

# PROGRAM REPORT

*Mobile Integrated Health*

2025



**UW Medicine**  
HARBORVIEW  
MEDICAL CENTER

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# ABOUT MIH

The Mobile Integrated Health (MIH) program was created in 2016 as a partnership between the Seattle Fire Department and the Seattle Human Services Department (HSD). It is a multidisciplinary team that leverages the broad expertise of its uniformed and civilian personnel to address the varied needs of its clients. The broad scope of the team mirrors the broad array of needs faced by these clients: dependence on the 911 system, mental illness, behavioral crisis, homelessness, substance abuse disorders, chronic illness, and much more.



*The mission of the Mobile Integrated Health program is to alleviate the strains placed on SFD Operations companies by high utilizers, behavioral or social crises, or lower acuity alarms while providing response and case management services to those individuals in need.*

The MIH program comprises several discrete functions. It provides short-term case management through HSD personnel, 911 response and immediate intervention, and fields a specialized overdose response unit. All SFD reports to Washington Adult Protective Services are routed through MIH for coordination and additional client service. Through a partnership with Harborview downtown clinics, the MIH team also staffs an Advanced Registered Nurse Practitioner.

Augmenting the core team services of field response and case management, the MIH program also supports SFD with outreach to high-utilizing locations, data analysis and visualization, department training, and collaboration with research, analytic, and communications initiatives.

# ORG CHART

**Fire Chief**

**SFD Program Manager, HSD Supervisor, *SFD Lieutenant\****

## **Response**

Case Managers & Firefighters

**Health One**

Health 1

Health 2

*Health 3\**

**Overdose Team**

Health 99  
(Response Team 1)

Health 98  
(Follow-up)

*Health 99\**  
(Response Team 2)

## **Client Services**

**Vulnerable Adult Program**

**Case Management**  
(HSD Staff)

**Advanced Practice Provider Program**

**Administration**

*Units are typically staffed with one case manager and two firefighters*

*\*Indicates that position or unit will be funded in 2026*

# PERSONNEL SPOTLIGHT



## **Elizabeth Aguilar, Case Manager**

Elizabeth (she/her/ella) joined the Health One team as a Case Manager in 2022. She has over eight years of experience in the fields of public health and social services. She is also currently a student at the University of Washington's School of Social Work attending as a Masters of Social Work candidate.

"Over these last three years, witnessing the genuine care, support, and collaboration within the Health One team and with those in our community has been such an honor and heartfelt privilege. It's truly rare and meaningful to serve on a team that supports each person as a whole—whether they are community members we've met or our own teammates."

## **Will Whatley, Firefighter/EMT**

Will (he/him) regularly works on both the Health One team and Post-Overdose Response team when he is not on his permanent shift as a driver on Ladder 3 in the Central District. He initially joined the team after being on the aid cars in downtown and seeing the gaps between patient care and places they could go. He has a passion for problem solving, having answers, and building bridges. Will uses this drive to provide better client care, and build relationships between responding units and Health One. His favorite part of working on Health One is the people, both the crews and the clients.



# CASE MANAGEMENT

Client case management is the heart of the MIH program. The centrality of this service rests on a core assumption: that clients and their circumstances are inherently complex, such that a single visit or intervention cannot typically touch the root cause of their behavior. Relationship-building and sustained efforts over time are required to meaningfully address issues such as substance use disorder, homelessness, or recurrent calls for chronic medical issues. The case management function sets the MIH program apart from other most similar alternative response teams in Seattle. MIH case management stands out among similar services for its low barrier approach, with virtually no rule-outs based on age, income, insurance, citizenship, or housing status.

MIH case management is performed by HSD staff. As employees of HSD's Aging and Disability Services Division, they have access to state long-term care and claims systems, along with EMS and hospital records, the county behavioral health and homelessness databases, and more. They use these discrete data sources - and client visits - to stitch together a comprehensive picture of client needs and available services and craft plans that principally rely on connections or referral to other providers. The HSD staff manage their own case loads, including client enrollment, interventions, and case closure.



*Health One crews transport a client's pets to the Seattle Animal Shelter for a temporary stay*

*In 2024, 904 clients were enrolled, up from 850 the prior year. Enrollment typically entails an in-person response or intensive care coordination. New and existing enrollments generated 3,312 client interactions in 2024: 1,314 in-person contacts, with the remainder administrative or remote.*

Complementing enrollments are Services: interactions for clients with lighter-touch case management, or specialty populations. In 2024 case managers added 1,166 of these: 349 post-overdose clients, 240 Vulnerable Adults, and 577 general services, including referrals to fall prevention. All told, these numbers paint a picture of a comprehensive service, spanning one-time referrals to intensive in-person outreaches.



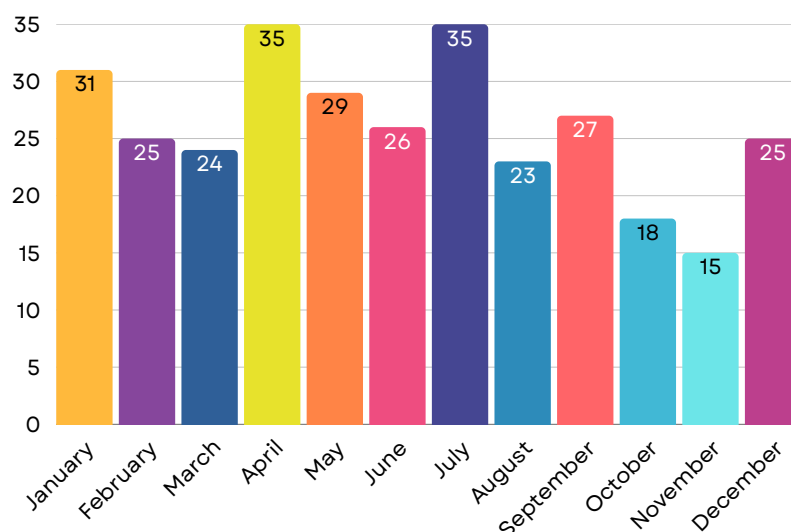
*FF Kenny Makowichuk on his way to an outreach in the Health One van*

# VULNERABLE ADULT REPORTING

Since 2011, SFD has partnered with the Human Services Department to administer the Vulnerable Adult reporting program. When SFD firefighters encounter older individuals experiencing abuse, neglect, or self-neglect, they report them to Washington Adult Protective Services (APS). These reports are submitted via the MIH program, allowing the team to add an additional layer of outreach, coordination, and referrals to augment what the state provides.

In 2024, firefighters reported 294 unique individuals, sending a total of 330 referrals to APS. Once a patient is reported, case managers may pursue any number of strategies to address the underlying concerns. Coordination with APS or hospital social workers, applications for state guardianship, rapport visits, benefits or in-home care assistance, and care conferences are among the strategies used to improve the circumstances of the clients. MIH staff regularly conduct training for SFD firefighters and officers on mandatory reporting.

## VULNERABLE ADULT REPORTS BY MONTH, 2024



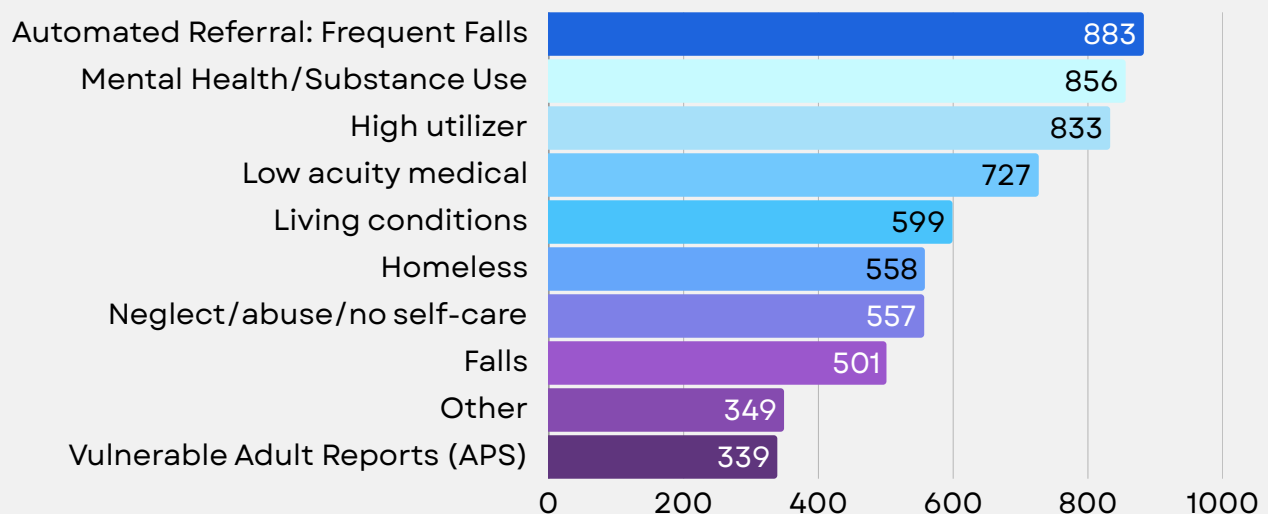
Excerpt from submitted Vulnerable Adult Report: "Patient lives alone, has extensive medical history including hypertension, Parkinson's, asthma and is on home O2. Patient lives in hoarding conditions and is unable to navigate most of her unit. Patient is non-compliant with medication, non-ambulatory, and cannot take care of herself."

# HEALTH ONE

Health One is the MIH program's co-responder program. Since 2019 it has fielded units with paired firefighters and case managers to provide services beyond just client case management. These range considerably but may include crisis intervention and de-escalation, warm handoffs to other units, transport, homeless services, rapport building, and much more. Health One units cover the whole city of Seattle and respond to any location except for highways.

The Health One program is designed to serve SFD Operations units first and foremost. SFD units in the field may consult directly with Health One to request a response or may electronically refer clients for later outreach. At the SFD 911 center, dispatchers processing calls for behavioral crisis may also directly dispatch Health One units to the scene. In certain cases, MIH partners providing field medical services, outreach, or crisis response may consult directly with Health One to coordinate a response.

## REASON FOR REFERRAL TO MIH, 2024



*Please note that multiple responses may be selected for the same client*

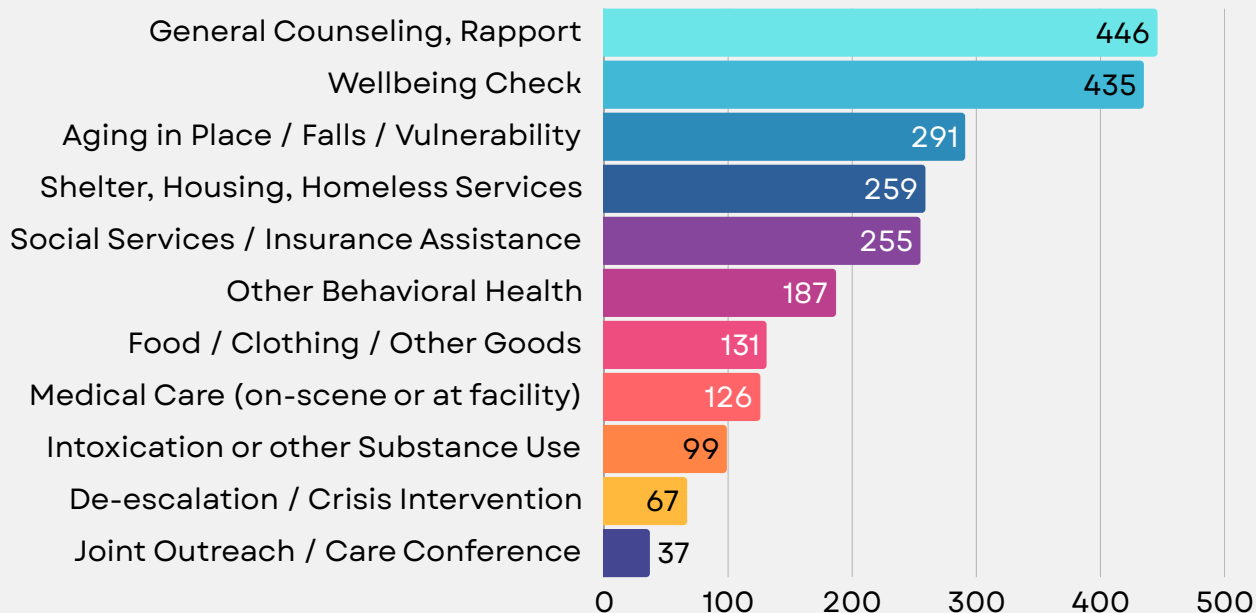


*Case Manager Shelby George observes SFD's technical rescue team as they assist a mobility-impaired client to move from her encampment under an overpass to a new apartment*

When a Health One unit responds to SFD Operations, it brings a wide array of tools and resources, but one of these is paramount: time. While engines and aid cars must quickly return to service, the Health One team spends as much time as necessary to resolve the situation. This may range from a quick provision of supplies to an all-day intensive outreach. Being free from the time pressures of standard EMS units gives Health One teams the leeway to build rapport and maintain a client-centered focus. In 2024, the average Health One on-scene time was 42 minutes.

The “warm handoff” is the gold standard for co-response and alternative response units. A warm handoff is a person-to-person client transfer, such as from a Health One team to a social worker or a clinician. This principle goes hand-in-hand with the concept of the alternative transport: a diversion away from the standard hospital destination and towards more appropriate services. Health One providers are authorized – and encouraged – to think broadly in their mission to avoid unneeded hospitalizations. An alternative transport may see crews accessing shelters, crisis centers, primary care clinics, residences, pharmacies, transit, and more. Warm handoffs and hospital diversions are particularly important for vulnerable clientele who may struggle to self-advocate.

## OUTCOME OF HEALTH ONE RESPONSES, 2024



*Please note that multiple responses may be selected for the same client*

Beyond handoffs and transport, Health One crews are well resourced to mitigate a wide variety of situations encountered in the field. All providers have crisis intervention training and team firefighters can provide first aid as needed. The rigs are equipped with food, beverages (hot during winter months), hygiene supplies, clothing, disposable mobile phones, and naloxone kits. One team vehicle is an ADA-compliant wheelchair van, capable of assisting mobility-impaired clients.



*Lt. Kenny Stuart and FF Ethyn Briscoe assist in bandaging a client's wounds*

# CASE STUDY ONE

Engine 30 responded to a collision between two vehicles, of which one vehicle was determined to have a mother and three children inside. The mother and children had been residing in the vehicle for the past three months. Due to the collision, the vehicle was totaled and the family needed immediate shelter. Health 1 was called to the scene to assist. Once on scene, the mother and three children had removed all of their belongings and were out on the street. CM Shelby George contacted a local organization that Health One recently developed a partnership with. The organization confirmed that they would be able to interview and possibly intake the family.

Health 1 coordinated transported the family and their belongings to the shelter. The family was interviewed and accepted into the shelter. The children each attended local schools, and CM George coordinated with the McKinney-Vento program to set up transportation to and from the shelter to each school.

The mother had previously struggled to maintain employment due to navigating the children's school schedule with her own work schedule. The shelter in which the family was placed allowed three meals a day, and supported in getting the mother back to work. They would have their own place for the four of them to share. During their last interaction, Health One provided haircuts to the children.

# CASE STUDY TWO

Ladder 8 responded to a 911 call with a chief complaint of chest pain, and recommended that the client be transported to the hospital. She became agitated and combative, refusing transport, and stayed at home with a neighbor. An APS report was filed, as SFD is a mandatory reporter.

The patient had a history of dementia and was recently hospitalized for another condition. During that hospitalization, it was recommended that she be discharged to a higher level of care, but there was difficulty finding a placement. She returned home, and worked with Providence ElderPlace. The patient's neighbor continued to check in on her. He found the patient in pain, not remembering to eat, drink, or use the bathroom. The neighbor reported that he could not longer provide the level of support that the patient would need.

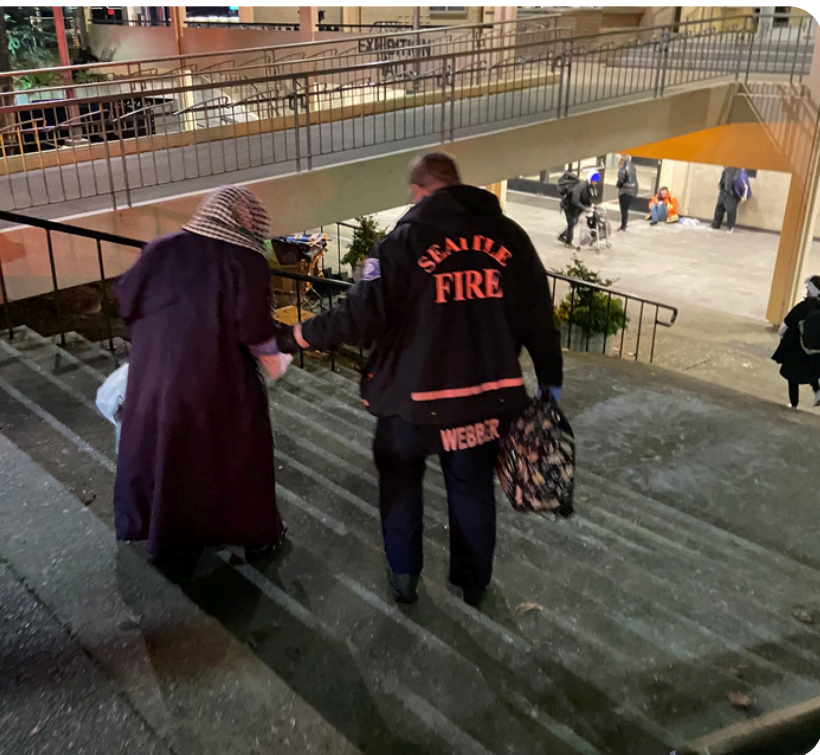
The neighbor connected Health One with the patient, who was initially suspicious. During this interaction, Health One often had to repeat parts of the conversation, and the patient was begrudging to provide further information. She allowed for a brief examination. She was informed that she had recently been hospitalized, which she also did not recall. The neighbor reported that prior to the hospitalization she could easily carry on a conversation and function well without support. However, he believed that she had decompensated since then and could no longer remain safely at home.

The patient consented to going to the hospital, and Health One followed the ambulance and met her there. She was admitted to the hospital, and later discharged to an Adult Family Home.

# SEVERE WEATHER RESPONSE

During inclement weather emergencies MIH leadership may upstaff the Health One team. Depending on the severity of the situation, Health One's hours can be extended up to 24/7 operations. During these events the team will balance regular outreaches and field requests with an increased focus on outreach to vulnerable populations. Typical weather emergencies are extended cold snaps, snow and ice, or unusual heat waves.

*"I just wanted to pass on how well the MAB worked out during the cold snap. It was ideal for moving large numbers of people to shelters. This kept operations companies in service and also kept operations from using AMR to simply send people to the ER where they would just be straining an already taxed system.... Having resources available overnight to take people to shelters saved lives."*  
- SFD Captain



*Lt. Roger Webber assists a client into a warming shelter*

While Health One is in emergency response mode, team leadership will coordinate extensively with the Office of Emergency Management and field partners. Typical tasks include proactive patrols of known encampments, transport to warming or cooling shelters, provision of emergency supplies, and assistance to other teams. In many cases, Health One will remain the sole overnight outreach and transport option in the city.



*Health One crews assist a client in a wheelchair into the MAB for transport to shelter*

In January 2024 the team was confronted by a historic cold wave. Beyond typical unit upstaffing, the MIH program made use of a new resource: the department's Mobile Ambulance Bus (MAB). Working with staff from Fire Station 39, Health One deployed the MAB as a mobile warming center and collection point. For 72 hours the team worked ceaselessly to visit major encampments, hand out cold weather supplies, facilitate shelter and hospital transport, and assist Operations units in the field. Between the MAB and Health One units the MIH team served at least 239 individuals.



# POST-OVERDOSE RESPONSE TEAM

The Post-Overdose Response Team, colloquially known as HEALTH99, began in summer 2023 following a mayoral directive and internal planning process. Its goal is to rapidly respond to individuals experiencing an opioid overdose, offering them resources, navigation, and access to expanded treatment options. The unit resembles other Health One teams, comprising a crew of two firefighters and a case manager. On the scene of an overdose the team may provide the full suite of typical MIH interventions, including alternative transportation, de-escalation, warm handoffs, essential items, and first aid. The rig also provides leave-behind naloxone kits and has distributed hundreds to date. Unlike other Health One units, HEALTH99 responds with lights & sirens with the goal of arriving as soon as possible after the patient wakes up.



*Lt. Castaneda and crews treat a client in the HEALTH99 rig*

## PROGRAM STATS

(through May 2025)

<b>H99 OD responses:</b> 1,166	<b>EMT-B Buprenorphine Administrations:</b> 79
<b>Follow-up responses:</b> 245	<b>Clients Navigated to MOUD Services:</b> 187
<b>MIH scene transports:</b> 169	<b>Narcan Kits Distributed:</b> 538

In early 2025 the team added a follow-up element, HEALTH98. Whereas the response team focuses on immediate provision of medications for opioid use disorder, navigation, and stabilization, the follow-up team can focus on larger goals with clients. Meeting hours to days after the overdose, the follow-up team may assist clients entering inpatient recovery services, connecting with primary care, or working with housing and outreach specialists. Modeled after a similar two-team approach in San Francisco, the response and follow-up strategy is designed to maximize the likelihood of a successful client engagement.



*FF Aletha Knoetgen administers buprenorphine to a client*



*HEALTH99 crews, medics, and an aid unit respond to an overdose*

# HEALTH99 CASE STUDY

HEALTH99 responded to an overdose in North Seattle. Upon arrival they found the patient had been resuscitated but was not interested in conversing. After some rapport building the crew engaged him and found him to be in withdrawal and feeling poorly. Upon gaining his consent, the crew received orders to administer buprenorphine. The patient began feeling better almost immediately and expressed interest in further substance use treatment. The H99 crew contacted colleagues at the DESC Opioid Treatment Network who are able to do field visits.

HEALTH99 left, and within the hour an OTN nurse arrived and administered a shot of long-acting injectable buprenorphine, which will protect from overdose and cravings for a month. A week later the MIH case manager reported that OTN had continued to engage the patient – he reported doing very well.



*ARNP Jess Haines and FF Aletha Knoetgen assist a patient with buprenorphine induction*

# BUPRENORPHINE PILOT PROGRAM

Medications for Opioid Use Disorder (MOUD) are the current gold standard for effective and safe recovery from opioid use disorders. Nationally these medications are seeing increased use in EMS. While prescribing options have increased, the barriers to MOUD treatment can be stubbornly high. Following an overdose reversal, when many patients are in acute withdrawal, an immediate induction of the MOUD drug buprenorphine can provide immediate symptom relief and help begin a pathway to recovery.

In early 2024 the Post-Overdose Response Team worked alongside Seattle Medic One to obtain approval for Washington State's first paramedic-delivered buprenorphine program. With an initial cadre of 16 trained paramedics, the first dose was administered in late February. Initial findings saw a dramatic rate of improvement in patients' willingness to engage and ability to work with MIH staff toward goals such as shelter, substance use recovery, and medical care. At the same time, the paramedic-only model was limited by unit availability and the logistics of requesting a medic response for patients seen by HEALTH99.

Thus, in November 2024, SFD and Medic One received approval from the Department of Health to begin an EMT-B buprenorphine program on HEALTH99. This program was the first of its kind in the nation. Later that month the team administered its first dose and has given it dozens of times since. In most cases these clients are taken to a crisis center, a destination more therapeutic and appropriate than a hospital ED.

In 2025, the team will work alongside UW and DESC to launch a novel post-overdose recovery center.

# ADVANCED PRACTICE PROVIDER INTEGRATION

After several years of operation, the MIH program leadership identified several gaps in its service. Specifically, these related to medically complex clients or those suffering from chronic illness or untreated wounds. In partnership with Congressman Adam Smith (WA-09), SFD secured funding, via the Substance Abuse and Mental Health Services Administration, to embed an Advanced Practice Provider (APP) within Health One.

Following a survey of area medical providers, in early 2024 SFD contracted with Harborview Medical Center to provide the program APP. Working with Harborview's Hobson Clinic, the MIH team selected an Advanced Registered Nurse Practitioner with a background in EMS, emergency care, and inpatient medicine to launch the program. In September 2024 the service began with several goals: providing advanced medical assessment, offering on-site street medicine and wound care, writing prescriptions and referrals, complex medical patient management, and support for the overdose response team. Thanks to the partnership with Hobson Clinic, the Health One provider is backstopped by a full primary care team, with access to a pharmacy, consult services, and clinic appointment availability.

In 2025 the program will evaluate the APP pilot alongside Medic One researchers. The findings of this analysis will help SFD and Harborview improve and refine the program. The evaluation will enable better matching of the nurse practitioner with appropriate clients and will give other MIH staff insight into clients who may benefit from their services.

# APP CASE STUDY

Engine 6 responded to a person in crisis in the International District. He was inappropriately dressed for the weather and calling for help in the street. The patient was agitated and difficult to assess. E6 called SPD for assistance with involuntary treatment but their response was significantly delayed. E6 then requested a Health One response. Based on reports from people who knew him, E6 assessed that the likely cause of his agitation was related to his polysubstance use. Health One responded with the APP on board. On scene the crew built rapport with the client and re-assessed him. The APP offered him olanzapine (a rapid-acting anti-psychotic) to help bring him into behavioral control, he was amenable to this option.

Within ten minutes they observed significant improvement in his behavior, such that involuntary treatment was no longer indicated. Within 20 minutes he was able to dress and feed himself. He shared his demographics and confirmed he used methamphetamine. He and his friends expressed gratitude to E6 and Health One. They felt he was treated with compassion and appreciated the de-escalation, medication, and outreach supplies, which allowed him to avoid further interaction with SPD and the hospital.



*ARNP Jess Haines checks a client's lungs after exposure to smoke from a house fire*

# PROGRAM EXPANSION

Through 2024 and into 2025 the MIH team has seen steady growth of its uniformed and civilian members. An internal interview and hiring round for firefighters that began in mid-2024 brought 18 new members to the team, swelling its uniformed ranks to nearly 40. In early 2026 the team expects to add its first uniformed supervisory member, a full-time lieutenant. A grant-supported case manager came onboard in early 2025; by the end of the year the case management team will grow to 10, including two new positions: senior counselors. These staff will assist with complex cases, training, and partner development while also holding their own case loads and helping staff units. A new part-time administrative member also joined the team in 2025.

Beyond standard onboarding training, MIH team members receive a wealth of ongoing specialized training opportunities. In the past year an array of team firefighters received Crisis Intervention Team or Certified Crisis Intervention Specialist training. These classes provided EMS-specific instruction on de-escalation tactics, behavioral crises, and real-world scenarios. Through a partnership with a local trainer, the team also received a course in motivational interviewing, a key client engagement technique used on most responses. MIH members additionally attended classes on opioid use disorders, trauma-informed care, suicide intervention, and housing strategies.

# 2025 & BEYOND

By early 2026 the MIH program will grow considerably, featuring its new lieutenant and senior case manager positions. The Health One teams will transition to a 7-day-a-week model, reflecting the continuous referral and live request volume from SFD Operations. The Post-Overdose Response Team will also grow, featuring expanded response hours (HEALTH99) paired with more follow-up resources (HEALTH98). The growing roster of case managers will enable the team to enroll more clients, providing the short-term case management that underpins the team's success.

The firefighters, case managers, nurse practitioner, and administrative staff of MIH look forward to continued service for the Fire Department and the Seattle clients most in need.



*FF Delmari Tyndale exiting the Health One rig*

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