City of Seattle
Mayor Jenny A. Durkan

TO: Sally Bagshaw, Chair, Finance and Neighborhoods Committee

FROM: Leslie Brinson, Senior Policy Advisor, Mayor's Office

DATE: May 2, 2019

RE: Green Sheet 13-40-A-3 (Mobile Integrated Health Response Unit)

Green Sheet 13-40-A-3 requests the Executive to work with the Seattle Fire Department (SFD), the Seattle Police Department, the Human Services Department, and Seattle King County Public Health and other internal and external stakeholders, as necessary, to assess how the City's emergency response system might better align with the needs demonstrated by its most frequent utilizers, including a plan to launch a Mobile Integrated Health Response Team pilot and potential analysis in the following areas:

- the types of calls coming in and the most appropriate types of responses that would benefit these situations;
- areas to improve or better coordinate existing non-emergent response programs, outreach, case management, and diversion contracts (including performance considerations);
- successful approaches in other cities; and
- supplemental recommendations to provide a multidisciplinary approach to low acuity response, which could include technology solutions and/or expansion of existing non-emergent response programs.

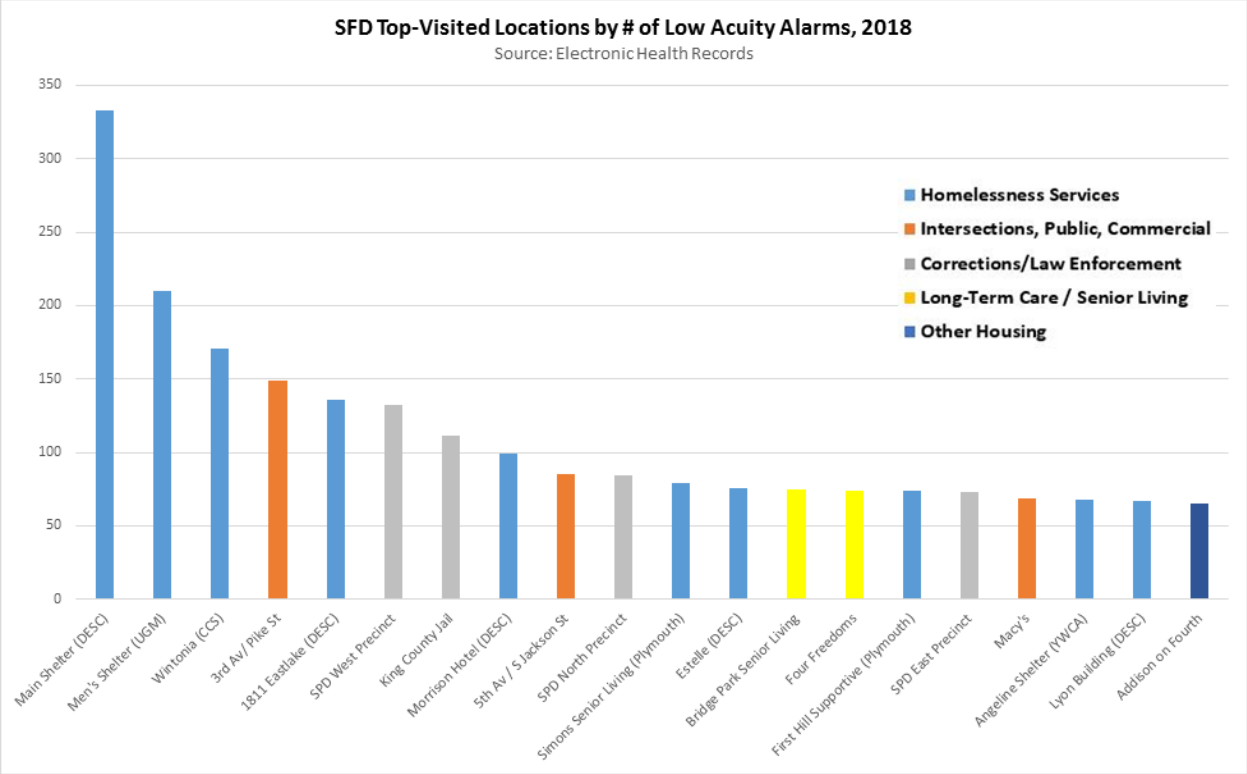
Green Sheet 13-40-A-3 includes $475,000 added to Finance General for Seattle Fire Department (SFD) to establish a multi-disciplinary Mobile Integrated Health Response Team that provides individually tailored services and diversion options to people with low acuity and chronic needs. **This document serves as the response required in Green Sheet 13-40-A-3 that allows this funding to be released from Finance General to SFD. In addition, transfer of the appropriation authority from Finance General to SFD will be requested in the second quarter supplemental budget.**

Introduction

The Seattle Fire Department (SFD) responds with a fully staffed engine, ladder, or aid car to a high volume of non-emergent calls that are often psychosocial in nature. This creates an inefficient use of resources that could otherwise be responding to an emergency call. These types of calls, referred to as "low acuity alarms" occur for several reasons: chronic or acute minor medical issues where the patient has no access to appropriate care; lifting a resident back into a wheelchair or bed after a fall; mental

health crisis; social service needs; and issues related to drug or alcohol use. Low acuity calls generally result in no action or a non-emergency ambulance transport to an Emergency Department for an issue that is likely to be more appropriately addressed in a primary care, urgent care setting or case management.

Of the top 25 locations generating low acuity calls, 15 are locations related either directly or indirectly to homelessness – known outdoor spaces, emergency shelters, permanent supportive housing locations, and corrections/law enforcement.



These locations are also touched by other City departments: they generally have contracts with the Human Services Department (HSD) for homeless services; they often have Healthcare for the Homeless medical staff onsite funded by Public Health – Seattle & King County (PHSKC); and they sometimes generate a number of non-emergent calls to the Seattle Police Department (SPD). As such, the Mayor's Office convened an Emergency Response Interdepartmental Team consisting of SFD, HSD, SPD, PHSKC, and the City Budget Office (CBO) staff to assess how the City might best address the needs of the people who most frequently utilize the City's emergency response system and how interventions might mitigate challenges faced by emergency responders when engaging with more frequent utilizers of the emergency response system.

Part 1: Reducing Low Acuity Calls

The first goal of the Emergency Response IDT was to understand the drivers of low acuity calls from the perspective of each department. SPD crosswalked their top call locations for public-disorder related events with the SFD low acuity locations and found a number of overlaps. HSD evaluated the staffing

models of the various shelter and permanent supportive housing locations. The Emergency Response IDT also met with a number of internal and external stakeholders and subject matter experts including SFD Chief Scoggins; SPD Assistant Chief Diaz and Navigation Team Officers; healthcare, shelter, and permanent supportive housing providers; and the Healthcare for the Homeless Network Community Advisory Group (whose membership consists of people with lived experience of homelessness and frontline service providers). This work resulted in the following key findings:

Permanent Supportive Housing (PSH) and Emergency Shelter Challenges

- Overall increasing age and acuity of adult homeless population and PSH residents
- Effectiveness of training is impaired by staff turnover
- Most providers have "No lift" policies which result in a call to 9-1-1 any time a resident falls to protect staff and address liability concerns
- Shelters often receive medically fragile people who have been released from the hospital because they no longer need hospitalization, but they are not well enough to be on their own
- Medicaid reimbursements are inadequate, inflexible, and difficult to access as they don't quite fit the interventions needed

Healthcare System Gaps

- Lack of low-barrier urgent care and walk-in healthcare options downtown
- Lack of appropriate low-barrier after-hours care
- Lack of non-911 alternative transportation (AMR, taxi vouchers, etc.)
- No Skilled Nursing Facilities or Adult Family Homes for this population

Further analysis by HSD found that staffing levels and types varied across target homeless service locations. Evening and overnight staffing levels are minimal and primarily for security purposes. Most locations have some level of medical service onsite during the day, generally contracted through PHSKC's Housing Health Outreach Team (HHOT), the Shelter Nursing Program and other programs funded by the Healthcare for the Homelessness Network. All locations had case management of varying levels. All the Permanent Supportive Housing locations reported having onsite Substance Use/Mental Health counseling, yet less than half of the locations had someone onsite who could prescribe treatment or medications.

Analysis showed that at sites with onsite HHOT nursing support, low acuity call volume is depressed while there is a HHOT staff onsite, and low acuity call volume increases when that person's shift ends. In addition, even though SFD provides training on low acuity triage and call diversion, shelter and permanent supportive housing providers are challenged by staff turnover which diminishes the effectiveness of training on this issue.

Permanent Housing Providers, specifically, also report that funding levels for services has not kept pace with the increasing medical needs of their residents. Over the past few years, King County has moved to using Coordinated Entry for All for referrals into Permanent Supportive Housing projects. While this is a positive shift that prioritizes the most intensive and expensive homelessness intervention for the people who need it the most, it has resulted in the concentration of an aging population with a higher level of medical needs without changes to the funding for the programs.

Future Opportunities to reduce low acuity calls

- **Appropriate Triage:** There is a need for additional resources options to support programs and people to on the "front end" that can provide medical advice and triage options other than an SFD response. Access to a 24/7 nurse triage line paid for by King County EMS and SFD was piloted with DESC in the past and saw some promising results, with over 80% of calls receiving a disposition other than 9-1-1. Shelter and PSH Providers expressed interest in bringing this back and expanding access to all shelter and PSH providers.

- **Alternative Transportation:** Most programs do not have transportation available for their residents, and those that do are limited based on staffing available to actually provide the transportation. To avoid defaulting to calling 9-1-1 for medical transportation, the City could explore potential alternative resources to provide transportation, such as taxi or rideshare vouchers, etc.

- **Dedicated Mobile Response:** Explore potential programming to aid shelter and PSH providers with non-emergent medical needs, such as assisting with lifts and transportation to urgent care facilities after-hours, particularly in the evening/early night hours after the Health Care for the Homeless Network staff shifts have ended.

- **Better addressing the needs of the aging and disabled population with increasing acuity in PSH in coordination with the Medicaid transformation efforts**: The Medicaid Transformation waiver includes three initiatives, all which do and will provide funding for an array of supportive services to those living in PSH. The goal of these services is to prevent the expenditure of Medicaid dollars for costly care such as emergency, hospitalization or nursing home care. HSD and PHSKC are both actively involved in the planning and implementation of all of three efforts;
    - Initiative 1 – Transformation through Accountable Communities of Health (HealthierHere),
    - Initiative 2 - Long Term Services and Support and,
    - Initiative 3 – Foundational Community Support Housing and Employment Services.

Part 2: Improving response to low acuity calls

The Emergency Response IDT and the SFD Low Acuity Alarm Program performed extensive outreach to community partners to understand the needs and optimal response strategies (see Appendix I). Significant outreach was also made to SFD operations members (with an emphasis on the Battalion 2 area) to understand their perspectives, frustrations, and suggested approaches[1]. In addition, SFD studied relevant alternative responses locally and nationally (See Appendix II). This outreach and research resulted in the following key findings:

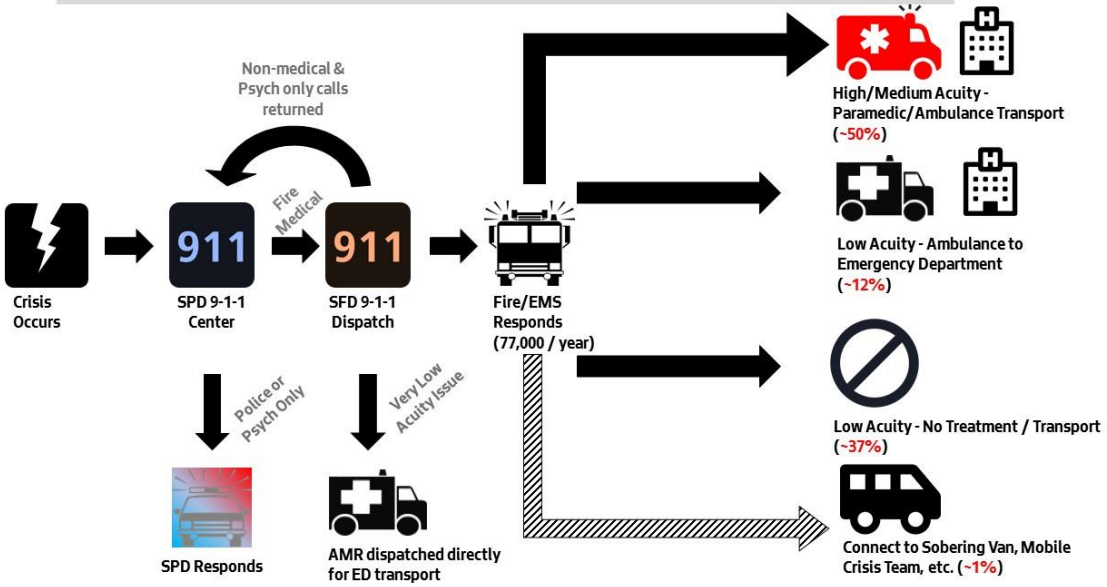
Emergency Response System Challenges

- 9-1-1 dispatch does not have access to any alternatives to address a caller's medical needs besides dispatching an SFD response.

[1] SFD's Battalion 2 covers most of Pioneer Square, the downtown core, Belltown, South Lake Union, Capitol Hill, Madison Park, and Madrona.

- 9-1-1 dispatch does not have the depth of medical expertise necessary nor the time available to triage the necessity of an SFD response over the phone.
- SFD and its contracted non-emergency ambulance service transport too many non-critical patients to the Emergency Department (ED) (due to statutory and systemic barriers to non-ED transport)
- There is a lack of transportation options below the 9-1-1 level but above bus/taxi level, i.e. an option with trained staff able to provide some level of patient assistance.
- Public insurance only pays for transportation via ambulance if it is to an Emergency Department.
- SFD operations units must minimize on scene time to be available for other emergencies, thus they are unable to spend time with patients making service connections
- Seattle's healthcare and homelessness service picture is a complex and nuanced one:
    - SFD firefighters do not have the requisite training to navigate the service system on their patients' behalf.
    - Low acuity and crisis patients often cannot effectively advocate for themselves and require a specialty team well versed in alternative options to hospitalization.
    - Information on case management, crisis services, high utilizers, and service connection points are often fragmented, siloed and inaccessible to SFD units.
- Only one mental health professional supporting entire SPD Crisis response effort.

Fig. 1: Current 9-1-1 System: SFD Response to Crisis / Medical Emergency



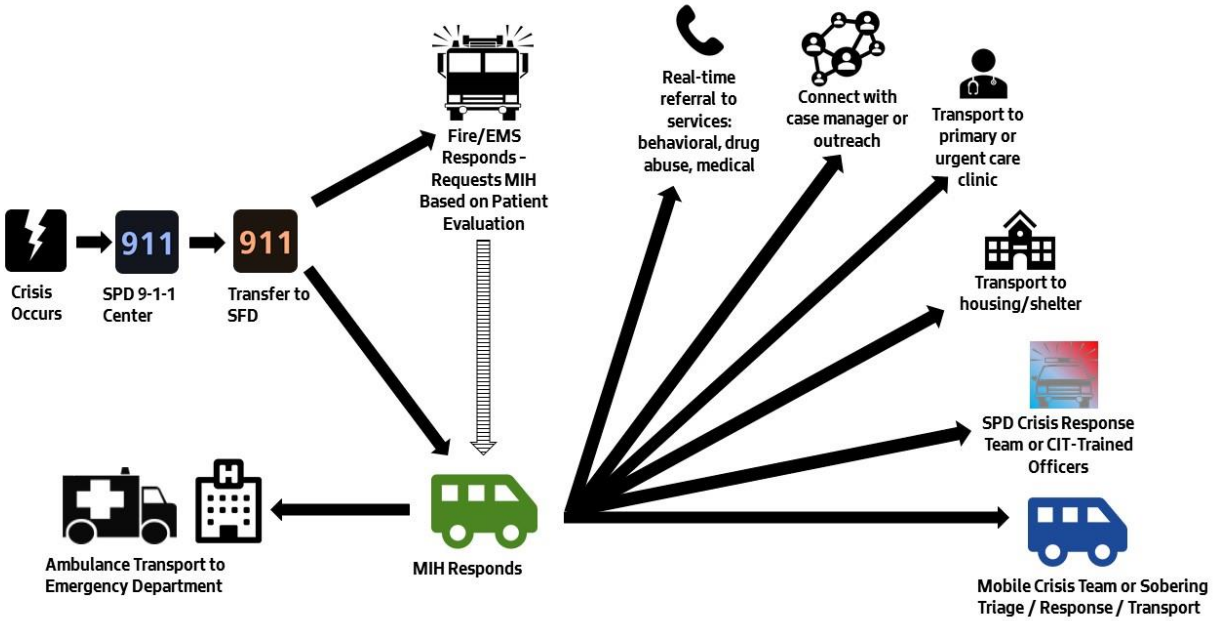
Better addressing the needs of low acuity patients

The Seattle Fire Department is not optimally configured to address lower acuity calls. Fundamentally the fire service is designed to mitigate the most critical emergencies. This means that operational units (which are busy and growing busier) do not typically have the time, tools, or training to appropriately address complaints that are not emergent in nature (see Figure 1 above).

Over the past five to ten years, an innovative response to this problem has been developing within the fire service nationally. Broadly, Mobile Integrated Health / Community Paramedicine (MIH-CP) is an acknowledgement that the EMS status quo is not working, and that new approaches are needed. Not

only can the fire service help address this public health problem, but indeed it is very well positioned to do so. Fire departments by nature are mobile, nimble, and have unparalleled access to patients in their homes and on the street. While firefighters are neither nurses nor social workers, their EMT or paramedic credentials are highly adaptable, and fire service personnel are used to working on larger teams to accomplish shared goals (Figure 2).

Fig. 2: Potential Mobile Integrated Health Pathways



Mobile Integrated Health Team Proposal

The Emergency Response IDT recommends the design, implementation, and evaluation of a pilot Mobile Integrated Health response unit to work in partnership with other local resources to more effectively address non-emergent healthcare, behavioral, and social crises in the context of 9-1-1 responses.

This pilot will have two overarching goals: (1) improve the patient experience and the outcomes of individuals who access the city 9-1-1 system for non-emergent complaints; and (2) lessen the impact of non-emergency requests for service on SFD operations units.

Near-Term Objectives of MIH Team:

- Provide an enhanced suite of patient transport destinations beyond the ED
- Perform more in-depth on-scene triage and evaluation
- Provide real-time warm handoffs or referrals to medical, behavioral, and social service providers, and post-call follow-up
- Divert patients away from costly ED, inpatient, and jail services

Medium to Long Term Objectives of MIH response unit:

- Increase SFD operational readiness as measured by front-line operations company response times and unit hour utilization
- Perform in-depth ongoing program evaluation and continuous quality improvement to understand strengths, weaknesses, and opportunities for MIH iteration and expansion

An iterative design model, where specifics of the deployment model shift and adapt based on continuous quality improvement, data analysis, and feedback from providers, partners, and patients is recommended.

Target Population

The MIH team will focus initially on three broad categories of patients:

I. Patients with chronic or low acuity medical complaints (including high utilizers);
II. Patients with complaints arising from behavioral crisis or substance use disorders;
III. Patients with social service needs only (e.g., shelter or warming)

Ongoing evaluation and data analysis should capture encounters and outcomes within these categories to help SFD further refine its patient matching and referral protocols.

Staffing

The recommended staffing level of the unit is three individuals. Initially, two of these will be dedicated Firefighters/EMTs. Firefighter staffing ensures SFD's ability to directly dispatch the unit on 9-1-1 responses. If the MIH team were inadvertently dispatched to a major medical emergency, firefighters would be sufficient to initiate basic life support measures and request additional support via radio.

The third team member will be someone with an in-depth understanding of the healthcare, behavioral health, and social service worlds such as a social worker (MSW/LICSW/other similar credential) or a Mental Health Professional.

MIH Team Deployment

Initially, the MIH team will initially either be directly dispatched form the Fire Alarm Center or directly request from operations units already on the scene who have had training on how and when the MIH Team is an appropriate resource. The MIH team could also proactively add itself to a response based on heard radio traffic, on known locations, and on information accessible via the unit's Mobile Data Terminal.

A future possibility could be to partner with specific organizations (such as homeless services providers) to provide them the ability to contact the MIH Team directly to request services.

Operational Detail

The MIH pilot will focus on the downtown core of Seattle with service provided to one or more adjoining residential neighborhoods (such as Capitol Hill). The exact parameters of the response area may be determined in part subjectively based on discussions with SFD operations personnel and city service partners, on anticipated unit roles and responsibilities. An objective layer of analysis will be added from 9-1-1 unit deployment modeling software.

Potential bases of operations could include an operations station, SFD headquarters, Medic One headquarters at Harborview Medical Center, a roving, non-station based model, or other facility. A full-

size SUV or van would allow the MIH Team to accomplish its mission. An ambulance is not required as the acuity level of patient contacts will not warrant supine patient transportation.

The MIH Team will use an expanded peak hour model that covers normal business hours plus service into the early evening when volumes are typically high. The rationale behind a peak hour model is twofold. First, due to limited pilot funds a 24/7 unit would deplete available resources too rapidly to effectively evaluate the program. Second, because this unit will focus heavily on diversion to available resources, it will function most effectively when it overlaps with daytime, business-hour services.

SFD anticipates that one-year operational costs will total $500,000. This includes approximately $379,000 in salaries with the remainder devoted to one-time costs such as vehicle procurement, equipment, supplies, training costs, and service hour expansion.

Race and Social Justice Initiative (RSJI)

Because the MIH Team represents a fundamentally new line of work for SFD and is expected to focus heavily on vulnerable, disadvantaged, and under-represented populations, SFD should initiate a conversation with departmental and city RSJI leaders to assess potential impacts and implications of this work. If indicated, a new Racial Equity Toolkit should be submitted.

Next Steps

Beginning in May, a working group will be assembled to bring this proposal from concept to fruition. The group will include SFD, IAFF Local 27 and necessary city, county, and private partner agencies. The MIH Team is expected to be operational in Q3 2019.

The implementation working group will also develop a comprehensive safety plan. This plan will cover issues such as protocols for behavioral crisis interaction, off-limits areas and locations (such as limited access roadways), civilian safety, and more.

Evaluation and Performance Monitoring

The MIH Team pilot will include a robust evaluation and data analysis effort. Suggested performance metrics include:

I. Total number of responses unit responses
II. Locations and location descriptions of responses
III. Responses by type: direct 9-1-1 dispatch, request from scene, other
IV. Total alternative transports made, and by type
V. Referrals made, and by type
VI. Long-term outcomes (dependent on grant)
VII. Low acuity alarms prevented to operations
VIII. Changes in front-line operations response time or unit availability as driven by the MIH unit

In partnership with the Innovation and Performance Team, SFD is presently applying to an independent grantor to provide an additional layer of financial support for this project. In addition to expanding the unit's operational timeline, the grant, if awarded, will fund a robust Ph.D.-level evaluation with a multidisciplinary team from the University of Washington. This evaluation would allow a far deeper and

more nuanced evaluation of the MIH program's assumptions, approaches, and actions than would be possible solely within SFD.

Appendix 1: Partnerships

Fundamentally, the Mobile Integrated Health Team will achieve success through relationships, partnerships, and the constellation of city, county, nonprofit, and private resources extant and forthcoming. The MIH Team is intended to be a connector in this network and not a new line of treatment, case management, or outreach.

Because SFD has set a 2019 timetable for deployment, it important to design it with currently available resources in mind. These can be tapped into today and incorporated in the team's workflow. At the same time, it is important to acknowledge that new services and locations are planned or coming online that may prove critical partners in the months and years to come.

Current Resources, Partners and Service Connections

I. **IAFF Local 27** – The SFD Firefighters' Union will be a key strategic partner in all stages of design and implementation.

II. **Emergency Services Patrol (Sobering Van) and Dutch Shisler Sobering Center** – In addition to this important alternative transport resource and alternative destination, the Sobering Center's summer 2019 relocation to Georgetown may add an additional transport site for primary and behavioral healthcare.

III. **Mobile Crisis Team** – The MCT will be a critical partner for triaging behavioral health emergencies and providing longer and more in-depth on-scene outreach and navigation than the MIH Team may be able to deliver.

IV. **Crisis Solutions Center** – Presently the CSC is only indirectly available to SFD operations, via the Mobile Crisis Team. The MIH Team will, as appropriate, be able to transport approved patients there directly.

V. **Urgent Care facilities** – Urgent care, such as the after-hours Country Doctor urgent care facility at Swedish hospital, are a critical resource for diverting non-emergent patients away from hospital EDs.

VI. **SFD High Utilizer Program** – The MIH Team will work closely with the Low Acuity Alarm Case Manager in the triage, outreach to, and navigation of high 9-1-1 utilizers.

VII. **SPD Navigation Team** – It is envisioned that bi-directional information flow with the Navigation Team, where the Navigation Team shares information on outreach and referrals and the MIH unit provides on-scene medical and social resources.

VIII. **SPD Crisis Intervention-trained officers and Crisis Response Team** – On the scene of behavioral health emergencies, the MIH Team will work closely with Crisis Intervention - certified officers and will liaise as appropriate with the SPD Crisis Response Team. As of writing the Low Acuity Alarm Program is exploring an MOU with SPD for information sharing around behavioral health emergencies.

IX. **Downtown High Utilizer Group** – The MIH Team, via the Low Acuity Case Manager, will refer individuals to the Downtown High Utilizer Group.

X. **Downtown Emergency Service Center** – As a major city homelessness service provider, DESC will be a critical partner. The MIH Team will be familiar with the DESC HOST team (homeless outreach), SAGE program (mental health), and Pathfinder program (opioid use disorders) and able to refer in to them.

XI. **Shelters, day centers and urban rest stop, hygiene centers** – It is anticipated that a significant portion of the MIH Team's work will involve individuals who are unsheltered. The team will be versed in the hours, intake, and operations of city shelters. Through the Navigation Team, it is expected that they will have on-call access to real-time shelter bed availability.

XII. **2-1-1 and Crisis Line** – The MIH team will be able to assist patients with accessing the 24-hour Crisis Line, the Warm and Recovery lines, and 2-1-1.

XIII. **Location-based case management (PSH and SHA)** – Due to the Team's longer on-scene times, the MIH Team will, as available, be able to liaise directly with housing case managers and other facility-based services

XIV. **Taxi and Rideshare transportation** – To maximize unit in-service time, the MIH Team will have access to transportation alternatives such as taxicabs and rideshare services (Lyft, Uber) for stable, ambulatory, willing, and appropriate patients.

Future, In-Development, and Potential Resources, Partners and Service Connections

These partners and resources range from those where cooperative agreements with SFD are in-progress to those that are possible but still notional and without funding.

I. **Single Diversion Portal /OneCall** – The Single Diversion Portal (soon to be OneCall) will be a 24/7 service provided by Crisis Connections that provides on-scene first responders with patient information and tools such as telephone warm handoffs and next-day appointment scheduling. OneCall is expected to be used primarily for behavioral health and substance use crises including real-time information on opioid use disorder treatment availability.

II. **Primary Care**, including:
   a. Downtown Public Health Center
   b. Harborview Medical Center Outpatient Clinics – Pioneer Square Clinic, 3rd Avenue Clinic in Belltown, and others
   c. NeighborCare Clinics
   d. Healthcare for the Homeless Network (HCHN) medical and behavioral health care sites, including the Mobile Medical Van
   e. Seattle Indian Health Board and Chief Seattle Club
   f. DESC 22nd and Rainier clinic (opening 2020)
   g. Sobering Center clinics

III. **Law Enforcement Assisted Diversion (LEAD)** – The MIH team will work with LEAD to develop a referral process for un-enrolled and actively case managed patients.

IV. Direct referral to **inpatient detoxification services**.

V. **SFD Nurse Navigator** – SFD is exploring the concept of 9-1-1 nurse navigation, whereby an RN is transferred non-critical calls for the purpose of additional screening, triage, medical advice, and provision of services such as scheduling appointments and dispatching alternative transportation. If this service entered operation, the 9-1-1 nurse and MIH team would be able to work in tandem.

VI. **AMR expanded transport** – AMR ambulances are presently restricted to emergency department transportation only. AMR transport units could potentially be utilized for alternative transportation in two scenarios. In the first, AMR could partner with SFD to provide non-

reimbursed alternative transportation for designated MIH patients. In the second, statewide statutory changes (such as suggested by HB1358) or federal changes (such as under the newly-unveiled Emergency Triage, Treat, and Transport (ET3) protocol from the Centers for Medicare and Medicaid Innovation) could pave the way for more widespread utilization of ambulances for alternative transportation.

Appendix II: Local and National MIH Models

As part of the review and proposal design process, SFD studied relevant MIH programs locally and nationally. Nearby programs studied included:

- Kent, WA – FDCARES (firefighter/nurse deployment model with social worker backstop)
- North King County, WA – Community Medical Team, CMT63 (non-response firefighter/social worker proactive outreach model)
- South King County, WA – Community Medical Team, CMT36 (response-based firefighter/social worker and proactive outreach model)
- Bellevue, WA – CARES, social worker and MSW student outreach and response model
- Pierce County, WA – Mental Health Professional outreach to PD/FD high utilizers

National models include:

- Los Angeles, CA Fire Department – Paramedic/nurse practitioner response team
- Fort Worth, TX – Community paramedic incident response with 9-1-1 nurse navigator
- Eugene/Springfield, OR – CAHOOTS mobile crisis response team staffed with crisis counselors, EMTs. Respond to FD/PD for behavioral crisis, intoxication, homelessness issues, first aid, transportation
- Colorado Springs, CO – FDCARES – Multidisciplinary team of paramedic, police officer, Mental Health Professional – respond to psychiatric emergencies
- San Diego, CA – Resource Access Program – collaboration of FD, PD, 2-1-1. RAP provides community paramedics to do high utilizer outreach, alternative transportation
- Spokane, WA – CARES program, alternative response vehicle staffed with paramedic/EMT. Alternative transport, coordination with social services, high utilizer outreach