

# METROPOLITAN EMS (MEMS)

How MEMS is Leveraging Communication Technology to Improve Outcomes for Behavioral Health Patients



## THE PROBLEM

In the wake of the COVID-19 pandemic, MEMS faced a new challenge: a growing number of pediatric behavioral health cases. Between 2022 and 2023, mental health calls accounted for 10% of MEMS' overall call volume, with a noticeable surge in pediatric mental health cases. MEMS was transporting every behavioral health patient under 18 to Arkansas Children's Hospital, creating a bottleneck in the emergency department as patients wait to be transferred to a behavioral health facility.

Mack Hutchison, Clinical Manager for MEMS, explains: "Many of these patients do not need medical clearance and can occupy a room in the ED for up to 24 hours before a bed is found for them at a behavioral health facility."

Hutchison had an idea: what if those that didn't need medical clearance could be routed directly to a behavioral health facility, relieving pressure on the ED and getting patients care more quickly?



## THE SOLUTION

Hutchison convened a task force to identify criteria that would enable EMS to bypass the ED when appropriate for behavioral health patients under 18. They settled on the following criteria: "Does the patient have an injury that needs medical attention? Is there an Ingestion? Chronic Medical Diagnosis? Is the patient acutely ill?" If the answer is "no" to all of those questions, MEMS may transport the patient directly to a behavioral health facility.

The protocol was approved by the Arkansas Emergency Physicians Foundation (MEMS Medical Authority) and Arkansas Children's Hospital. But there was still the issue of communication: How would paramedics communicate with staff at both the hospital and behavioral health facilities? "Pulsara, of course," said Hutchison.

## THE CUSTOMER

 [metroems.org](https://metroems.org)



Metropolitan Emergency Medical Services (MEMS) is a public, non-profit EMS entity serving Little Rock, Arkansas, and its surrounding counties. The organization's service area covers approximately 1,800 square miles and nearly half a million Arkansans. MEMS transports around 77,000 patients each year.

In 2020, MEMS adopted Pulsara to improve communication with area hospitals for time-sensitive emergencies such as stroke, STEMI, and trauma. Since then, the platform has helped decrease treatment times for patients. One of MEMS' hospital partners, Baptist Health Medical Center - Little Rock, reported a 58% improvement in door-to-puncture times for stroke patients.



Now, in addition to using the platform for time-sensitive emergencies, MEMS uses Pulsara to communicate with healthcare facilities about pediatric behavioral health patients.

“Using the protocol, medics on-scene first determine whether the patient should go to the ED based on factors like alcohol/drug consumption and potential for self-harm and injury,” explains Hutchison. “If they meet the determined criteria, they can go directly to a psych-admitting facility instead.” Using Pulsara, medics can jump on a video call with admissions staff to help determine whether the facility is able to meet the patient’s needs. “A hospital may say, ‘We need a little more information about this child because we’ve never had him before. Let’s connect face-to-face.’ This live call can uncover additional details about the patient to determine the best placement for them,” said Hutchison.

EMS professionals can also use Pulsara to ask if a patient already has a history with a particular facility. If so, they can ask if a bed is open, or view availability at other facilities if the first one is full. While en route, the medic can input all patient data and vitals into the app, so the receiving healthcare staff is prepared for the patient.

## THE RESULTS

Overall, MEMS has been pleased with how Pulsara has helped expand their options for responding to behavioral health calls. Between October 2022 and June 2023, MEMS responded to 438 pediatric mental health calls. Of those, MEMS was able to use the new protocol to transport 196 pediatric patients directly to behavioral health facilities—a 44% reduction in pediatric mental health patients transported to the ED. MEMS now partners with 5 different pediatric behavioral health facilities for direct admissions, and has plans to expand the protocol to adult behavioral health patients as well.

“The behavioral health aspect [of using Pulsara] has really been revolutionary,” said Hutchison. “Everybody wins: The process benefits MEMS, our hospital partners, patients and their parents, and caregivers. Rather than minors sitting for hours in an ER or hospital room where they don’t belong, they go directly where they need to be.”

The new process has helped MEMS achieve their goal of providing patients with timely, personalized care that meets their needs. “You wouldn’t delay a stroke or a STEMI for hours by taking them somewhere that couldn’t care for them, and now it’s the same with behavioral health patients,” said Hutchison. “Using Pulsara, we get the right patient to the right place, the first time.”

