Advancing Mobile Health Access and Equity: Harris County Public Health's Integrated Mobile Health Services Initiative.

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Harris County
Public Health
Building a Healthy Community

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BACKGROUND

In the United States, financial and nonfinancial barriers limit access to health care, leading to unmet health needs, delayed care, and worsening health disparities and outcomes.[1–3]

Factors Affecting Access to Health Care

Socio-demographics, health status, service availability, and patient-provider preferences. Access to care is more limited for young adults, women, minorities, and those with low incomes or chronic illnesses.[3–4]

Harris County, Texas

Compared to the rest of the U.S., individuals have lower household incomes, less insurance coverage, and reduced access to preventive care. 1 in 5 adults couldn't afford medical care, and 1 in 3 did not receive routine preventive care.[5–8]

Innovative Approach to Address Access to Care Barriers

Mobile health clinics (MHCs) provide primary and preventive care to underserved communities, reducing barriers to access. However, the process for effectively launching MHCs is not well understood.[3]

AIM

Following a four-year suspension due to COVID-19, in 2023, Harris County Public Health (HCPH), serving the largest county by population in TX, initiated an agency-wide and multi-level implementation to increase access to its Mobile Health Clinics (MHCs) and services (including preventive and chronic care) among priority communities in Harris County, TX.

METHODS

We used Implementation Mapping to guide our process, conducting Needs, Assets, Capacity, and Readiness Assessments to identify community needs and organizational readiness and capacity. Surveys were conducted to gather data from the community, staff, and partners to evaluate the success and impact of the implementation on increasing health care access. We used ArcGIS and Excel to analyze quantitative and qualitative data.

1 Landscape Analysis
- Primary & secondary quantitative data.
- Publicly available sources.
- Identify community health status.
- Identify areas with the most need.

2 Strengths, Weaknesses, Opportunities, & Threats (SWOT)
- Primary quantitative and qualitative data.
- Organizational readiness & capacity.
- Internal and external facilitators (strengths, opportunities, and assets).
- Barriers (gaps and threats) for the implementation.

3 Implementation Plan
- Agency-wide collaboration defining roles & responsibilities.
- Leveraged community assets.
- Selected implementation strategies, identified tasks, developed supporting materials, and created timelines to ensure effective coordination.
- Used Management and Incident Command System frameworks.

4 Community Surveys
- Demographics, services of interest, and satisfaction.
- Later updated to include questions on barriers to care.

5 Staff & Partner Surveys
- Staff surveys assess services provided and satisfaction, focusing on challenges and barriers to quality improvement.
- Community partner survey gathered feedback on services provided and identified areas of success and improvement.
- Both surveys enhanced future events and addressed staff and partner feedback.

RESULTS

After a four-year hiatus, we successfully hosted three large-scale mobile health clinic (MHC) events in partnership with community organizations between March & August 2024 in high-priority zip codes with elevated social vulnerability and chronic disease rates within Harris County Precincts 1-3.

6 Mobile Clinics
Clinical and Dental Preventive Health Services, Veterinarian, and Nutrition.
Health services and programs (N=18): Asthma Control, Tobacco/Vaping Prevention, Diabetes Prevention, Nutrition and Physical Activity, Lead Poisoning Testing, HIV/STI Testing, Immunizations, Maternal Child Health Program, Substance Use Prevention, WIC, ACCESS, CHVPS, Outreach, Connect, EPH, MVC, PHPR, and Medical Reserve Corp, WIC, Substance Use, and OESED.

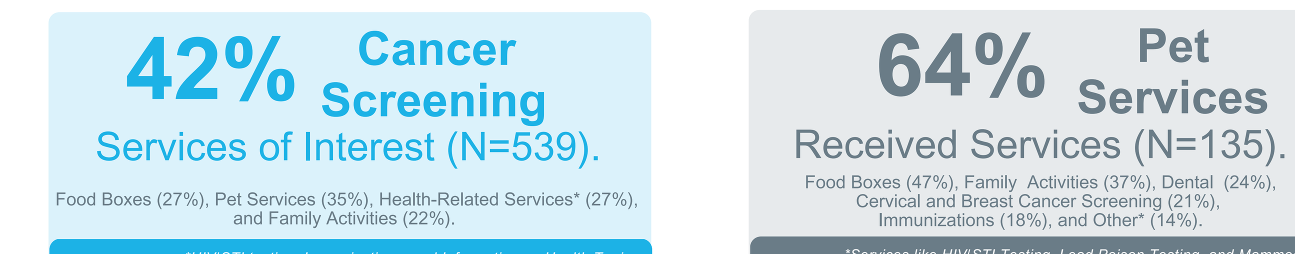
26 Community Organizations and Programs
County government agencies, non-profits, city health departments, schools, faith-based organizations, & one hospital.

539 Unique Households Served
Surveys Completed by Household Representative.
Approximately 36% attended alone, 41% of attendees came with 2-3 household members, 21% with 4-5, and 6% with 6 or more.

Survey Language
47% English | 53% Spanish
Selected Survey Language (N=539).

79% Sex Gender
Identified Female, sex & Gender Identity (N=233).

44% Race Ethnicity
Hispanic/Latino (N=233).
Black/African American (33%), White (14%), Multiracial (4%), and Other* (5%).
*Asian, American Indian or Alaska Native, Middle Eastern or North African, Native Hawaiian or Pacific Islander.

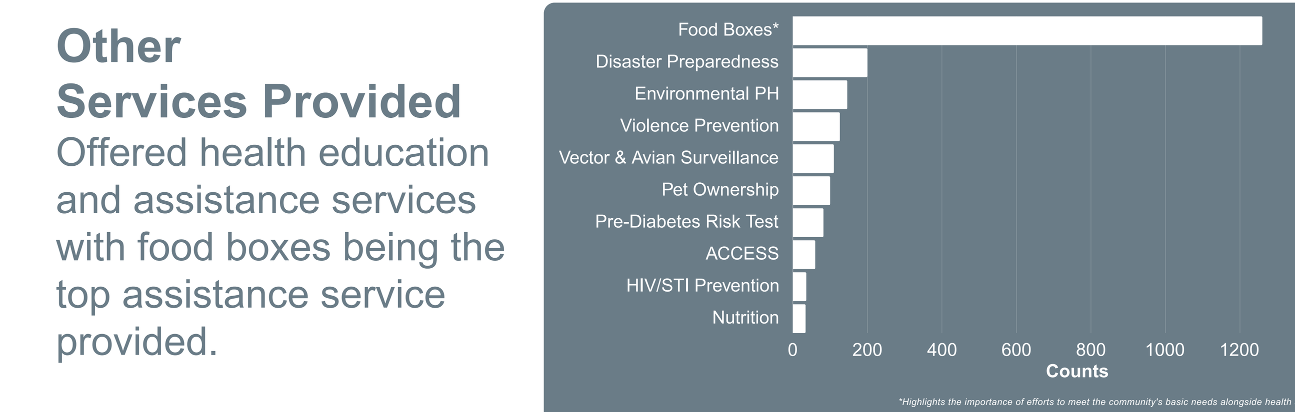


Mobile Health Services Provided

Offered a range of mobile health services, with immunizations being the top health service provided.

Other Services Provided

Offered health education and assistance services with food boxes being the top assistance service provided.



Feedback and Recommendations

Staff appreciated the community interaction and event atmosphere, while partners valued the support, collaboration, and diverse services provided by HCPH mobile health services. Recommendations included refining logistics, such as weather accommodations, promotion, accessibility, navigation, signage, service distribution, and referral pathways. Overall, staff, community members, and partners were satisfied with the event delivery.

Overall Satisfaction

CONCLUSION

HCPH successfully revitalized its MHCs after a four-year suspension due to COVID-19, increasing access to health services in vulnerable communities. Despite some challenges, the community response has been positive. Scale-up and sustainability efforts incorporate stakeholder feedback and implementation strategies to meet the community's needs while continuously improving quality.

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