

# Vulnerable Population Strategic Initiative (VPSI) Mid-Levy Review

Prepared for the Emergency Medical Services Division of  
Public Health – Seattle & King County

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July 18, 2022

# Acknowledgements

I would like to express my gratitude to Public Health – Seattle & King County for the opportunity to work with them on this mid-levy review. I would especially like to thank Marlee Fischer and Hendrika Meischke, without whom this project would not have been possible. The guidance, support, and patience you have both offered me over the course of this process have been instrumental in my success. I would also like to thank the VPSI partners who make this program possible, and who do so much to support their communities. Especially during the pandemic over the past two years, their collective wisdom, compassion, and resilience is one of the greatest assets of VPSI. Those partners include Seattle Office of Emergency Management, The Somali Health Board, St. Vincent de Paul Centro Rendu, The Chinese Information and Services Center, and the University of Washington School of Public Health.

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# Summary

The Vulnerable Population Strategic Initiative (VPSI) is currently in its second levy period, which will run through 2025. VPSI partner organizations conduct community education and outreach with the objective of disseminating information about 9-1-1, CPR and AED, stroke recognition and response, and other EMS-related topics. The long-term purpose of this initiative is to eliminate disparities in emergency medical services (EMS) access, and in the health outcomes of people affected by cardiac arrest, stroke, and choking incidents.

VPSI partners reported outreach and education activities, and described their experiences to support the evaluation of VPSI activities in the first two years of the current levy period (2020-2021). The information provided was compiled and analyzed to gain a snapshot of what has been done so far this levy period, what has worked well, what could have worked better, and what direction VPSI outreach and education work may take in the future.

The COVID-19 pandemic was officially declared a public health emergency by the United States Department of Health and Human Services in March 2020, and had a significant effect on the administration and focus of VPSI activities. Restrictions on in-person gatherings necessitated a shift to online hosting of many outreach and education activities early on in the current levy period. Some events were held in person while adhering to social distancing, including outdoor COVID-support events and drive-through food bank distribution. Additionally, many community organizations and individuals deprioritized all non-COVID-related topics due to the amount of time and resources COVID response required. The EMS Division of Public Health – Seattle & King County provided support to partners in responding to the changing needs of target communities, which contributed to the ability for partners to maintain community connections through the pandemic.

While there were difficulties associated with adapting to these new circumstances, some of the changes made would be valuable to continue after the pandemic has subsided. Shifting outreach and education online allowed partners to reach new segments of the population, and to connect with the community more efficiently.

The successes experienced so far this levy period demonstrate the strength of VPSI connections and the impacts that have been made in the prioritized communities. The findings of this evaluation present ways to build on these existing strengths to advance the goals of VPSI through outreach and education in the remainder of this levy period, and can inform strategic planning for the next levy period. An overview of recommendations is provided in the box below.

## Overview of Recommendations

### Supporting current partners to continue and advance their work

- **Technical assistance and skill-building:** support the development of partners during the current levy period, and include resource and funding considerations in future levy planning
- **Sharing lessons learned with one another:** leverage existing connection points to enhance outreach and education efforts in the current levy period
- **Evaluation, assessment, and quality improvement support:** begin support and testing of a coordinated quality improvement approach in the current levy period, with the possibility of expansion in the next levy period
- **Expanding reach by scaling up the train-the-trainer model:** support current efforts to utilize the train-the-trainer model in the current levy period, and consider additional partners and methodologies in the next levy period

### Enhancing collaboration between community partners and fire departments

- **Career pathways into EMS:** continue outreach in the current levy period, and consider additional collaboration and support opportunities in the next levy period
- **Language access:** support the ongoing expansion of reaching different language communities in the current levy period
- **Connecting MIH and VPSI:** leverage existing connection points to identify possible collaboration in the current levy period, with additional support in the next levy period

### Leveraging partnerships and aligning with Public Health's enhanced approach to community engagement

- **Authentic engagement:** continue outreach and relationship building in the current levy period, and collaborate with the Office of Equity and Community Partnerships to strengthen engagement in the next levy period
- **Look beyond what data can show:** support community input to identify priorities and assets in the current levy period
- **Identification of priority populations and new and emerging topics:** continue in the current levy period, and collaborate with the Office of Equity and Community Partnerships in the next levy period

*Table 1. A brief overview of recommendations for the current and future levy periods.*

# Introduction

The Vulnerable Population Strategic Initiative (VPSI) is a collaborative program between the Emergency Medical Services (EMS) Division of Public Health – Seattle & King County (PHSKC), the University of Washington (UW), local fire departments, and community-based organizations serving vulnerable populations in King County. The goal of VPSI is “to conduct programmatic, scientific and case-based evaluations to assure that EMS provides the best possible care to all King County residents regardless of race, ethnicity, age, socio-economic status, culture, gender or language spoken.”<sup>1</sup>

The designation of ‘vulnerable population’ is given to any group determined to have higher risk for poor health outcomes resulting from social, economic, political, environmental, or other barriers, or those who have illnesses or disabilities which limit physical or mental capacity.<sup>2</sup> A 2014 needs assessment involving EMS providers throughout King County identified several priority populations for improving service delivery, including limited English proficiency (LEP), seniors, intoxicated patients, institutionalized patients, and patients with mental health conditions. Priority topics for educating these populations are improving understanding of EMS services, when and how to call 9-1-1, how to communicate with EMS personnel, and how to respond to medical emergencies before medical intervention is possible. As a result of that needs assessment, the current populations of focus for VPSI outreach and education activities are seniors, immigrants, and LEP communities.

As detailed in the EMS Division 2021 Annual Report, there are currently five distinct focus areas and objectives of VPSI:

1. **Community education and outreach:** *conduct 9-1-1-related education and outreach activities in communities that are vulnerable to health disparities*
2. **Fire-based pilot studies:** *conduct pilot studies on alternative EMS care delivery to populations requiring complex care*
3. **UW partnership:** *support the collaboration between UW School of Public Health and VPSI*
4. **Mental wellness:** *assess and address mental wellness needs among King County EMS personnel*
5. **Equity and social justice (ESJ):** *build career paths in EMS to promote a diverse workforce, and integrate ESJ values into the EMS workplace<sup>3</sup>*

This evaluation concentrates on the VPSI focus area of community education and outreach. This report will highlight activities undertaken in the current levy period (2020-2025), what factors have contributed to success, what factors have created barriers, what lessons have been learned, and where current partners hope the initiative might go in the future. This report will also consider opportunities for improving or expanding VPSI community education and outreach activities in the remainder of the current levy period and inform strategic planning for the next levy period (2026-2031).

# Background

## The Public Health Problem

Disparities in access to healthcare and in health outcomes related to poverty, discrimination, and limited English proficiency (LEP) pose a significant population health challenge in King County. Nationally, medically disadvantaged populations are less likely to have health insurance, less likely to have a regular primary care provider, and are more likely to use the emergency department (ED) as a primary source of healthcare services.<sup>4</sup> In fact, the King County Community Health Needs Assessment (2021/2022) shows that “more than half (54%) of all Medicaid beneficiaries in King County with five or more ED visits had no visits to a primary care provider (PCP) in 2019.”<sup>5</sup> Furthermore, “racial/ethnic disparities in insurance coverage have widened” since 2014.<sup>5</sup> Frequently, the first contact these patients will make in the healthcare system is with Emergency Medical System (EMS) providers. Communication barriers and cultural differences create distinct challenges for immigrant and LEP communities accessing 9-1-1 and EMS services. Data from the 2020 U.S. census indicates that 23.7% of residents in King County are foreign-born, and 28.4% of residents over 5 years old spoke a language other than English at home, creating a high priority in addressing these barriers.<sup>6</sup>

Senior citizens experience a higher rate of certain life-threatening conditions and events than other age groups, including sudden cardiac arrest, heart attack, stroke, and choking. More than 350,000 sudden cardiac arrests occur in the U.S. every year, with a survival rate of only about 10%.<sup>7</sup> As many as 800,000 U.S. residents have strokes each year, with more than 135,000 resulting deaths.<sup>8</sup> Close to 5,000 people died from choking in the U.S. in 2020, more than half of whom were over 75 years old.<sup>9</sup> In King County, sudden cardiac arrest is the 3rd leading cause of death and stroke is the 6th leading cause of death.<sup>10</sup> Many deaths caused by these events can be prevented through quick activation of EMS and bystander intervention.

The COVID pandemic has had disproportionate impacts on communities already experiencing health disparities.<sup>11</sup> Hospitalization and mortality rates for Black, Indigenous, and people of color (BIPOC) populations have exceeded those for White populations.<sup>11</sup> Black and Latinx community vaccination rates lagged behind White community vaccination rates for much of the pandemic.<sup>11</sup> Additionally, Asian communities experienced an increase in hate crimes and discrimination due to anti-Asian rhetoric used by high-ranking government officials early in the pandemic.<sup>11</sup>

## Intervention Model and the Strategic Initiative

Community-based interventions have been shown to increase healthcare access and utilization and to improve outcomes. The use of community health workers can improve “knowledge of screening, prevention, and self-management, resulting in more



appropriate utilization of services and significantly better outcomes” particularly for “people in poor, underserved, and minority communities.”<sup>12,13</sup> One study examining disparities in 911 EMS activation for people experiencing symptoms of a stroke showed that community education programs can be effective in raising awareness of the importance of calling 911.<sup>14</sup>

VPSI began in the prior levy period (2014-2019), and is currently in its second levy period, which runs 2020-2025. The activities during the previous levy period included “conducting education and outreach activities on 9-1-1 and emergency response in vulnerable communities... conducting pilot studies on alternative EMS care delivery... and conducting a county-wide wellness needs assessment among 9-1-1 personnel.”<sup>15</sup>

While the core objectives of VPSI remain the same now as they were at the inception of the initiative, activities since 2020 have built upon those conducted in the first levy period. The following topics are prioritized in VPSI outreach and education due to their ability to improve health outcomes and survivability of medical emergencies, as well as their relevance to the targeted populations:

- **9-1-1 education:** LEP individuals are less likely to call 9-1-1 than their English-speaking counterparts, but providing information on when, why, and how to call 9-1-1 increases the rate at which LEP people make that call.<sup>16</sup>
- **Hands-only CPR and AED use:** Although the mortality rate of sudden cardiac arrest is extremely high, the chance of survival increases 2-3 times if bystander CPR is performed immediately.<sup>17</sup> Furthermore, recent research has indicated that survival rates are better for patients with hands-only CPR as compared to CPR involving rescue breaths.<sup>18</sup> Cardiac arrest victims who receive an AED shock from a bystander before the arrival of emergency responders also have a far greater chance of survival and return to normal function than patients who did not.<sup>19</sup> To increase the likelihood of receiving timely life-saving actions, members of the community must be trained in CPR and AED use, but rates of CPR training are lower in communities with lower educational attainment, or lower household incomes.<sup>20</sup> In fact, Black and Hispanic victims of cardiac arrest are less likely to receive bystander CPR than White victims, regardless of whether the cardiac arrest occurs in the home or in public.<sup>21</sup> This disparity contributes to inequities in survival for cardiac arrest outside of a hospital.
- **Stroke recognition and response:** Stroke patients who receive emergency medical care within 3 hours of the onset of their symptoms have lower rates of long-term disability than those who receive delayed care.<sup>22</sup> A meta-analysis conducted by experts in racial-ethnic disparities in stroke care showed that minority groups are less likely to receive education to recognize symptoms of stroke and less knowledgeable about the need for immediate medical care.<sup>23</sup> Cultural and language barriers also contribute to slower response times for LEP victims of stroke.<sup>23</sup> These factors contribute to racial and ethnic disparities in morbidity and mortality outcomes for stroke patients. Stroke fatality is also

correlated with advanced age, and with lower socioeconomic status.<sup>24,25</sup> These populations are in need of targeted awareness and response education to improve survival and decrease this disparity.

- **Choking response:** Permanent brain damage or death can result from choking and the loss of oxygen delivery to the brain, but the faster assistance is provided, the less risk of permanent disability.<sup>26</sup> The two age groups most likely to experience a choking incident are young children (1 to 3 years old) and adults over the age of 60.<sup>26</sup> More than half of deaths resulting from choking incidents are in adults older than 74.<sup>26</sup>
- **Hypertension:** Hypertensive crisis, a dangerous increase in blood pressure, is a medical emergency that, if left untreated, can lead to stroke.<sup>27</sup> Lower rates of insurance coverage and limited healthcare access are associated with disparities in hypertension. Hypertension risk can also be exacerbated by the cumulative stress of racial discrimination over the lifespan.<sup>28</sup> These factors all contribute to higher rates of hypertension in Black, Hispanic, and immigrant populations.<sup>27</sup> Additionally, risk of developing hypertension increases with age, making the elderly population more susceptible to this chronic condition.<sup>29</sup> Understanding the risk factors for developing hypertension, the signs and symptoms of a hypertensive crisis, and how to prevent hypertensive crisis are all of great importance to VPSI priority populations.
- **Falls prevention:** The risk of a serious fall increases substantially with age, making fall prevention a high priority education topic for elderly populations. As many as one in three people over the age of 65 falls each year, and many of these falls result in injuries serious enough to require emergency medical intervention and hospitalization.<sup>30</sup> Many elderly individuals are aware of the risk of falls, which is a source of fear and may lead to some avoiding activities like walking, socializing, and shopping.<sup>30</sup> Understanding the factors that lead to falls and learning how to lower the chances of a fall can improve quality of life for older adults.

The COVID-19 pandemic struck early in the current levy period, leading to adjustments in the topics of outreach and education activities, as well as the mode of delivery of those activities. VPSI partners responded to the shifting priorities of their communities and offered education on topics relevant to pandemic response, which will be covered in greater detail throughout this report. Partners also modified their method of engagement, making use of virtual platforms and making contact with members of the community at COVID-related events like vaccine clinics. One VPSI partner remarked, “Nothing was normal in the first two years of this levy period and it’s interesting to see what will stick and what will go back to ‘normal’.”

Subject matter experts have created lesson plans for all VPSI priority topics, which are available on the VPSI website. Each lesson plan incorporates education on calling 9-1-1 and includes background information on why the priority topic is important to the

community, learning objectives, discussion questions, and adaptations for delivery in LEP communities. The EMS Division provides funding to select organizations to create in-language education materials, conduct outreach, and facilitate workshops using these lesson plans to their communities of focus.

There are currently five organizations partnered with the EMS Division to conduct VPSI outreach and education activities: the University of Washington School of Public Health, the Seattle Office of Emergency Management, the Chinese Information and Services Center, St. Vincent de Paul Centro Rendu, and the Somali Health Board. The communities served by each organization are distinct, but all represent segments of senior, immigrant, and LEP communities.

- The **University of Washington** provides outreach and education to seniors in King County. Undergraduate and graduate students in the School of Public Health participate in these outreach activities through workshops at senior centers, door-to-door canvassing, phone banking, and mail campaigns. Students are also involved in the creation of educational materials and curricula for the outreach program. Graduate students also support the study design and evaluation of VPSI projects as part of their practicum, capstone, and/or thesis.
- The **Seattle Office of Emergency Management (OEM)** focuses their outreach and education activities on LEP, low income, and Black, Indigenous, and people of color (BIPOC) populations. OEM contracts with bilingual navigators, known as Community Safety Ambassadors (CSAs), to conduct VPSI and other emergency response-related outreach.
- The **Chinese Information and Services Center** provides outreach and education to immigrant and LEP communities with a particular focus on Asian segments of those populations.
- **St. Vincent de Paul Centro Rendu** provides services for all communities, with a focus on reaching the Latinx and Spanish-speaking communities. They train EMS navigators, community leaders who are interested in sharing VPSI topic information with the community.
- The **Somali Health Board** aims to reduce health disparities in King County's Somali and other East African communities. Through VPSI, they focus heavily on CPR education, as well as outreach and education on other EMS topics.

## Methods

This evaluation of VPSI's community outreach and education included information gathered via survey and individual interviews, and was designed and implemented with the input of each of the partnering organizations. The 2018 mid-levy review and presentation materials accompanying VPSI partner work updates were used to draft the logic model (Appendix A), which informed the creation of the survey (Appendix B) and

interview guide (Appendix C). Those evaluation materials were provided to all participating organizations for review and feedback regarding clarity and completeness.

The logic model shows the intended outcomes of VPSI outreach and education activities. Measures of long-term outcomes (changed conditions) and intermediate outcomes (changed actions) are outside the scope of this review. Short term outcomes include deliverables of VPSI activities, which were the focus of the quantitative portion of this evaluation.

The survey's primary objective was to collect data on the quantity of outreach and education activities conducted by topic, the number of people reached through those activities, and the populations targeted. Interviews were conducted with the objective of gaining insight into the experience of each partner during the current levy period, including discussion of successes, challenges, lessons learned, and hopes for future VPSI work.

Survey responses from each partnering organization were compiled to gain a high-level view of the impact of VPSI activities in the community. Interviews with partners were recorded and transcribed for qualitative analysis. A codebook was created based on themes of successes, challenges, lessons learned, and hopes for the future. Qualitative findings from partner interviews were used to contextualize and expand upon quantitative findings from survey responses. All survey responses and interviews were completed by April 2022. Some aspects of VPSI community outreach and education work may have changed by the time this report is published.

## Results

### Survey Responses

#### Materials Created

Partners were asked to report the topics and medium of educational materials they developed or translated, and the languages those materials are available in. Partners listed materials created on EMS-related topics identified by VPSI at the start of the current levy period, as well as emerging topics related to the COVID pandemic, and some that did not fall under either of those categories but had been prioritized in the community. Many of these resources are available on the [VPSI website](#).

#### Materials created or translated by VPSI partners, by topic

Topic	Platform/medium
COVID-19 Information Navigator	Online content
9-1-1 User's Guide for Japanese	TeamsOnline content
AlertSeattle	Poster and business cards

Calling 9-1-1	Video
CPR/Hands-only CPR	Video
Signs of stroke	Video
Hate crimes	PowerPoint
COVID-19 Information	Resource guide
CPR & AED	Unspecified
Hypertension	Unspecified
Fall prevention	Unspecified

Table 2. This table shows topics and mediums of educational materials created or translated by VPSI partners.

### Languages of materials created or translated by VPSI partners

Languages of written resources	Languages of video resources
<ul style="list-style-type: none"> <li>● Amharic</li> <li>● Arabic</li> <li>● Burmese</li> <li>● Chinese (simplified and traditional)</li> <li>● Dari</li> <li>● English</li> <li>● Khmer</li> <li>● Korean</li> <li>● Lao</li> <li>● Oromo</li> <li>● Romanian</li> <li>● Russian</li> <li>● Somali</li> <li>● Spanish</li> <li>● Thai</li> <li>● Tigrinya</li> <li>● Vietnamese</li> </ul>	<ul style="list-style-type: none"> <li>● Cantonese Chinese</li> <li>● Dari</li> <li>● English</li> <li>● Khmer</li> <li>● Lao</li> <li>● Mandarin Chinese</li> <li>● Oromo</li> <li>● Somali</li> <li>● Spanish</li> <li>● Thai</li> <li>● Tigrinya</li> <li>● Vietnamese</li> </ul>

Table 3. This table shows the languages written or video educational materials are available in.

### Materials Distribution and Social Media

Partners were asked to report how materials were distributed, VPSI-related social media activity, and number of people reached through materials distribution outside of social media. Guidelines for reporting “reach” were provided, including links to information on how various social media platforms track how many people see and interact with content. The majority of methods used for materials distribution were digital, including website content, social media, and chat apps. Several partners reported materials distribution at COVID response and community support events, like testing sites and vaccine clinics.

**Methods of materials distribution**

- Direct to nonprofits and businesses
- Website
- Facebook
- WhatsApp Group
- YouTube
- Drive through events
- Mass mailing
- Zoom
- Tabling events
- In person at food bank
- Radio
- Email

**Social media platforms and estimated number of people reached**

2020		2021	
Social media platform	Estimated number of people reached	Social media platform	Estimated number of people reached
YouTube	700	YouTube	600
Facebook	778	Facebook	2646
WhatsApp	250	WhatsApp	500
Combined unspecified social media	2420	WeChat	200
<b>Total</b>	<b>4148</b>	<b>Total</b>	<b>3946</b>

*Table 4. This table shows social media platforms used by partners and the estimated reach of each platform by year.*

**In-person Activities**

Although many in-person education and training activities were eliminated due to the pandemic, each partner reported that some in-person outreach activities took place. Many of the high-reach events were directly related to pandemic response and community support, including outreach at COVID testing sites and vaccine clinics. Multiple partners identified drive-through food bank distribution as a valuable mode of connecting with members of the community and distributing information about upcoming online events and resources. The COVID pandemic led to temporary and permanent businesses closures, job losses or reduced hours for workers, and financial strain for many families. These factors led to an increase in food bank access in the community, and as a result, nearly 70% of people contacted by VPSI partners in 2020 were reached

at food bank events. That fell to 14% of people contacted in 2021, though the number of people reached through these events was still significant.

**Outreach activities conducted in person and people reached, by type of event**

	2020		2021	
Type of event	Number of events	Estimated number of people reached	Number of events	Estimated number of people reached
In-person events, unspecified topic	14	119	11	650
Door-to-door education events	3	4	0	0
COVID-19 events	NA	500	NA	3000
Community/ cultural events	7	1450	2	998
Food bank events	22	5610	10	800
Census-related event	2	350	0	0
Health fair	0	0	2	140
<b>Totals</b>	<b>48</b>	<b>8033</b>	<b>25</b>	<b>5588</b>

*Table 5. This table shows a breakdown of the types of in-person outreach activities VPSI partners reported during the current levy period. The number of each type of event and estimated number of people reached is listed by year.*

**Remote Outreach and Training**

Partners reported estimated number of people reached for remote outreach and training activities. Outreach activities were defined as “less formal and less structured activities which involve short interactions (less than 30 minutes) with your audience” and training activities as “more structured and include a defined learning objective or outcome in alignment with the VPSI lesson plans, conducted in front of an audience lasting at least 30 minutes.” Remote activities include online events not counted as social media posts, phone contact, physical mail, and radio segments. Communities reached include seniors, immigrants, refugees, and limited English proficiency populations. Groups specifically mentioned in reporting included communities who speak Spanish, Dari, Pashto, Ukrainian, Amharic, Chinese, Vietnamese, Somali, Khmer, as well as newly arrived refugees from Afghanistan, Myanmar, Bhutan, Nepal, and East African nations.

**Outreach activities conducted remotely and people reached, by topic**

Topic	2020		2021	
	Number of events	Estimated number of people reached	Number of events	Estimated number of people reached
COVID-related	1	107	2	65
Unspecified	43	2987	32	1040
9-1-1	1	31	1	218
Signs of stroke	1	12	2	219
Radio segment, unspecified topic	1	NA	0	0
Healthy heart, healthy life	0	0	1	15
Mental health	0	0	1	15
Hypertension and cholesterol	0	0	2	17
Stroke information, phone and physical mail campaign	0	0	1	1066*
<b>Totals</b>	<b>47</b>	<b>3137</b>	<b>41</b>	<b>2655</b>

*Table 6. This table shows topics VPSI partners reported including in virtual/online outreach activities in the current levy period. Number of events and estimated number of people reached are reported by year.*

*\*The total number of people reached via this activity is a count, not an estimate.*

**Number of trainings conducted, by topic**

Topic	2020	2021
Stroke	118	203
CPR	2	8
CPR & AED	12	49
9-1-1	14	50
COVID-19	1	3



<b>AlertSeattle</b>	0	228
<b>Hypertension</b>	0	7
<b>Healthy Heart, Healthy Life</b>	0	1
<b>Mental Health</b>	0	1
<b>Navigator Training</b>	0	1
<b>Totals</b>	<b>147</b>	<b>551</b>

Table 7. This table shows the number of training activities, by topic and by year, reported by VPSI partners in the current levy period.

Due to the necessity for CPR to be taught and evaluated in person, the estimated number of people trained in CPR was lower in 2020, when in-person gatherings were more heavily restricted. Hands-only CPR includes instruction on assessing the scene and the patient, calling 9-1-1, and performing chest compressions, but does not include instruction on rescue breathing. This method of CPR was taught by three VPSI partner organizations. CPR completion cards are awarded by certified CPR instructors after completion of education on the previously listed skills as well as rescue breathing during a CPR certification course. Three partners hosted training events at which CPR completion cards were awarded.

#### **Hands-only CPR training and CPR completion cards awarded, by year**

<b>Type of CPR education</b>	<b>2020</b>	<b>2021</b>
<b>Hands-only CPR</b>	90	469
<b>CPR Completion cards</b>	185	354
<b>Totals</b>	<b>275</b>	<b>823</b>

Table 8. This table shows the number of people trained in each of two different modes of CPR delivery, listed by year.

#### **Community Feedback**

In response to the survey prompt “were pre- and post- surveys conducted” after VPSI outreach or training, only one partner reported using this kind of feedback tool. A post-workshop evaluation survey was conducted in 2021 with 168 seniors, and measured the retention of stroke education 3 months after the workshop. Surveys were not used to gather feedback by most participating organizations, but are a planned activity in 2022.

Informal feedback from program participants has been provided to partnering agencies verbally. Community Safety Ambassadors (CSAs), trained vendors conducting outreach with OEM, report feeling “generally positive”. Participants at in-language CPR trainings have explained that they had previously sought CPR education but felt they did not understand all the instructions in English, and expressed appreciation for the

opportunity to learn in their own language. Participants receiving education provided suggestions for future topics, including mental health, high blood pressure, CPR, COVID-19, and diabetes. For UW student-involved outreach and education, students provided feedback to the instructor and program assistant, which resulted in adaptations to the material presented.

### Changes to VPSI Activities

Each partner reported a shift to remote engagement strategies, including outreach by physical mail, phone contact, virtual meeting platforms like Zoom, and online messaging apps. One partner reported the use of drive-through events to comply with COVID restrictions. One partner reported that, later in 2021 as COVID case numbers appeared to be declining, some activities were presented in a hybrid format, with some portions conducted online, and some portions held in person.

## Interviews

### Challenges

#### Limitations for in-person activities

Not surprisingly, direct and indirect barriers caused by the COVID pandemic were the challenges most commonly cited by the liaisons. Perhaps the most impactful of these barriers was the limitations in holding in-person outreach and education. Each partner organization reported a shift to new forms of engagement with varying degrees of success. Partners who had never considered virtual outreach and education were suddenly in a position where that was the only option. Many organizations turned to video conferencing platforms, but often found that engagement with the material was more difficult in that realm. Many participants were not tech-savvy and experienced difficulty using the platform's features. Segments of the community including older adults and those with lower incomes were less likely to have access to devices needed to join online events, leading to the potential for further marginalization for people already in greater need of connection. Of those community members who were able to connect, liaisons reported that some appeared to be distracted, and the number of questions asked was markedly diminished as compared to in-person events. The difficulty of building rapport and trust was expressed in multiple liaison interviews. It was also noted by multiple liaisons that CPR requires hands-on practice and therefore can only be effectively taught in person, temporarily eliminating that as a topic for training activities.

#### Shifting priorities and community-specific crises

Some partner organizations explained that their organizational priority shifted to COVID response, diverting resources away from CPR and 9-1-1-related activities. This mirrors the shift that happened within communities, as the interest in events not related to COVID dwindled. COVID also gave rise to concerns that were specific to some of VPSI's target populations. Namely, the Latinx community was particularly hard-hit by high COVID infection rate, hospitalizations, and deaths. As of December 2020 in King

County, 27% of reported COVID cases were in the Latinx community, despite only accounting for 10% of the population. The Latinx community was also among the slowest to get fully vaccinated. In the Asian community, there was a marked increase in hate crimes, resulting in widespread fear and anxiety. All communities experienced the impact of misinformation about the virus, efforts to control spread, and vaccines. VPSI partners serving these communities were compelled to develop supports and resources to address these emerging issues, further deprioritizing EMS-related outreach and education efforts.

### Returning to in-person activities

As case rates have declined and restrictions have lifted, partners have started to return to some in-person outreach and education activities. While this has largely been a welcome shift, challenges have continued. Initially, there were limitations on how many people could gather in a given space, due to the need for social distancing. Some liaisons also observed that the habit of gathering seems to have been interrupted, and many people continue to feel unsafe in public spaces, both of which lead to lower attendance at certain facilities or events. Due to rapid changes in factors like level of community spread and public sentiment about COVID restrictions, participation in partner-led outreach and education activities may have improved between the time interviews were conducted and when the findings of those conversations will be reported.

### Complexity of target populations and re-establishing connections

While each partner organization has a particular community of focus, each of those populations contains sub-populations with differing priorities. Within each community there exist broad disparities in education and income, as well as differences in cultural practices and languages spoken. This creates a challenge for liaisons striving to provide services and resources if they don't have connections to organizations or community leaders that can facilitate that outreach. Some of those connections that were previously relied upon ended during the pandemic when organizations closed their facilities for public use. Those connections must be re-established by liaisons, which will take some time and concerted effort.

## Successes

### New ways to engage communities

As detailed above, restrictions on in-person events necessitated creative approaches to engaging the community. There were aspects of each new method of connection that proved difficult, but overall, the impact was positive. Partners reported that connecting via social media and holding events over video conferencing services like Zoom increased participation for some segments of the population who hadn't previously been engaged in face-to-face events. Multiple liaisons hypothesized that this was due to the elimination of barriers related to traveling to in-person events. One partner was able to reach older adults in their community by providing internet-ready devices and training on their use. They found that this was an effective way to reach

seniors who were otherwise isolated due to COVID-mitigation guidelines. Another partner found that their target population didn't engage well over video conferencing, but they were able to provide effective outreach and education through mail and phone calls. The use of social media by partners was expanded, allowing for efficient and timely dissemination of COVID-related information, as well as notifying people in the community about upcoming virtual events. All partners expressed that at least some of the new ways they reached their target communities were successful, and all expressed a desire to continue using these new methods of connection even after the pandemic has ended.

#### Support from community partnerships and the EMS Division

Partnerships with community-based organizations outside of VPSI, other VPSI participants, and the EMS Division are a cornerstone of what makes VPSI successful. Through the involvement of these additional community-based organizations, partners have been able to reach new segments of the community. Those organizations have also aided in identification of the priorities for those subpopulations, and in translation of resources into additional languages. One liaison described YouTube videos in several hard-to-find languages that were created as a result of partnership with community organizations. Multiple liaisons also expressed appreciation for the benefits provided by their connection with the EMS Division of Public Health – Seattle & King County. Some detailed COVID response resources provided including masks, hand sanitizer, and up-to-date COVID information. Others praised the division's flexibility and understanding when adaptations to program activities had to be made to meet the needs of the community.

#### Community impacts

Liaisons were asked during interviews why the work of VPSI is important to their communities. The answers provided included reasons that were specific to each community, as well as some that are shared by all currently prioritized populations. For instance, all partners mentioned hesitation to access EMS services arising from language barriers, knowledge gaps, and cultural beliefs. Multiple partners talked about income- and race-based disparities, and the intersectionality of those issues. Two target communities were described as having mistrust of any person who is or appears to be working for a government agency due to government corruption in some individuals' country of origin. Some in these communities also experience fear over interactions with law enforcement or immigration and customs enforcement as a result of calling 9-1-1. Partner organizations endeavor to mitigate each of these issues through VPSI outreach and education. In particular, lessons on calling 9-1-1 help ease obstacles to accessing EMS, and authentic connections with communities builds trust in partners and related entities, including fire departments and EMS providers. Helping the community overcome these barriers to healthcare access and improved outcomes are an important source of motivation for liaisons, and make VPSI activities feel like meaningful and impactful work.

# Discussion and Recommendations

After reviewing survey responses and conducting interviews with VPSI partner organizations, several recommendations for enhancing VPSI work can be made. Many of these suggestions can be implemented in part or in full during the current levy period. Others will require a greater level of planning and gathering resources, or may have funding considerations, and thus will be better suited for implementation in the next levy period. Each recommendation includes an indication of the expected timeframe for implementation.

## Supporting current partners to continue and advance their work

### Technical assistance and skill-building

Providing educational opportunities and/or technical assistance to partner organizations can support the goals of VPSI. Skills that may be complementary to outreach and education activities include:

- Needs assessments
- Program evaluation
- Quality improvement
- Group facilitation
- Teaching adult learners
- Health literacy
- Healing-centered engagement

Multiple partners expressed a desire to increase needs assessments, program evaluations, and collection of participant feedback regarding content delivery. Those quality improvement skills will lead to greater efficacy and consistency of message delivery from all partners.

Some of the barriers to EMS activation by the currently targeted populations are rooted in past trauma, including a history of negative interactions with health systems, and exposure to corrupt systems complicit in their oppression. While it is not the job of VPSI liaisons to heal these traumas, their interactions with these populations and their efforts to encourage use of available resources would be facilitated by acknowledging those traumas and incorporating strategies to support wellbeing.

Initial efforts to implement this goal can be launched in the current levy period. Full implementation will require planning, resource gathering, and funding consideration, and should be considered in planning for the next levy period.

### Sharing lessons learned and collaborating with one another

Liaisons currently attend quarterly meetings with the EMS Division and benefit from this opportunity to connect, celebrate successes, troubleshoot challenges, and share lessons learned. The advantages offered by these connections can be expanded upon. During an interview, one partner shared that video conferencing with the elderly

population was unsuccessful, and they discontinued that form of outreach in favor of less tech-based communication. Another partner shared how they were able to support seniors in their comfort with video conferencing, and found that it was a positive method of engagement for that population. Encouraging more frequent connection between VPSI partners and providing low-barrier avenues for that connection may uncover these shared challenges and allow liaisons to reduce silos and overcome issues as they arise. In addition, each VPSI partner organization has different strengths, and more frequent collaboration between VPSI partners could allow them to leverage one another's assets to advance their collective efforts.

Because connections between liaisons already exist, expansion of those connections should be possible with minimal barriers starting in the current levy period.

#### Evaluation, assessment, and quality improvement support

UW students conduct evaluations of fire-based pilot projects, and programmatic evaluations like this mid-levy review. The Medic One/EMS 2020-2025 Strategic Plan report states that "Strategic Initiatives are continually assessed and may be reconfigured, if needed, to broaden the reach, advance their objectives, or meet emergent needs."<sup>31</sup> A shared data collection and evaluation structure for the education and outreach component of VPSI would support those goals, and create clarity and consistency for future reviews. This strategy is somewhat limited by variances between partner organizations, and complete synchronization of data collection may not be possible due to these differences. Involving partners in the creation and implementation of a shared framework would help ensure that the approach is useful for all parties.

Furthermore, incorporating rapid cycle improvement schemas would reinforce the adaptability that was greatly appreciated by the liaisons during the COVID pandemic, and boost efforts to meet emergent needs.

A coordinated approach to assessing the impact of VPSI outreach and education is currently in the planning stages, and should be tested through the remainder of this levy period, with potential for broader scale implementation in the next levy period.

#### Expanding reach by scaling up the train-the-trainer model

One way to increase the impact of VPSI is by employing a train-the-trainer model. This is an effort already underway, as some partners have started subcontracting with other community-based organizations serving new communities. Expanding this approach may require additional funding so the individuals being trained may be compensated for their engagement in the community. It may be possible for VPSI partners to use current levy funding towards these efforts, or to engage some community members as volunteers in this model.

This goal is in some ways already being implemented. Investing in current VPSI partners and supporting their continued growth and reach is warranted in the current levy period. Possibilities for more formal expansion to 3-5 new community partners

should be considered in the next levy period, as this will require additional internal organization and resources.

## Enhancing collaboration between community partners and fire departments

### Career pathways into EMS

Increasing diversity in the EMS workforce is a top priority, as it is a proven strategy to decrease disparities in access to care, treatment, and outcomes, and as of 2019, less than 10% of the U.S. EMS workforce identifies as a racial or ethnic minority.<sup>32,33</sup> Some effort to change this deficiency is already being made by VPSI partners by exposing people in targeted communities to careers in EMS. Additionally, the EMS Division runs recruitment-related programs, and has prioritized implementation of the regional diversity toolkit in the 2021 EMS Annual Report.<sup>3</sup> There are likely more opportunities for collaboration between VPSI partners and the EMS Division to promote EMS career pathways among the VPSI populations of focus.

Implementation of this goal is likely possible in the current levy period, but may be expanded in the next levy period.

### Language access

So far in this levy period, education and outreach activities have been delivered and materials have been created in more than 20 different languages. However, there are still segments of the population whose languages are not currently represented in VPSI engagement, including many indigenous communities. Continuing to partner with organizations providing services to LEP communities and provide EMS education in additional languages will be crucial to the ongoing expansion of VPSI.

This is an ongoing effort, and should be supported in the current levy period.

### Connecting MIH and VPSI

The recommendations provided so far arose from correspondence and interviews with VPSI liaisons. In the interest of gaining a broader perspective, two representatives from Mobile Integrated Health (MIH) programs were also interviewed. The following observations and suggestions were made by those MIH personnel.

Communities prioritized by VPSI overlap significantly with those MIH programs most frequently interact with, but the work being done by each entity is currently siloed. Although MIH units don't specifically focus on LEP communities, they do have substantial contact with LEP individuals. VPSI liaisons and MIH providers can support each other by sharing information about community needs and available resources. Much of the success in MIH work in recent years has come from expanding connections for referrals and warm hand-offs. According to the 2021 EMS Annual Report, the most frequent connections are those for "mental health support, fall prevention, case management, and medical care." Identifying and connecting with additional cultural and

linguistically appropriate providers, especially for behavioral health and substance use disorder needs, would enhance that success and benefit LEP communities.

MIH providers would benefit from education about disparities, where they come from, and how to provide services in support of eliminating those disparities. Data showing how vulnerable populations, especially LEP, are or are not interacting with MIH would help guide that effort. VPSI education and outreach are currently focused on medical needs and general EMS activation, but in the future could include topics around behavioral health and how MIH supports community members.

It was not always clear to MIH providers how their work could be better connected with VPSI work, though they were eager to support connections that might be available. Identifying those potential connection points and communicating them in a clear and tangible way can bring these two entities into alignment. MIH providers would like to hear from VPSI “this is what we’re doing, this is how it impacts MIH, this is how you can use it, and how you can get information out to other MIH providers.” MIH personnel have been attending quarterly VPSI oversight committee meetings during this levy period, though the nexus between the two programs continues to be unclear.

Each of the above recommendations can be minimally implemented in the current levy period, but substantial alignment between these programs will be more realistic in the next levy period. Clarifying the objective of MIH representation in VPSI Oversight Committee meetings can be done immediately, and may provide an opportunity to start identifying where topics and populations served overlap, and how these two entities may collaborate.

### Leveraging partnerships and aligning with Public Health’s enhanced approach to community engagement

As of June 2020, racism has been declared a public health crisis in King County.<sup>34</sup> PHSKC’s Office of Equity and Community Partnerships (OECF) was established during the pandemic, following nationwide conversations about racism and oppression in the Spring and early Summer of 2020. OECF exists in part to support operationalizing the values of anti-racism in the policies and activities of the county. The following recommendations within this section were drawn from a conversation with OECF, and their office will be an invaluable partner in achieving these goals. While some of this work is already in process and will continue in the current levy period, supportive collaboration with OECF should be a goal for the next levy period.

#### Authentic engagement

Among the strategic priorities set on the county Executive’s website is a commitment to “intentional and meaningful community engagement leading to co-creation.” To truly understand the needs within a community, a meaningful relationship must be established and nurtured. The work needed to build those relationships is both external and internal. Externally, communication must be bi-directional, and what is offered to the community must be in line with what the community truly needs. Internally, the



workforce must be developed to be reflective of the community demographically, but policies and practices must also be grounded in the values of diversity, equity, justice, and community.

The work currently being done by VPSI partners has established the kind of relationship OECP describes as vital to authentic engagement. Continuing to support these communities will strengthen the existing connections and allow for further identification of and response to community priorities, and sets a framework for authentic engagement in new communities as VPSI expands in the future.

#### Look beyond what data can show

Data is a vital part of identifying health inequities and targeting interventions to create greater equity, but some disparities are not visible in data analysis. The relationships built through authentic engagement can help distill where the gaps in connection and resources are, and what VPSI can do to better support the needs of the community. Additionally, data collection and analysis may have less success in identifying what strengths and assets exist within each community. OECP suggests not only setting priorities based on where the biggest problems are, but by where the biggest opportunities are. Through discourse with the community, determine what is working to advance the goals of VPSI, how to support those assets, and how to build on them. The 2021 EMS Annual Report expresses a goal to leverage resiliency within target communities, which is made possible through these asset-based mapping approaches.<sup>3</sup>

The first step in being able to identify priorities not shown in data analysis is authentic community engagement, as described above, and is an ongoing focus of VPSI.

#### The identification of priority populations and new and emerging topics

Also prioritized within the 2021 EMS Annual Report is the need to “adapt to meet community needs.”<sup>3</sup> This can mean identifying new segments of the population that would benefit from VPSI engagement, or identifying additional topics for outreach and education activities. OECP suggests looking beyond race and ethnicity, and including priority populations based on geographic barriers, disability status, sexual orientation and gender identity, housing status, etc. The EMS Division has an opportunity to align with PHSKC’s broader strategic approach to identifying priority populations and engaging directly with communities. Currently involved VPSI partners have leveraged their community connections to identify topics they would like to see included in VPSI activities going forward. While some of these topics may be well-suited to be led by the EMS Division and its VPSI partners, there may also be opportunities to leverage and connect with existing efforts across PHSKC and King County on other topics. Topics of interest to current community partners include those that are likely to need EMS response, as well as some that are valuable for improving community health, but may not require emergency care. The topics likely to elicit EMS response are:

- Extreme weather events (e.g., heat waves, snow storms)
- Diabetes
- Substance use disorder and overdose prevention
- Mental health

- Stop the bleed

Topics that are not directly EMS-related but would be valuable for communities are:

- Hepatitis B
- Environmental toxins (e.g., lead, asbestos)
- Health literacy
- Patient self-advocacy

VPSI partners are continuously building relationships in the communities they serve, are listening to those communities to identify needs and assets, and are working to identify subpopulations and new topics.

## Limitations

There are multiple limitations of this mid-levy review. In the attempt to collect quantitative data, there were inconsistencies in how data were reported by each respondent, limiting the depth of data analysis and the reliability of what conclusions can be drawn. Creating a shared evaluation framework and standardizing how data is collected and reported would help future evaluation efforts. The scope of this review included only community outreach and education, and collaboration with UW, and did not include fire-based pilot studies, EMS workforce mental wellness, or equity and social justice. Additional assessments will be required to get a full picture of the impact of VPSI on EMS services and the community. This evaluation was focused on deliverables, one of the short-term outcomes included on the VPSI logic model. Additional short-term outcomes, including awareness of 9-1-1 services and knowledge of CPR, stroke, and other EMS topics, can be measured through pre- and post-training surveys. Those surveys are not currently in use by VPSI partners, but would be a useful addition to future VPSI evaluations.

## Conclusion

The goals and strategies outlined in the Division of Emergency Medical Services 2021 Annual Report and the 2020-2025 Medic One/Emergency Medical Services 2020-2025 Strategic Plan are reflected in and aligned with each of the recommendations presented above. Those goals and strategies include:

- Enhancing quality improvement capabilities (2020-2025 Strategic Plan)
- Standardization, consistency and coordination... and expanding these benefits to all agencies, throughout all tiers, regardless of agency size or budget (2020-2025 Strategic Plan)
- Enhancing support to the Equity and Social Justice (ESJ) work related to workforce diversity (2020-2025 Strategic Plan)
- Improve access to mental wellness trainings and resources for EMS personnel to address the emotional impacts of COVID-19 and strategies to strengthen resiliency in recovery. (2021 Annual Report)

The greatest asset the Vulnerable Population Strategic Initiative has are the incredible partners doing outreach and education in these communities. Their enthusiasm is evident in the way they talk about every aspect of the program. The liaisons have done significant work to build community connections, which will continue to be an important factor in determining the program's success. Ongoing support from the county in terms of resources, guidance, and fostering the growth of partnering organizations will enhance their success.

The COVID pandemic illustrated the importance of adaptability in responding to rapidly evolving situations. All parties involved in VPSI have exhibited the ability and desire to pivot when necessary to meet community needs, which has been a major success in the current levy period.

Liaisons involved in VPSI had overwhelmingly positive things to say about the program, about the impact they have in their communities, and about the support they receive from the county. The majority of challenges expressed were a result of the pandemic, and are not a reflection of any weakness in VPSI.

Areas for growth in the next levy period are eliminating silos between VPSI and other programs, and looking for ways to expand the reach and focus of outreach and education efforts. In medical literature, “vulnerable populations” are broadly defined as “those at greater risk for poor health status and healthcare access,” and those who “experience significant disparities in life expectancy, access to and use of healthcare services, morbidity, and mortality.”<sup>27</sup> As the EMS Division looks toward the next levy period, there is an opportunity to revisit and ensure the original objectives and focus areas of VPSI still resonate and meet the evolving needs of our region. Levy planning stakeholders should also examine to what extent VPSI may need additional resources to expand its reach and align with PHSKC’s enhanced approach to community engagement.

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# Appendices

## Appendix A: VPSI logic model

INPUTS	OUTPUTS Participants - Activities - Direct Products			OUTCOMES/IMPACT Short term - Intermediate - Long Term		
	Who we reach	What we do	What we create	What was learned?	What actions changed?	What conditions changed?
-CISC -Seattle OEM -SHB -St Vincent De Paul -Centro Rendu -UW students -Fire/EMS partners	-LEP -Seniors -Immigrants and refugees -Other patient groups who face barriers to effective EMS service delivery -UW students	-Community needs assessment -Design EMS-related health education materials -Disseminate EMS-related health education materials -Conduct EMS health education workshops and outreach -Mentor UW Public Health students -UW students conduct outreach/education/evaluation -Pilot studies on alternative EMS care delivery to vulnerable populations -Stakeholder meetings (Oversight Committee & Liaisons)	-Health educational materials -Workshop curriculums -Mentor/mentee relationships	-Awareness of 911 services -Knowledge & confidence in CPR, stroke, and other EMS topics - Deliverables: -# people trained, by topic area -# workshops delivered, by priority population -# new educational materials developed	-Skill building in CPR, stroke recognition, and other VPSI topics -All people in King County know how to access 911/emergency services and have optimal outcomes from EMS contact, regardless of race, ethnicity, age, socio-economic status, culture, gender, or language spoken - Awareness/knowledge of how to request interpreter services when accessing 911/EMS -Opportunities for organizations serving immigrant and BIPOC communities to engage their communities with county initiatives	-Decreased disparity in accessing 911 services -Improved relationships and increased trust between target audiences and EMS -Reduced delay time in dispatching care to LEP patients -Greater use of interpreter services among people accessing 911/EMS -Increased bystander CPR rates among our target audiences -Increased stroke recognition rates among our target audiences
<b>Assumptions</b>				<b>External Factors</b>		
Disparities exist in service and outcomes among vulnerable populations when accessing 9-1-1/EMS				Cultural practices, beliefs, prior experiences of target populations		

**Appendix B: Outreach and education partner survey**

Please answer each question or prompt to the best of your ability. Not all prompts will be relevant to your work; mark any prompt as “not applicable” or “NA” if it is not relevant. Where possible, include disaggregated data. We would love to see specifically what populations are being reached by language spoken, gender identity, age group, race and ethnicity, etc. We may send follow-up questions to clarify answers or to gain additional insight. Many of these topics will also be included in a one-on-one interview in the near future.

**Educational Materials**

Indicator	2020	2021
<p>List educational materials developed, by language and topics included:</p> <ul style="list-style-type: none"> <li>- Calling 9-1-1</li> <li>- CPR &amp; AED</li> <li>- Stroke</li> <li>- Hypertension</li> <li>- Other (specify)</li> </ul>		
<p>How have materials been distributed?</p>		
<p>For materials distributed through social media, list VPSI-related social media posts (by platform, topic, and language), and the “reach” of each (total # of people who have seen your content):<sup>[1]</sup></p>		



Number of people reached through materials distributed outside of social media:		
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<sup>[1]</sup> Please note, each social media platform has its own way of tracking total number of people who have seen your content. See the following links to learn more, or consult with your organization's social media administrator for support:

- [Twitter](#) "impressions"
- [Facebook](#) "reach" (requires business account)
- [Instagram](#) "reach" (requires business account)
- [YouTube](#) "views"

## Outreach and Training Activities

For this section, outreach activities are less formal and less structured, including tabling events, health fairs, flier distribution, door knocking, etc. Training activities are more structured and include a defined learning objective or outcome. If you are unsure whether an activity is "outreach" or "training" please indicate that in your response, or email me at [MDArgetsinger@gmail.com](mailto:MDArgetsinger@gmail.com) to discuss!

Indicator	2020	2021
List outreach activities conducted <b>in person</b> , and number of people reached by target population: <ul style="list-style-type: none"> <li>- Limited English proficient [specify language(s)]</li> <li>- Seniors</li> <li>- Other (specify)</li> </ul>		

<p>List outreach activities conducted <b>virtually/online</b>, and number of people reached by target population:</p> <ul style="list-style-type: none"> <li>- Limited English proficient [specify language(s)]</li> <li>- Seniors</li> <li>- Other (specify)</li> </ul>		
<p>Number of trainings conducted, by topic(s):</p> <ul style="list-style-type: none"> <li>- Calling 9-1-1</li> <li>- CPR &amp; AED</li> <li>- Stroke</li> <li>- Hypertension</li> <li>- Other (specify)</li> </ul>		
<p>Number of people trained by target population:</p> <ul style="list-style-type: none"> <li>- Limited English proficient [specify language(s)]</li> <li>- Seniors</li> <li>- Other (specify)</li> </ul>		
<p>Do you provide completion cards or other documentation of completed CPR training? How many were awarded? (For formal CPR training by a certified instructor only):</p>		

Number of people who received hands-only CPR education lasting at least 30 minutes and involving CPR practice:		
Were pre- and post- surveys conducted during any of the training activities listed above? Please attach examples of those surveys.		
If pre- and post- surveys were used, briefly describe findings from those surveys, i.e. what knowledge or confidence was gained as a result of training activities?:		
Was feedback collected from participants outside of formal surveys? How was that collected? What were the findings of that feedback?		
How was participant feedback integrated into subsequent activities?		
Describe community surveys/needs assessments planned, in progress, or completed:		

**Partnerships with Organizations and Individuals**

Indicator	2020	2021
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List organizations you partner with for VPSI activities, and briefly describe the nature of that partnership (sharing information, sharing resources, planning activities together, have a formal MOU/contract, etc.):		
Number of undergraduate students involved in VPSI activities:		
Number of graduate students involved in VPSI activities:		
Number of service-learning hours completed by students:		
Number of hours of activities conducted by volunteers (not students):		

**Other**

Indicator	2020	2021
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<p>Briefly describe projects undertaken or planned as part of VPSI activities that were not previously accounted for (e.g. are not included as educational material creation or distribution, outreach and training activities, or partnering with other organizations):</p>		
<p>Number of staff involved in VPSI activities:</p>		
<p>Briefly list/describe changes made since the previous levy (pre-2020) (include both content and format changes, and any changes that occurred as a result of the COVID-19 pandemic):</p>		

**Appendix C: VPSI partners interview guide**

**Introduction**

This interview is part of information-gathering to help the EMS Division conduct a mid-levy assessment of VPSI. Today we will be talking about what VPSI work has been successful, what challenges exist, what lessons have been learned, and your hopes for the future of VPSI work. The information you share today will be combined with the data you previously provided, as well as information shared by other VPSI liaisons. All of that knowledge will be combined to create a snapshot of the current status of VPSI. This review will help inform strategies and goals for the remainder of this levy period and the next levy period.

Your honest perspective is vital to the integrity of this review. Many of the topics we discuss today will only be shared in general terms – for example, some challenges or difficulties you share will be described broadly and can apply to any of the participating organizations. Other topics will be shared with greater specificity – for example, your target populations and success stories. If you ever have a question about how information will be shared, or wish to report anything confidentially, let me know and I will be sure to accommodate you.

If it is ok with you, I would like to record this conversation so I can focus on the discussion rather than trying to capture notes.

**Interview questions**

## Opening Questions

1. Please state your name, organization, and your role/involvement in VPSI.
2. What are the priority/target population(s) of your organization's VPSI efforts (language, race/ethnicity, region of King County, age, other demographics)?
3. Why is this work important for your community(s)? What barriers or disparities are you trying to address?

## Successes

1. What has been your biggest success(es) so far in this levy period (since 2020)? Can you share a success story?
  0. Share a positive impact on the community(s) you serve
    0. Awareness of 9-1-1/EMS, including how to request an interpreter
    1. Knowledge of/confidence in CPR, stroke, and other EMS topics
- a. What is your favorite part of the work you do? What gets you energized and excited about your work?

## Challenges

1. What has been the biggest challenge(s) for you in this levy period (since 2020)?
  0. How have you successfully overcome some of those challenges?
    1. What challenges remain where you would like support?

## Lessons Learned

1. How have collaborations with other organizations affected your VPSI work and outcomes, positively or negatively?
  0. Have new or different materials been produced as a result of collaboration?
    1. Have additional people been reached as a result of collaboration?
2. If you participated in VPSI before 2020, how have you changed your approach to VPSI in this current levy period compared to your earlier VPSI work (pre-2020)?
3. What changes have been made or lessons have been learned due to COVID-19 that you feel should be continued after the pandemic is over?
  0. Have any changes been made that you will gladly leave behind post-pandemic?

## Hopes for the Future

1. What are your hopes for VPSI in the rest of this levy period (now through 2025)?
    0. What are your suggestions or recommendations for improvement?
  2. What are your hopes for VPSI longer term, in the next levy period (2026-2031)?
    0. How would you like to see this initiative change, grow, and/or progress forward?
  3. What is one thing you would most like to see happen in the population you serve as a result of your participation in VPSI?
    0. What does long-term success look like for you and your community?
- 
1. Is there anything else you'd like to share to be included in this mid-levy review that we didn't get a chance to discuss today?

## **Appendix D: Mobile integrated health personnel interview guide**

### Introduction

This interview is part of information-gathering to help the EMS Division conduct a mid-levy assessment of VPSI. Today we will be talking about what VPSI work has been successful, what challenges exist, what lessons have been learned, and your hopes for the future of VPSI work. The information you share today will be combined with information shared by other VPSI partners. All of that knowledge will be combined to create a snapshot of the current status of VPSI. This review will help inform strategies and goals for the remainder of this levy period and the next levy period.

Your honest perspective is vital to the integrity of this review. Many of the topics we discuss today will only be shared in general terms – for example, some challenges or difficulties you share will be described broadly and can apply to any of the participating organizations. Other topics will be shared with greater specificity – for example, your target populations and success stories. If you ever have a question about how information will be shared, or wish to report anything confidentially, let me know and I will be sure to accommodate you.

If it is ok with you, I would like to record this conversation so I can focus on the discussion rather than trying to capture notes.

### Interview questions

#### Opening Questions

1. Please state your name, organization, and your role/involvement in VPSI.
2. How has your fire department been involved in VPSI this levy period (2020 – present)?
3. Why is this work important for your community(s)? What barriers or disparities are you trying to address?

#### Successes

1. What have been your greatest successes related to VPSI this levy period (2020 – present), in regards to:
  - a. Advancing the mission of VPSI (providing the highest quality EMS services for vulnerable populations, e.g. limited English proficient patients, older adults, people experiencing homelessness, mental illness, substance abuse, etc.)
  - b. Your participation in VPSI activities (pilot studies, stakeholder meetings, etc.)
  - c. Your partnership with the EMS Division and other VPSI stakeholders

#### Challenges

1. What have been the greatest challenges/barriers to your fire department's involvement in VPSI this levy period (2020 – present)?
  - a. Advancing the mission of VPSI
  - b. Participation in VPSI activities
  - c. Partnership with the EMS Division and other VPSI stakeholders

#### Hopes for the Future

1. What are your hopes for VPSI in the rest of this levy period (now through 2025)?

- a. What are your suggestions or recommendations for improvement, with a focus on how we can better partner with fire departments to advance the VPSI mission?
  2. What are your hopes for VPSI longer term, in the next levy period (2026-2031)?
    - a. How would you like to see this initiative change, grow, and/or progress forward, particularly around collaboration with fire departments?
  3. What is one thing you would most like to see happen in the population you serve as a result of your participation in VPSI?
    - a. What does long-term success look like for you and your community?
- 
1. Is there anything else you'd like to share to be included in this mid-levy review that we didn't get a chance to discuss today?