
    c. Did you make any modifications or adaptations during the pilot period?
4. Overall, how successful was the working group structure for sites?
    a. Is there anything you would change about the working group structure?
5. Overall, how successful was the strategic work plan in advancing collaboration and shared decision making between participating PSAPs and 988s?
    a. How did their collaboration and shared decision-making change over time? (Probe: What contributed most to these changes?)
    b. How did their collaboration and shared decision making seem to affect their ability to develop governance documents?
    c. Is there anything you would change about the approach to helping sites with 911/988 interoperability governance?
6. Overall, how successful were the pilot activities in supporting joint SOPs between participating PSAPs and 988s?
    a. What challenges did pilot sites face in developing joint SOPs?
    b. What challenges did pilot sites face in implementing joint SOPs (if applicable)?
    c. Is there anything you would change about the approach to helping sites with joint SOPs for 911/988 call transfers?
7. What do you think will be the biggest issues with sites' ability to sustain 911/988 interoperability after the pilot?
8. What types of supports or resources do sites need to sustain or expand 911/988 interoperability?
9. Based on what you have learned through this process, how can the Clear Pathways team continue to advance 911/988 interoperability after the Crisis Response Pilot?

Appendix C. Example Decision Tree

Exhibit C.1. Example decision tree



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