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Prepared by Rede Group, November 2023

OHA Mobile Health Pilot Program

Evaluation Plan and Environmental Scan

Acknowledgments

This report was produced by Rede Group on behalf of the Oregon Health Authority Health Systems Division, Medicaid Programs.

Collaborators and Key Informants:

- The Honorable Travis Nelson
  Oregon State Legislature, House District 44
- Paul Bollinger
  Knight In-Reach Program Manager
- Esther Kim
  Oregon Health Equity Alliance
- Verian Wedeking
  OHSU Casey Eye Institute Community Outreach
- Stefanie Murray and Rebecca Jacobs
  Oregon Health Authority, Public Health Division

OHA-HSD Mobile Health Pilot Program Grant Recipients:

- Chase Bisset
  Central City Concern
- Harrison Spiegel
  Central City Concern
- Leslie Tallyn
  Central City Concern
- Lorie Dolo Scott
  Central City Concern
- Paul Myatt
  Grand Ronde Health and Wellness Center
- Jennifer Worth
  Grand Ronde Health and Wellness Center
- Dr. Ruth Zúñiga
  Raíces De Bienestar
- Bonnie Lerner
  Raíces De Bienestar

OHA-HSD Medicaid Programs

- Elizabeth Gerardo, MPH
- Joan Stephanie Lofamia
- Jessica Deas, MPH

Rede Group Team:

- Jill Hutson, MA
- Lauren Seki, MPH
- KC Thompson
- Erin Charpentier, MFA
- Skye Larsen
- Ami Marui, MPH
- Katie Hart, MPH

Contents

Acronyms

Acronym	Definition
CCC	Central City Concern
CTGRC	The Confederated Tribes of the Grand Ronde Community of Oregon
FGHC	Federally Qualified Health Center
BIPOC-AI/AN	Black, Indigenous, person of color - American Indian/ Alaskan Native
HB	House Bill
HTO	Healthier Together Oregon
HSD	Health Systems Division
UIMC	University of Iowa Mobile Clinic
LGBTQ+	Lesbian, Gay, Bisexual, Trans, Queer, Questioning, Intersex, Asexual and more identities.
MHU	Mobile Health Unit
MHC	Mobile Health Clinic
NCD	Non-Communicable Diseases
OHA	Oregon Health Authority
OHA-HSD	Oregon Health Authority-Health Systems Division
ORS	Oregon Revised Statutes
PNW	Pacific Northwest
RCB	Raíces de Bienestar
REALD	Race, Ethnicity, Language, and Disability
ROI	Return On Investment
SUD	Substance Use Disorder
TBD	To Be Determined

Purpose + Background

Purpose

The purpose of this report is to submit deliverables due to OHA, HSD, Medicaid Programs (hereafter OHA-HSD), under a contract with the Rede Group (hereafter Rede).

Background

OHA-HSD contracted with Rede in July 2023 to support evaluation planning for the OHA-HSD Mobile Health Pilot Program and to conduct an environmental scan of mobile health units (MHUs) in Oregon.

The Mobile Health Pilot Program was created in 2022 by the Oregon State Legislature. HB 4052 required OHA to establish a Mobile Health Pilot Program to reduce barriers to healthcare access by bringing care directly into communities, leveraging existing community assets, and providing culturally and linguistically specific services. To fulfill this mandate, OHA-HSD was tasked with establishing grants to fund Mobile Health Unit Pilot Programs using a budget of (at most) $1,275,000 for the 2021-2023 biennium and $2,072,000 for the 2023-2025 biennium.

Based on guidance set forth by the Mobile Health Advisory Committee[1], OHA-HSD developed a grant program and, in the summer of 2023, selected three pilot MHU programs to receive funding: Central City Concern, Confederated Tribes of Grand Ronde Community of Oregon, and Raíces De Bienestar.

- Central City Concern (CCC) is a homeless-facing Community-Based Organization that aims to increase self-sufficiency in people experiencing homelessness in the Portland Metro Area. CCC's participation

[1] For more information about the Mobile Health Advisory Committee see: https://www.oregon.gov/oha/HSD/Documents/MHU-Committee-Overview.pdf

seeks to use the pilot program funding to improve access to primary healthcare for people experiencing homelessness.

- The Confederated Tribes of Grand Ronde Community of Oregon (CTGRC) is a confederation of 27 plus tribes that range from Western Oregon to Northern California. The CTGRC provides a range of services, including medical and educational services, to thousands of tribal members. CTGRC aims, with funding provided in the pilot program, to decrease barriers to substance-use disorder, particularly opioid use.
- Raíces De Bienestar (RCB) is a Latine/x Community-Based Organization that services the Oregon Latino Communities in the Portland Area. RCB's aim with funding from the pilot program is to provide culturally relevant mental health services for a population that has issues with stigmatizing mental health care.

Program start dates varied across each Grantee, with timelines ranging from 12 to 18 months of service delivery from the start date.

In the summer of 2023, OHA-HSD also began to plan to evaluate the Mobile Health Pilot Program and conduct an environmental scan that, when combined with additional information, will inform "the feasibility of expanding mobile health units throughout this state" (HB 4052(2022)). As noted earlier, OHA-HSD contracted with Rede to perform this work.

Mobile Health Literature

Methods

Rede reviewed scientific (peer-reviewed) publications to inform the development of the logic model and evaluation plan. In searching for scientific literature, “mobile health unit” AND “equity” search terms on the PubMed database were used and the “All fields” search criteria was implemented. Also included were all articles published since 1995 and only those written in English. The initial literature search resulted in 89 articles, which were then individually reviewed by the Rede team to determine if they met the inclusion criteria. Criteria included topics related to providing mobile health services, accessibility to health care, and acknowledging health disparities. The result of the literature search from the PubMed database was 10 articles.

Additional articles were found on the Harvard Mobile Health Map website and other scholarly sources to encompass a robust literature search of mobile health unit programs and health equity around the world. As a result, a total of 15 articles were summarized and listed in the annotated bibliography.

Annotated Bibliography

1. Aung, K-K., Hill, C., Bennet, J., Song., Zirui, & Oriol, N. E. (2015). The Emerging Business Models and Value Proposition of Mobile Health Clinics. *The American Journal of Accountable Care, 3*(4). https://www.ajmc.com/view/the-emerging-business-models-and-value-proposition-of-mobile-health-clinics

In this article, the authors examined the value of widespread deployment and utilization of mobile health clinics and various business models in which mobile health clinics may most generate value. A major finding related to cost-effectiveness was that blood pressure screenings and hypertension counseling provided on The

Family Van in Boston resulted in a 32.2% decrease in the relative risk of myocardial infarction and a 44.6% decrease in the relative risk of stroke than patients prior to receiving health services. Mobile clinic programs within accountable care organizations, hospitals, or community health centers could fill gaps in care; thus, financial models and policies that encourage collaborations with these entities are favorable.

2. Beks, H., Ewing, G., Charles, J. A., Mitchell, F., Paradies, Y., Clark, R. A., & Versace, V. L. (2020). Mobile primary health care clinics for Indigenous populations in Australia, Canada, New Zealand and the United States: a systematic scoping review. *International journal for equity in health, 19*(1), 201. https://doi.org/10.1186/s12939-020-01306-0

In this article, the authors examined existing literature to find evidence of mobile primary health care clinics implemented specifically for Indigenous populations in Australia, Canada, New Zealand, and the United States. A major finding was among 25 mobile clinics, 52% documented usage of some form of evaluation. The majority of the evaluations consisted of quantitative methods, including descriptive statistics, surveys, and longitudinal data. Examples of descriptive statistics included clinical indicator measurements, patient demographics, and offered services data.

3. Beks, H., Mitchell, F., Charles, J. A., McNamara, K. P., & Versace, V. L. (2022). An Aboriginal community-controlled health organization model of service delivery: qualitative process evaluation of the Tulku wan Wininn mobile clinic. *International journal for equity in health, 21*(1), 163. https://doi.org/10.1186/s12939-022-01768-4

In this study, the researchers explored contextual factors affecting the implementation of the Tulku wan Wininn mobile clinic, which included the acceptability of service to health service personnel, external key informants, and Aboriginal and/or Torres Strait Islander clients in Victoria, Australia between July 2019 and October 2021. A qualitative evaluation methodology was used, which included semi-structured interviews and inductive thematic analysis. Major themes that emerged were considerations for early implementation of a mobile clinic,

maintaining face-to-face services during COVID-19, mobile clinics being an acceptable model of health service delivery, and maintaining the mobile clinic as a service delivery model.

4. Bertoncello, C., Cocchio, S., Fonzo, M., Bennici, S. E., Russo, F., & Putoto, G. (2020). The potential of mobile health clinics in chronic disease prevention and health promotion in universal healthcare systems. An on-field experiment. *International journal for equity in health, 19*(1), 59. https://doi.org/10.1186/s12939-020-01174-8

In this study, the researchers described the population attracted to the mobile health clinic (MHC) initiative and the impact of this initiative in the prevention and control of non-communicable diseases (NCD) in Italy between November and December 2017. A major finding was that the initiative attracted at-risk populations, such as foreigners, men, and people aged 50 to 69. Also, newly diagnosed or uncontrolled disease was observed in above 40% of the participants for hypertension and hypercholesterolemia, which shows that MHCs can aid in identifying additional cases of NCDs resulting in prevention of complications and a reduced number of emergency room visits.

5. Borysow, I. da C., Conill, E. M., & Furtado, J. P. (2017). Health care of people in homelessness: a comparative study of mobile units in Portugal, United States and Brazil. *Ciência & Saúde Coletiva, 22*(3), 879–890. https://doi.org/10.1590/1413-81232017223.25822016

In this article, the researchers examined the legal framework guiding the use of mobile units in Portugal, the United States, and Brazil to improve access and continuity of care for the homeless population. Improving access, addressing psychoactive substance abuse, outreach and multidisciplinary work were common themes in the comparative analysis. The authors concluded that in all three countries, a linkage between health centers and mobile units in primary healthcare could contribute to reducing morbidities among homeless men, who have the highest rates of potential years of life lost and less seeking of health care services.

6. Bouchelle, Z., Rawlins, Y., Hill, C., Bennet, J., Perez, L. X., & Oriol, N. (2017). Preventative health, diversity, and inclusion: a qualitative study of client experience aboard a mobile health clinic in Boston, Massachusetts. *International journal for equity in health, 16*(1), 191. https://doi.org/10.1186/s12939-017-0688-6

In this study, researchers examined mobile health clinics' (MHCs) role in patients' healthcare residing in Boston, Massachusetts. Twenty-five clients, who received care on The Family Van between June and July 2014, were recruited by the researchers to gather themes about participants' experiences in receiving health services aboard the MHC, using the semi-structured interview approach. A major finding was the relational factors most significant to the participants' perspective of care on The Family Van, which were being able to communicate understandably, creating a culture of respect and inclusivity, and being diverse with the knowledge of the community. Some structural factors most significant to the participants' perspective of care on the MHC were a focus on preventative health and chronic disease management, as well as being fast, free, and providing multiple services, and location.

7. Coaston, A., Lee, S. J., Johnson, J. K., Weiss, S., Hoffmann, T., & Stephens, C. (2023). Factors associated with mobile medical clinic use: a retrospective cohort study. *International journal for equity in health, 22*(1), 195. https://doi.org/10.1186/s12939-023-02004-3

In this study, the researchers describe factors associated with mobile medical clinic usage and examined the relationship between mobile clinic utilization and the presence of chronic illness, while controlling for sociodemographic and health characteristics in Southern California between January 1, 2018 and December 31, 2019. Data were collected from patient charts on predisposing, enabling, and need factors based on the Andersen's Behavioral Model. Then, a zero-truncated negative binomial regression model was utilized to examine the association of chronic illness and the number of mobile medical clinic visits accounting for potential confounding variables. A major finding was that patients with hypertension and diabetes had 1.22

(95% CI, 1.02-1.45) and 1.61 (95% CI, 1.36-1.92) times the rate of mobile medical clinic visits than those without those chronic illnesses, respectively.

8. Guilliot-Wright, S., Farr, N. M., & Cherryhomes, E. (2022). A community-led mobile health clinic to improve structural and social determinants of health among (im)migrant workers. *International Journal for Equity in Health, 21*(58). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8535297/

In this study, the researchers interviewed fishermen to understand the health needs of this specific occupation for (im)migrant workers and then implemented a free mobile health clinic at the Gulf Coast dock of southeast Texas. A major finding was that the highest number of visits were for medical kits, boxed lunches, and diabetes screening. Additionally, one person was diagnosed with type 2 diabetes, five patients were sent for diabetes testing, one person admitted to the hospital, and one person diagnosed with high blood pressure and transported to the local free clinic.

9. Hill, C. F., Powers, B. W. (2014). Mobile Health Clinics in the Era of Reform. *The American Journal of Managed Care, 20*(3). https://www.ajmc.com/view/mobile-health-clinics-in-the-era-of-reform

In this article, the authors discussed the role of the mobile health clinic (MHC) sector and its impact on access, cost, and quality using data collected through the Mobile Health Map and published literature related to MHCs. Patients of The Family Van in Boston with hypertension experienced a decrease in systolic and diastolic blood pressure readings by 10.7 and 6.2 mm Hg, respectively, during follow-up visits. An asthma-specific mobile clinic generated savings of $3,500 per child due to a decreased number of emergency department visits, hospitalizations, and school absenteeism compared to patients before enrollment in mobile health services.

10. Iqbal, A., Anil, G., Bhandari, P., Crockett, E. D., Hanson, V. M., Pendse, B. S., Eckdahl, J. S., & Horn, J. L. (2022). A Digitally Capable Mobile Health Clinic to Improve Rural Health Care in America: A Pilot Quality Improvement Study. *Mayo Clinic. 6*(5)475-483. https://doi.org/10.1016/j.mayocpiqo.2022.08.002

In this study, the researchers describe the digitally capable mobile health clinic (MHC) quality improvement initiative and implementation framework using Agile methodology for patients in rural southern Minnesota. A major finding was of the patients seen at the MHC during the pilot period, 68.6% were seen for primary care and family nurse visits and 22.8% were seen for blood and urine laboratory testing. Patients in the surrounding areas of the MHC scheduled stops contributed to more than 45% of the appointments.

11. Levy, P., McGlynn, E., Hill, A. B., Zhang, L., Korzeniewski, S. J., Foster, B., Criswell, J., O'Brien, C., Dawood, K., Baird, L., & Shanley, C. J. (2021). From pandemic response to portable population health: A formative evaluation of the Detroit mobile health unit program. *PloS one, 16*(11), e0256908. https://doi.org/10.1371/journal.pone.0256908

In this study, the researchers described their experience developing and implementing five mobile health units (MHU) in Detroit, Michigan. This initiative started as a mobile SARS-CoV-2 testing strategy and evolved into bringing mobile health services to disadvantaged communities. The formative evaluation was performed by applying the Centers for Disease Control and Prevention framework for public health program evaluation. A major finding was among the patients screened for hypertension, 46.4% had elevated systolic blood pressure and 55 patients requested to be connected to a primary care provider. The authors suggested that, based on their study, MHUs are effective especially in populations and areas where telehealth uptake was low.

12. Malone, N. C., Williams, M. M., Smith Fawzi, M. C., Bennet, J., Hill, C., Katz, J. N., & Oriol, N. E. (2020). Mobile health clinics in the United States. *International journal for equity in health, 19*(1), 40. https://doi.org/10.1186/s12939-020-1135-7

In this study, the researchers described mobile health clinics in the United States that participated in the Mobile Health Map between 2007 and 2017. The information gathered included client demographics, services offered, organizational structures, and funding sources. A major finding was that among mobile health clinics (MHCs) that reported data in the online form, 56% targeted the uninsured, 55% low-income groups, 38% homeless persons, and 36% rural communities with the top services being preventative care and primary care. Also, MHCs had a median number of 3,491 visits annually.

13. Oriol, N.E., Cote, P.J., Vavasis, A.P., Bennet, J., DeLorenzo, D., Blanc, P., Kohane, I. (2009). Calculating the return on investment of mobile healthcare. *BMC Medicine,* 7(27). https://doi.org/10.1186/1741-7015-7-27

In this article, the authors discussed if the value of the services provided by mobile health programs could be quantified by adjusted life years saved and estimated emergency department expenditures avoided. A return on investment (ROI) ratio was created using a sample mobile health clinic (The Family Van) and published research, in which the relative value of the mobile health clinic services were divided by the annual cost to run a mobile health clinic. Using the service data by The Family Van for 2008 and the ROI ratio, the return on investment would be $36 for every $1 invested in the mobile health program.

14. Palma, M. L., Arthofer, A., Halstead, K. M., Wahba, J. M., & Martinez, D. A. (2020). Service Learning in Health Care for Underserved Communities: University of Iowa Mobile Clinic, 2019. *American journal of public health, 110*(9), 1304–1307. https://doi.org/10.2105/AJPH.2020.305755

In this article, the authors described the characteristics and evaluation methods in implementing the University of Iowa Mobile Clinic (UIMC), which is a student-run free medical clinic. Most common health care services accessed by patients of the UIMC included clinician visits (54.5%) and health education (28.8%). Also, the most common laboratory tests performed were hemoglobin A1c (51.1%) and cholesterol (49.4%). Patient satisfaction surveys showed that 44.4% of patients used UIMC as their only source of health care, and 54.6% of the patients were returning visits.

15. Yu, S. W. Y., Hill, C., Ricks, M. L., Bennet, J., & Oriol, N. E. (2017). The scope and impact of mobile health clinics in the United States: a literature review. *International journal for equity in health, 16*(1), 178. https://doi.org/10.1186/s12939-017-0671-2

In this article, the researchers examined the existing literature on mobile health clinics (MHCs) and their role in the United States healthcare system between January 2015 and December 2016. The authors evaluated 51 articles and found that MHCs are successful in reaching vulnerable populations by delivering services in communities of need and adapting their services based on the changing needs of the target population. MHCs represent a resource to individuals unable to approach a health center for necessary services and check-ups, including cases of infectious disease and chronic disease management.

Engagement

Overview

Engaging partners was a foundational element in OHA-HSD's approach to this project. Rede worked with OHA-HSD to identify and contact organizations connected with or interested in equity-focused mobile health units. This outreach aimed to seek input and advice about key elements in the evaluation plan (specifically, the key evaluation questions, the logic model, and, for OHA-HSD Mobile Health Pilot Program Grant Recipients, the evaluation plan data collection methods).

Mobile Health Pilot Grant Recipients

All three OHA-HSD Mobile Health Pilot Program Grant Recipients attended an evaluation planning kick-off meeting in August 2023. Discussion during this meeting sought to design engagement plans that balanced the burden on grant recipients in providing insights and direction in evaluation planning with OHA-HSDs desire to create a collaboratively developed evaluation plan. Based on input from grant recipients offered in the meeting, Rede developed an engagement plan tailored to individual grant recipients' needs. Rede sent OHA-HSD Mobile Health Pilot Program Grant Recipients three topically specific emails requesting feedback. OHA-HSD Mobile Health Pilot Program Grant Recipients responded in writing or in a meeting set up at their request. After each feedback period concluded, Rede carefully documented and reviewed feedback to revise evaluation tools using the knowledge and insights provided by OHA-HSD Mobile Health Pilot Program Grant Recipients.

Interested Parties

Additional interested parties contacted by Rede included:

- **The Oregon Health Equity Task Force,**[2] A group of 20 individuals and organizations that championed House Bill 4052, which led to the creation of the OHA-HSD Mobile Health Pilot Program).
- **The Honorable Travis Nelson,** Oregon State Legislature, House District 44.
- **Verian Wedeking,** Oregon Health Sciences University, Casey Eye Institute and the Mobile Healthcare Association PNW.

Rede conducted interviews/meetings with the Oregon Health Equity Alliance (a member of the Health Equity Task Force), Representative Nelson, and Verian Wedeking. These meetings informed the evaluation planning process, products, and the environmental scan.

[2] For more information about the Oregon Health Equity Task Force see: https://www.oregonpublichealth.org/oregon-health-equity-task-force

Logic Model

Overview

As the first step in developing the evaluation plan, Rede drafted a Mobile Health Pilot Program Logic Model (found below). As with any logic model, the purpose of this tool is to graphically illustrate the relationship between the program's resources, activities, and intended effects.

In addition to conclusions drawn from the scientific literature, Rede relied heavily on information from the OHA-HSD Mobile Health Pilot Program Grant Recipients and OHA-HSD-Medicaid Programs staff to develop the model. Key informant feedback from various project partners has been incorporated into the model.

Importantly, the logic model predicts long-term outcomes but these outcomes depend on the OHA-HSD Mobile Health Program being adequately resourced for a sustained (beyond five years) period.

Moreover, expectations about the timing for short-term outcomes must take into account the considerable effort necessary to set up a mobile health unit.

Logic Model: OHA-HSD Mobile Health Pilot Program

Situation Statement: In accordance with HB 4052 (2022), OHA funds 3 Mobile Health Units through a pilot program which focuses on health equity.

Inputs	Activities	Outputs	Outcomes – Impacts		
			Short-term Result (1-3 years)	*Medium-term Result (3-5 years)*	*Long-term Result (5+ years)*
• Funding for pilot program • OHA grant and program evaluation support • Medicaid or other insurance	• Launch pilot program • Plan for evaluation and feasibility study	• Completed grant-making process • Staff retention policies • Continuous needs assessment	• Successful launch of MHU and start of services with community engagement	• Clients are receiving services from MHU or PCPs (if referred) • Clients are satisfied with the care they receive from MHUs	• Increased client network, allowing for a self-sustaining economic model for the MHU unit • Decreases morbidity among MHU clients • Decreased mortality among MUH clients • Decreased healthcare costs
• MHU operators/ clinicians/drivers • MHU equipment + materials • MHU Organization's support	• Build MHU staff capacity including training/education for MHU clinicians/ operators • Procure materials and supplies for services • Plan culturally specific client services • Plan bridge medical services to help clients feel safe with PCPs	• MHU staff training occurs • MHU equipment and materials secured • Plans for culturally specific services developed • Plans for bridge medical services developed • Referral program for primary provider	• Increased services provided for clients and those in crisis • Improved culturally specific services • Successful bridge services services to primary care providers • MHUs can track and monitor patient data	• Specific-population clients connect consistently with primary care and other prevention services at MHUs	**Note:** Long term results will **only** be achieved with sustained funding, beyond the pilot project timeframe.
• Community partnerships • Consumers/clients	• Conduct community outreach • Provide services- (e.g., primary care, urgent care, mental health, substance use) • Collect information about services provided	• Services provided and documented at a level appropriate to the level of service provided	• Increased substance/opioid use disorder services, mental health services, infectious disease prevention, primary care, urgent care, wound care, vaccinations, and medication	• Specific improved health outcomes for MHU clients in Pilot Service Areas (overdose, advanced infection, depression, anxiety, etc.) • Decrease in unnecessary utilization of high-cost emergency services	

Assumptions:
- Stable funding for MHU operations
- Community partners will remain invested in MHU activities, outputs and outcomes

Evaluation Plan

See Attachment 1 for the OHA-HSD Mobile Health Pilot Program Evaluation Plan.

- This plan is submitted in draft form.
- Due to unknowns about the timing of the start of the evaluation, Rede did not develop a timeline for the evaluation.

Environmental Scan

HB 4052(2022) required an“environmental scan” of the mobile health unit landscape in Oregon. This section will detail Rede’s methods and findings in conducting the scan.

MHU Definition

Using a definition borrowed from OHA, a mobile health unit (MHU) is defined as any unit that can provide a combination of people and equipment to provide services directly to individuals in their communities for preventive, diagnostic, therapeutic, behavioral, rehabilitative, maintenance, or palliative care and counseling services, assessment, or procedure with respect to the physical or mental condition, or functional status of individuals, or that affect the structure or function of the body; and the sale or dispensing of a drug, device, equipment, or other item in accordance with a prescription.

In this project, Rede was particularly interested in identifying MHUs that operate in a health equity-focused model. Therefore, Rede looked specifically for MHUs that:

1. Provide health care services, incidental, or specialized health care supplies primarily to one or more of the following groups:
    a. Communities of color;
    b. Oregon’s nine federally recognized tribes and the descendants of the members of the tribes;
    c. Immigrants;

    d. Refugees;
    e. Migrant and seasonal farmworkers;
    f. Low-income individuals and families;
    g. Persons with disabilities; and
    h. Individuals who identify as lesbian, gay, bisexual, transgender or queer or who question their sexual or gender identity
2. Involve communities in determining the MHU's services, location(s), outreach methods, and other decisions that benefit from insights coming from people with lived experience overcoming barriers to accessing health care services
3. Provide culturally-specific health care services or culturally-specific incidental or specialized health care supplies
4. Provide consistent connection and referral to primary care services
5. Does not operate in a profit-driven business model

Environmental Scan Methods

There is no central registry for MHUs in Oregon. MHUs often fall under the health care regulatory and compliance umbrella of parent organizations and those organizations are not required to separately register MHUs. Thus, creating a definitive, reliable list of MHUs in Oregon was challenging. Rede used multiple methods to research existing MHUs in Oregon.

Internet Searches

Using selected search terms, we first extracted information using standard research methods of searching the internet for mobile health operations in Oregon. We created a spreadsheet that acted as a database for all mobile health units we could be sure operated in Oregon and provided services in the last year (fiscal year 2022-2023).

Mobile Health Unit Databases

The internet search yielded the location of two databases with mobile healthcare membership information—the Mobile Healthcare Association and Harvard's Mobile Health Map. Both websites were populated by mobile health operations that were self-selected to be members of these associations. Key informants interviewed for this project opined that neither database provided a comprehensive picture of MHUs operating in Oregon.

Survey

Verian Wedeking, a Mobile Healthcare Association National Board Member, forwarded a survey (developed by Rede) to a network of mobile healthcare partners. The survey asked MHUs to respond to Rede with information about their practice.

Outreach to FQHCs

Rede contacted all Federally Qualified Health Centers (FQHCs) in Oregon to gather information about MHUs affiliated with their centers or information about MHUs' FQHC professionals were aware of in their communities. Outreach was confined to emailing and phone contacting FQHCs that had a MHU listed as a part of their services.

Finally, we emailed and called all organizations on our list to gather more specific information to see if the MHU met our definition criteria (offered below).

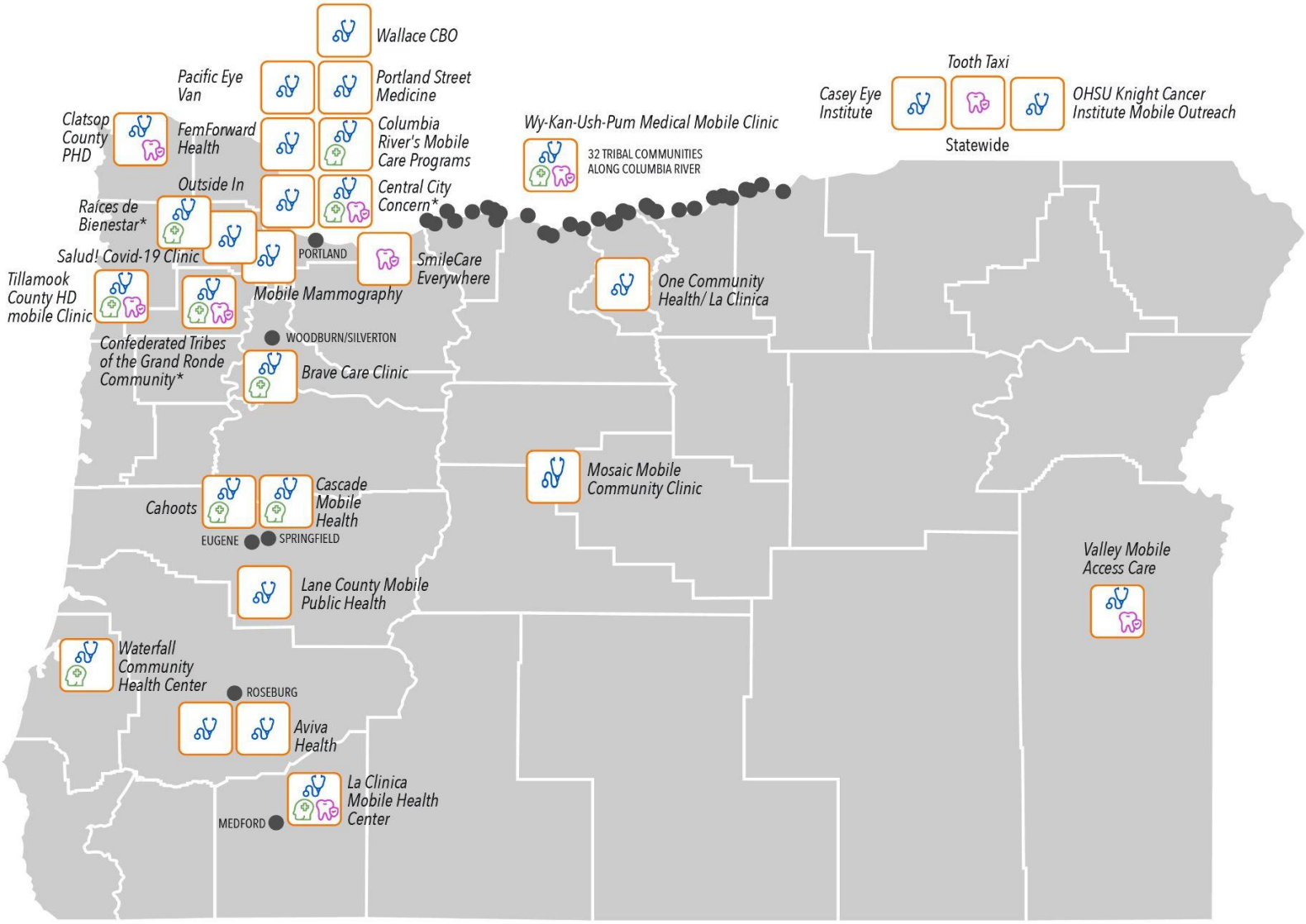
Results

Our findings show that there are at least 32 MHUs that provide various services for Oregonians. Several MHUs provide services in multiple locations across the state, while most of the MHUs provide services for one main location, area, or county.

Services

		
Physical health	**Behavioral health**	**Dental health**
• Primary care • Vaccinations • Chronic disease health screenings • Testing • Health education • Diagnosis and treatment of illness/injury	• Mental health screenings • Substance use screenings • Crisis counseling • Suicide Prevention, Assessment, and Intervention • Grief and loss	• Oral health screenings • Dental care

Location of MHUs and Services Provided



Overview of MHU populations served, services provided, and service areas

MHU	Populations Served	Services Provided	Service Area
Aviva Health (2 units)	• Vulnerable populations in Roseburg	• General and preventative health care (children/adults) • Chronic disease management • Immunizations • Referrals to specialists • Health education	Roseburg, Douglas County
Brave Care Clinic	• Youth under 17 and families	• COVID-19 testing • Full pediatric services: primary care, urgent care, and behavioral care	Marion, Woodburn, and Silverton, Marion County
Cahoots	• Residents of Eugene and Springfield	• Crisis Counseling • Suicide Prevention, assessment, and intervention • Conflict Resolution and mediation • Grief and loss • Substance abuse • Housing crisis • First Aid and non-emergency medical care • Resource connection and referrals • Transportation to services	Eugene and Springfield, Lane County
Cascade Mobile Health	• Agricultural workers	• Injuries: Sprains, strains, minor cuts, scrapes, and scratches, minor burns, eye injuries, bruises • Drug and alcohol screening • Workplace mental training	Lane County
Clatsop County PHD	• Clatsop County residents	• Basic health services • Vaccinations • Testing • Dental care	Clatsop County
Columbia River's Mobile	• Unhoused individuals	• Basic medical screenings • Mental health screenings	Clark County Washington

Care Programs		• Alcohol and drug screenings	
FemFoward Health	• Woman, pregnant populations	• Gynecology and early pregnancy care	Multnomah, Clackamas
La Clinica Mobile Health Center	• Unhoused • Low-income • Migrant and seasonal farmworkers	• Blood pressure checks/education • Diabetes screening/education • One-on-one medical exams, • Vaccinations (COVID-19, H1N1, flu) • HIV testing/education • Education about nutrition, tobacco, food stamps, family planning, breast self-exams, and pesticide safety • Limited dental care	Medford, Jackson County
Lane County	• Multiple populations, adult and children	• Primary medical care • Primary preventive services	Lane County
Mobile Mammography	• Women	• Mammography and related preventive services	Washington County
Mosaic Mobile Community Clinic	• Individuals experiencing homelessness • At-risk youth	• Medical care • Vaccinations	Deschutes, Crook, and Jefferson Counties
OHSU Casey Eye Institute	People at: • County fairs • Street fairs • Health fairs • Block parties • Community events • Other events throughout Oregon	• Optometry • Eye health and vision Services • Eye health referrals	Statewide
OHSU Knight Cancer	People at: • County fairs	• Provide resources to educate, prevent, detect and treat cancer such as HPV vaccines, skin cancer screening, FIT	Statewide

Institute Mobile Outreach	• Street fairs • Health fairs • Block parties • Community events • Other events throughout Oregon	kits, and clinical trials	
One Community Health's La Clinica	• Students (age 18 and below)	• School-based primary care	Wasco County
Outside In	• Laurelwood shelter residents • Homeless youth	• Primary care • Check-ups and physical exams • Diagnosis and treatment of illness and injury • STI Testing • Vaccinations • Wound care • Chronic disease support • Reproductive health care • Referrals • Language interpretation services when needed	Portland, Multnomah County
Pacific Eye Van	• Anyone / all ages	• Optometry and vision care	Multnomah, Washington, Yamhill, Polk, and Clark Counties
Salud! Covid-19 Clinic	• Anyone but outreach is specific to those with bilingual needs	• Covid-19 Screening • Referrals to FQHC	Washington County
SmileCare Everywhere	• Hispanic/Latinx communities and uninsured populations	• Dental health	Multnomah, Washington, Yamhill, Polk, and Clark Counties

Tillamook County Health Department Mobile Clinic	• Residents of Tillamook County	• Medical services • Dental services • Behavioral health services by request	Tillamook County
Tooth Taxi	• Uninsured and underserved children (age 18 and below)	• Dental services	Statewide
Valley Mobile Access Care	• Residents of Malheur County	• Medical services • Dental services	Malheur County
Wallace CBO	• Students and community	• Preventive and urgent care • Behavioral health, immunizations • Lab tests • Chronic disease management • General illness, injuries • Dental hygiene • Student Primary Care	Multnomah county
Waterfall Community Health Center	• Vulnerable populations	• Patient education • Primary care • Health screenings and social health	Coos County
Wy-Kan-Ush-Pum Medical Mobile Clinic	• Native People living along the Columbia River and outlying communities	• COVID-19 testing and vaccinations • Connection to resources • Health education • Health insurance enrollment • Behavioral health • Chronic disease health screenings • Basic medical care • Oral health • Supplies and resources	32 tribal communities along the Columbia River
Current OHA-HSD Mobile Health Pilot Program Grant Recipients			

Central City Concern/ Portland Street Medicine	• People experiencing homelessness in Portland metro area	• Primary care • Wound care • Infectious disease screening and treatment • Vaccinations • Medication prescriptions	Portland, Multnomah County
Confederated Tribes of the Grand Ronde Community of Oregon	• Tribal members along Columbia river • Other American Indian/Alaska Native who reside in Tillamook, Yamhill, and Polk counties	• Opioid counseling and treatment • Medication prescriptions	Tillamook, Yamhill, and Polk Counties
Raíces de Bienestar	• Hispanic/Latinx communities • Migrant seasonal farmers • Uninsured populations	• Mental health and wellness services • Mental health therapy • Medication prescriptions	Washington County, Portland Metropolitan area, Mid-Willamette Valley, and Southern Oregon

Mobile Health Unit Funding

In conducting research for the scan, Rede gathered information about funding sources for mobile health units. Across Oregon there was a variety of funding models and funding sources that support mobile health units including grant-funded (e.g., Indian Health Services, State of Oregon), philanthropy (e.g., Ford Family Foundation, Collins Foundation, Oregon Community Foundation), private donors, county or city governments, FQHC dollars, and accepting insurances (e.g., Medicaid, Medicare, or private insurance).

Scan Limitations

As noted earlier, Rede stitched together various threads of information to develop this list, and much of the information came from secondary sources. Rede was not able to gather comprehensive information about services, client groups, and funding sources for each provider. Therefore, information is incomplete.

In addition, in some cases it was also difficult to determine if mobile health operations found online were actively providing services. The scan includes only those mobile health units confirmed to have provided services in the last calendar or fiscal year (i.e., June 2022 at the latest).

ATTACHMENT 1

» Evaluation Plan:

Oregon Health Authority, Mobile Health Unit Pilot

Submitted to Liza Gerardo, OHA » 11/30/2023

»Contents

»Introduction

The evaluator is responsible for developing methods to examine and report successes and lessons learned in the Oregon Health Authority Health Services Division's Mobile Health Pilot Program.

»Program Description

House Bill 4052 (2022) and Mobile Health Pilot Program Grants

Oregon HB 4052 (2022) requires a Mobile Health Pilot Program to reduce barriers to healthcare access by bringing care directly into communities, leveraging existing community assets, and providing culturally and linguistically specific services. OHA's Health Services Division is responsible for establishing grants to fund Mobile Health Unit Pilot Programs a budget of (at most) $1,275,000 for the 2021-2023 biennium and $2,072,000 for the 2023-2025 biennium.These mobile health programs can help underserved communities overcome common barriers to accessing health care, including time, culture, geography, and trust. The pilot program centers on health equity and community by emphasizing community engagement and focusing on priority populations (as defined in OAR 943-021-0005(7)), which are groups that disproportionately experience poor health or social outcomes attributable to racism.

Based on guidance set forth by the Mobile Health Advisory Committee Advisory Committee, OHA developed a grant program and, in the summer of 2023, selected three pilot MHU programs to receive funding: Central City Concern, Confederated tribes of Grand Ronde Community of Oregon, and Raíces De Bienestar.

- Central City Concern (CCC) is a homeless-facing Community-Based Organization that aims to increase self-sufficiency in people experiencing homelessness in the Portland Metro Area. CCC's participation seeks to use the pilot program funding to improve access to primary healthcare for people experiencing homelessness.
- The Confederated Tribes of Grand Ronde Community of Oregon (CTGRC) is a confederation of 27 plus tribes that range from Western Oregon to Northern California. The CTGRC provides a range of services, including medical and educational services, to thousands of tribal members. CTGRC aims, with funding provided in the pilot program, to decrease barriers to substance-use disorder, particularly opioid use.

- Raíces De Bienestar (RCB) is a Latine/x Community-Based Organization that services the Oregon Latino Communities in the Portland Area. RCB's aim with funding from the pilot program is to provide culturally relevant mental health services for a population that has issues with stigmatizing mental health care.

Program start dates vary across each Grantee, with timelines ranging from 12 to 18 months of service delivery from the start date.

»Logic Model

Situation Statement: In accordance with HB 4052 (2022), OHA funds 3 Mobile Health Units through a pilot program which focuses on health equity.

Inputs	Activities	Outputs	Outcomes – Impacts		
			Short-term Result (1-3 years)	*Medium-term Result (3-5 years)*	*Long-term Result (5+ years)*
• Funding for pilot program • OHA grant and program evaluation support • Medicaid or other insurance	• Launch pilot program • Plan for evaluation and feasibility study	• Completed grant-making process • Staff retention policies • Continuous needs assessment	• Successful launch of MHU and start of services with community engagement	• Clients are receiving services from MHU or PCPs (if referred) • Clients are satisfied with the care they receive from MHUs	• Increased client network, allowing for a self-sustaining economic model for the MHU unit • Decreases morbidity among MHU clients • Decreased mortality among MUH clients • Decreased healthcare costs
• MHU operators/ clinicians/drivers • MHU equipment + materials • MHU Organization's support	• Build MHU staff capacity including training/education for MHU clinicians/ operators • Procure materials and supplies for services • Plan culturally specific client services • Plan bridge medical services to help clients feel safe with PCPs	• MHU staff training occurs • MHU equipment and materials secured • Plans for culturally specific services developed • Plans for bridge medical services developed • Referral program for primary provider	• Increased services provided for clients and those in crisis • Improved culturally specific services • Successful bridge services services to primary care providers • MHUs can track and monitor patient data	• Specific-population clients connect consistently with primary care and other prevention services at MHUs	
• Community partnerships • Consumers/clients	• Conduct community outreach • Provide services- (e.g., primary care, urgent care, mental health, substance use) • Collect information about services provided	• Services provided and documented at a level appropriate to the level of service provided	• Increased substance/opioid use disorder services, mental health services, infectious disease prevention, primary care, urgent care, wound care, vaccinations, and medication management.	• Specific improved health outcomes for MHU clients in Pilot Service Areas (overdose, advanced infection, depression, anxiety, etc.) • Decrease in unnecessary utilization of high-cost emergency services	**Note:** Long term results will **only** be achieved with sustained funding, beyond the pilot project timeframe.
Assumptions: - Stable funding for MHU operations - Community partners will remain invested in MHU activities, outputs and outcomes					

»Key Evaluation Questions[1]

1. To what extent did pilot MHUs provide services for priority populations?
2. To what extent did pilot MHUs connect clients with primary care and other health care resources?
3. In what ways, if any, did pilot MHUs provide culturally responsive care?
4. In what ways, if any, did clients of pilot MHU programs believe the services were safe and trustworthy?
5. How did pilot MHUs engage community members in determining and developing services?
6. What elements would be needed to sustain the pilot MHUs?
7. What elements would be required to scale[2] health pilot MHUs
8. What were the critical lessons learned from the pilot MHUs about structuring services, service models, providing services, community partnerships, and payment models?
9. How did the work of Pilot Program MHUs contribute to goals and objectives in the 2020-2024 State Health Improvement Plan, Healthier Together Oregon, specifically impacting the following goals?
    - Increase equitable access to and uptake of community-based preventive services.
    - Increase equitable access to and uptake of clinical preventive services.
    - Implement systemic and cross-collaborative changes to clinical and community-based health-related service delivery to improve the quality, equity, efficiency, and effectiveness of services and interventions.
    - Increase resilience by promoting safe, connected, and strengths-based individuals, families, caregivers, and communities.
    - Expand the reach of preventive health services through evidence-based and promising practices.

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[1]This evaluation plan does not include key evaluation questions addressing the long term objectives in the logic model; rather, it is focused on evaluating the success of mobile health units in meeting short and medium term objectives with the assumption (grounded in the scientific literature) that long term outcomes will occur if short and medium term outcomes are achieved and no unforeseen moderating variables are introduced.

[2] For the purpose of this plan, scalability is defined as: the ability of a health intervention shown to be efficacious on a small scale and or under controlled conditions to be expanded under real world conditions to reach a greater proportion of the eligible population, while retaining effectiveness.

- Reduce systemic barriers to receiving behavioral health services, such as transportation, language, and assessment.
- Enable community-based organizations to destigmatize behavioral health by providing culturally responsive information to the people they serve
- Target population: (HTO's) primary goal is to achieve health equity[3] for BIPOC-AI/AN, people with low incomes, people with disabilities, people who identify as LGBTQ+, and people who live in rural areas.

»Methods

Qualitative

1. **Annual individual structured interviews with pilot MHU operators**.
    a. Key staff from each of the three pilot programs will be interviewed by a professional interviewer annually using a structured interview guide that will take approximately 90 minutes to complete. Interviews can be conducted in person, telephonically, or in a video meeting.
    b. Questions will focus on community engagement, service provision, sustainability, scalability, lessons learned and impact stories.
    c. Interviews will be recorded and transcribed.
    d. The evaluation team will analyze transcripts using best practices for qualitative content and thematic analyses.
2. **Group interviews with pilot MHU clients**.
    a. Three structured group interviews with four to five participants each who:
        i. Have received services from a pilot MHU
        ii. Are a family member of a person who has received services from a pilot MHU
        iii. Are a community advocate or organization representing people or a person who has received services from a pilot MHU

[3] Health equity is "when all people can reach their full health potential and well-being and are not disadvantaged by their race, ethnicity, language, disability, gender, gender identity, sexual orientation, social class or the intersections among these communities or identities or other socially determined circumstances" (Oregon Health Policy Board – Health Equity Committee).

b. In recruiting for and composing groups, the evaluator ensures that participants representing diverse geographies, racial/ethnic, and types of services received are represented.
c. Structured group interviews will use Appreciative Inquiry Methods. Group interviews will be conducted by a professional group interviewer, conducted in person or using video, and can be conducted in English or Spanish. Translation can be available for other languages as necessary.
d. To the extent possible, professional interviewers will be members of the community being interviewed.
e. Participants will be compensated/incentivized for their time, labor, transportation, and other associated costs.
f. Recruitment will be planned with pilot MHU operators and designed to limit the burden on providers.
g. Group interviews will be recorded and transcribed.
h. Note: Institutional Review Board processes do not need to be followed because this is a program evaluation and not a research study. However, a qualified researcher will review interview guides to ensure participants' rights are centered. OHA may also choose to make a formal determination about IRB processes.

Quantitative

3. **Biennial brief questionnaire survey of pilot MHU direct service staff and volunteers.**
    a. Drawing on information from individual and group interviews, the evaluation team will develop a questionnaire survey, not to exceed 20 questions.
    b. A convenience sample of individuals working with/for pilot MHUs at the time of survey administration will be utilized. The evaluation will attempt to reach all direct service staff with a survey link over a one-month administration window.
    c. Questions will focus on lessons learned and the impact of MHU services as observed by direct service staff and volunteers.
    d. Surveys will be administered electronically; the evaluation team will provide a link to MHUs and request their assistance in sharing the survey link with all staff and volunteers.
    e. Incentives will be provided for all survey respondents.

4. **Document review of Pilot MHU grant reports submitted to OHA.**

a. The evaluator will synthesize and review information submitted by pilot MHUs for grant reporting purposes, including:
    i. Race, Ethnicity, Language, and Disability (REALD) data for clients served.
    ii. Numbers served, type of service (clinical care, mental, health and SUD), and connections made to continued care.
    iii. Additional client, client service, and client outcome reporting requirements developed in mutual agreement between the OHA staff and grantees.

Methods Table[4]

Key Evaluation Question	Method
To what extent did pilot MHUs provide services for priority populations?	1, 2, 3, & 4
To what extent did pilot MHUs connect clients with primary care and other health care resources?	1, 2, & 3
In what ways, if any, did pilot MHUs provide culturally responsive care?	1 & 2
In what ways, if any, did clients of pilot MHU programs believe the services were safe and trustworthy?	2
How did pilot MHUs engage community members in determining and developing services?	1 & 2
What elements would be needed to sustain the pilot MHUs?	1 & 3
What elements would be required to scale health pilot MHUs?	1

[4] Grantee reports may be used as a data source for evaluation questions in addition to those noted in this table. This will be determined by OHA based on grantee requirements for reporting.

What were key lessons learned from the pilot MHUs about structuring services, service models, providing services, community partnerships, and payment models?	1 & 3
How did the work of Pilot Program MHUs contribute to goals and objectives in the 2020-2024 State Health Improvement Plan, Healthier Together Oregon?	1, 2, 3, & 4

»Analysis and Interpretation

Qualitative data

- The evaluation team will analyze individual and group interview transcripts using best practices for qualitative content thematic analyses or inductive analysis. Narrative information in grantee reports submitted to OHA will also undergo qualitative analysis.
- Beyond thematic analysis, using the data collected, the evaluation team will focus on "impact narratives" or stories that demonstrate the effect of MHU services on members of the priority populations.

Quantitative data

- The evaluation team will tabulate numeric data from grantee reports applying standards for data management and quality control.
- The evaluation team will analyze numeric data from grantee reports using an analysis software and applying industry and best practices for descriptive statistics.

Interpretation

- The evaluation team will design and conduct a participatory interpretation process (exercise or workshop) with OHA, pilot MHUs (based on availability), and partners to review preliminary results and inform meaning-making decisions.
- The evaluation team will guide discussions about effective and appropriate uses of descriptive data to inform correlative, causal, or program effect assessments.

»Reporting & Dissemination

- TBD by OHA