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ASSESSING HOW THE HUMANE HEALTH COALITION CONNECTS VETERINARY SERVICES WITH HEALTHCARE FOR PEOPLE EXPERIENCING POVERTY AND HOUSING INSECURITY

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By

Katie Willis

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Approved March 19, 2024

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ABSTRACT

ASSESSING HOW THE HUMANE HEALTH COALITION CONNECTS VETERINARY SERVICES WITH HEALTHCARE FOR PEOPLE EXPERIENCING POVERTY AND HOUSING INSECURITY

By

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May 2024

Thesis supervised by Dr. Anita Zuberi

People experiencing housing insecurity and financial hardship often prioritize their pets' needs ahead of their own. In addition to financial concerns, some struggle to obtain medical treatment because they lack transportation or have had negative experiences with medical professionals. The Humane Health Coalition (HHC), a collaboration between Humane Animal Rescue of Pittsburgh (HARP) and Allegheny Health Network (AHN), seeks to address these challenges. The HHC is based on the One Health Model and brings together medical and veterinary staff to provide care and resources for both pets and their owners. My research examines the implementation of this new program. I conducted observations and semi-structured interviews at eight HHC clinics over four months. I interviewed twenty-seven participants and thirteen staff members from HARP, AHN, and other staff associated with the HHC. In addition, I

analyzed the HHC's administrative data. My findings describe the services offered, assess how effectively the initiative is reaching its target population, and explore the experiences of HHC participants in accessing services. These results will be shared with the Coalition and can inform future HHC events, such as where clinics should be held, changes to the intake paperwork, and additional staff training.

DEDICATION

This study is dedicated to the HHC's staff members and visionaries, as well as the clients who granted me their time and introduced me to their animal companions. And to my animal companion, Shasta.

ACKNOWLEDGMENT

Many thanks to those who assisted me in this process. First and foremost, Dr. Anita Zuberi for her invaluable encouragement and instruction throughout my time in the program, but especially with this research. I could not have completed this research without her, nor would I have wanted to try! Thanks to Dr. Cathy Appelt for her feedback and guidance with my thesis, and before I even entered the program. I deeply appreciate those connected with the HHC for their enthusiasm and responsiveness to my endless questions, especially Dr. Ariella Samson, Ben Talik, and Chelsea Chappars. And thanks to my partner, Jacob, for his support and willingness to learn with me.

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LIST OF ABBREVIATIONS

HHC = Humane Health Coalition

HARP = Humane Animal Rescue of Pittsburgh

AHN = Allegheny Health Network

OHC = One Health Clinic

SDC = Street Dog Coalition

JAC = Junior Advisory Council

IRB = Institutional Review Board

CIH = Center for Inclusion Health

ASSESSING HOW THE HUMANE HEALTH COALITION CONNECTS VETERINARY SERVICES WITH HEALTHCARE

Over 500,000 people experience homelessness on any given night in the United States (Kerman, et al. 2020; Lynch, et al. 2022). Likewise, "approximately one in every four renters is severely cost burdened, spending more than half of their household income on housing costs" (JCHS 2020, as cited in Kang 2023). Low housing availability and high housing costs create precarious situations for people and impact every aspect of their lives, including their physical health. People experiencing poverty, housing instability, and homelessness struggle to meet their daily needs and can only "focus on their other health issues" after they have obtained the fundamentals they need to survive (Nickasch and Marnocha 2009:39). Meanwhile, homelessness takes an enormous toll on health, and health conditions themselves can be a barrier to stable housing, with households being significantly more likely to experience chronic housing instability when one member has a health condition that prevents them from working (Kerman, et al. 2020; Kang 2023). Research also finds that individuals in these populations are hesitant or unable to access medical treatment because they lack transportation or have had negative experiences with medical professionals (Reid, et al. 2008; Nickasch and Marnocha 2009; Call, et al. 2023; McDowall, et al. 2023). Due to these factors, people in these at-risk populations may not receive the preventive care that they need.

There is an overlap between people experiencing poverty, housing instability, and homelessness, and people with pets. "Between 5% and 25% of people who are unable to secure housing in the United States are companion animal guardians" (McDowall, et al. 2023:7-8). Many in this population face limited housing options due to their pet ownership status (Graham,

et al. 2018; McDowall, et al. 2023). They may choose to buy dog food or pay for an expensive veterinary procedure rather than address their own needs, including healthcare (Geller 2022; McDowall, et al. 2023). Research has shown that steps are being taken by the medical field to address this population's loss of trust in the healthcare system and the barriers they face to receiving care. Some of these measures include medical respite, street medicine, and programs built around the One Health Model. This model is based on the concept that human, animal, and environmental health are all connected (Kerman, et al. 2020). While academic research on the One Health Model has predominately evaluated health threats "such as zoonoses," or diseases that are transmittable between humans and animals, few articles have "promoted an understanding of the many beneficial physical and psychosocial impacts of human-animal relationships" (Jordan and Lem 2014:1203). Several human and animal health initiatives following the One Health Model have been established across the country, and studies of these programs have been sparse. This study aims to add to the existing literature by examining one such program.

This thesis examines the implementation of a local initiative based on the One Health Model, called the Humane Health Coalition (HHC). Specifically, this study explores the services it offers and if it reaches the intended population. The research draws upon multiple sources of data collected at a sample of HHC clinics: observations, interviews, and quantitative analysis synthesized from the administrative data. The study findings can help inform future HHC clinics, such as changes to clinic locations, intake paperwork, or services offered. This project reflects public sociology in its active engagement with local organizations and potential to build relationships with community members.

LITERATURE REVIEW

Housing Insecurity and Healthcare

Research has found that people experiencing poverty, housing insecurity, and homelessness are mainly focused on their basic needs and may treat their physical health as secondary to their short-term survival (Reid, et al. 2008; Nickasch and Marnocha 2009). When they do attempt to access healthcare, they face several barriers such as a lack of health insurance and transportation (Reid, et al. 2008; Nickasch and Marnocha 2009). Due to these factors, among others, one study found that "worsening housing instability and economic standing was associated with poorer access" to healthcare, and patients would postpone the care or medication that they needed, leading to the development of more acute medical needs in the future (Reid, et al. 2008:1212).

Another barrier for people in this population is the negative experiences they may have with the healthcare system, as they often feel that healthcare providers are discriminatory and unfeeling toward them (Nickasch and Marnocha 2009; Call, et al. 2023). This stigma can manifest in a variety of ways, from medical staff making comments about their appearance or hygiene to more systemic patterns of discrimination. Call and colleagues (2023) measured the rates of insurance-based discrimination and found that they remained stable over the eight-year study period and were directly impacted by the type of insurance a patient had, if any. Furthermore, the researchers found that 21% of adults with public insurance and 27% of adults without insurance reported insurance-based discrimination, while only 4% of adults with private insurance reported the same. This insurance-based discrimination "persistently interfered with confidence in getting needed care and reports of forgoing care" (Call, et al. 2023:218).

There is evidence that the medical field is taking steps to address this population's loss of faith in the healthcare system. One way that they are working to heal these relationships is through Medical Respite programs. Medical Respite can be described as

> …an intervention that provides postacute medical care for persons who are experiencing homelessness who are not ill enough to justify staying in a hospital bed, but are too sick or frail to recover from a physical illness or injury on the streets or in a traditional shelter (Canham et al. 2020:720).

Many medical professionals also practice street medicine as another way to reach those in need, knowing that going to where people are can remove many of the barriers preventing them from accessing care (Geller 2022). In addition to providing medical care, street medicine teams have helped connect patients with resources such as housing programs, health insurance, and substance use treatment (Lynch, et al. 2022). By providing services like medical respite and street medicine, healthcare professionals are acknowledging that a gap in care exists and working to fill it by meeting people in their circumstances with better solutions and care. Some studies have shown that these approaches are successfully helping to reestablish this population's trust in the healthcare system (Gazey et al. 2019; Geller 2022; Lynch, et al. 2022). While these services are promising, they do not account for the relationship this population may have with animal companions and how that might influence their decisions, including in healthcare. This gap is addressed by the One Health Model, discussed later in this thesis.

Housing Insecurity and Pet Ownership

Approximately 1 in 10 people experiencing homelessness in the U.S. have pets, and there are findings that only "6% of homeless shelters in larger U.S. cities are pet-friendly" (Geller

2022:181-182). Exceptions may be made in some shelters for service animals, but such a small number of options for pet owners to obtain even temporary lodging presents significant barriers, especially in combination with other requirements, such as IDs and substance use abstinence. As pet owners in these circumstances struggle to obtain shelter and other basic needs, they often prioritize their companion animals (Kidd & Kidd 1994; Geller 2022).

Pet ownership can be expensive, with veterinarian services among the top costs of care (Kidd & Kidd 1994; Kerman, et al. 2020). Prohibitive costs can lead to pet owners surrendering their animals to shelters, or even "economic euthanasia," in which pets with treatable conditions are euthanized due to the cost of care. Both outcomes negatively impact pet owners and veterinarians, in addition to the animals (Kipperman, et al. 2017:785; Graham, et al. 2018). "In a study of rehomed companion animals, 40% of the participants identified that free or low-cost veterinary care could have prevented relinquishment" (Park, et al. 2021, as cited in McDowall, et al. 2023:9). For pet owners experiencing housing insecurity, it can be difficult to find affordable housing that allows companion animals. Instead, they may settle for or remain in housing that they wouldn't otherwise, or even experience homelessness rather than lose their pet (Kidd & Kidd 1994; Slatter, et al. 2012; Graham, et al. 2018). Once homeless, this predicament does not diminish and they "commonly face the dilemma of whether to choose accommodation over homelessness to keep their pets" (Slatter, et al. 2012:381).

The difficulties that this population faces in pet ownership are important to recognize and address because people can receive significant benefits from having pets. In fact, "there is a growing understanding that pets may provide homeless individuals with a primary purpose for living" (Geller 2022:181). Other benefits include companionship, a sense of responsibility, and

improved mental and physical health (Kidd & Kidd 1994; Slatter, et al. 2012; Geller 2022). Long-term and multidisciplinary efforts to help people retain their pets suggest promising outcomes for both animal and human health (Baker, et al. 2021; McDowall, et al. 2023). Such valuable impacts and their broader implications for the well-being of both humans and animals are further explored using the One Health Model.

The One Health Model

People living below the poverty line and experiencing housing insecurity and homelessness may go to great lengths to retain their animal companions, who can in turn provide comfort and improved health. These strong bonds and the circumstances that influence the well-being of both pets and pet owners illustrate the One Health model, which "recognizes that the health of humans, animals, and environments are inextricably connected" (Kerman, et al. 2020:3). Several programs have centered their work on this model, recognizing that supporting the pet owner helps the pet, and vice versa.

Initiatives based on the One Health Model are effectively an extension of street medicine, recognizing that trust can be built "whereby pet owners become more willing to accept medical or other health care for themselves" (Geller 2022:184). One example of a program based on the One Health Model is the Street Dog Coalition (SDC), which specifically serves pets and pet owners who are experiencing housing insecurity and homelessness. In an article providing an overview of SDC clinics, Geller discusses the effectiveness of providing medical care for humans, explaining that the services may be "limited to history collection and physical examination, but such care opens the door for more extended care and potential referral, which are ongoing challenges on the streets" (2022:184). Due to the barriers experienced by this

population, even small steps may help rebuild trust in the healthcare system and impact the long-term health of individuals.

The One Health Clinic (OHC) in Seattle, WA, has been in operation since 2018 and provides four-hour clinics twice a month. Pet owners come with the understanding that they will speak with both a medical and veterinary team, and they leave with a care plan for both themselves and their animals (Tin, et al. 2022). Jordan and Lem describe a program in Ontario, Canada, that holds clinics "every few months in accessible social service locations" (2014:1203). The researchers also discuss how veterinarian students' perceptions of the population they were serving changed while participating in the clinics, illustrating the invaluable education opportunities these programs can provide.

One Health Model programs also provide educational opportunities for pet owners, as demonstrated in Milberger and colleagues' (2009) findings that people can be motivated to quit smoking when they learn about how second-hand smoke harms their pets. This is particularly relevant for people experiencing homelessness, of which approximately three-fourths use tobacco products (Jordan & Lem 2014). Such a compelling finding is corroborated by other research showing that animal companions can provide people with "a sense of responsibility and prevent them from pursuing destructive habits such as drinking and drugs" (Yang, et al. 2021:358).

Another study examining a One Health pilot program in Phoenix, AZ had a particular focus on the human-animal bond (HAB) using the Lexington Attachment to Pets Scale (LAPS). The researchers found that study participants identified most readily with the statements, "I consider my pet to be a great companion" and "I would do almost anything to take care of my

pet" (Yang, et al. 2021:364). Such strong sentiments are evident in the sacrifices pet owners often make for the sake of their pets, as discussed in the previous section. Programs based on the One Health Model provide a unique context that enables these important findings. Typical medical and veterinary settings miss the chance to gain a more complete understanding of a patient, their circumstances, and the reasoning behind their decisions.

Current Study

The current study evaluates a newly launched program that follows the One Health Model, called the Humane Health Coalition (HHC). The initiative serves residents of Allegheny County (including the city of Pittsburgh) in Pennsylvania who are living below the poverty line, experiencing housing insecurity and homelessness, or receiving government assistance. This population faces the many barriers to health care and veterinarian services outlined in the previous sections. In its business plan, the HHC directly references programs such as the OHC in Seattle as a model for its operations (Fourth Economy 2023; Tin, et al. 2022). At present, the HHC operates very similarly to the OHC with semimonthly clinics that run for about four hours. A chapter of the SDC has been operating in Pittsburgh for almost five years and will continue to operate under the umbrella of the HHC (Geller 2022). The SDC focuses on serving people and pets experiencing housing insecurity and homelessness, while the HHC expands that population to include people living below the poverty line or receiving government assistance. The first clinic of the month is technically an SDC clinic and the second an HHC clinic, but both are run identically and largely with the same staff. Most importantly, people within the broader HHC target population can make an appointment for either clinic; the distinction is mainly in funding. For simplicity, this thesis refers to the program as the HHC.

In addition to contributing to the HHC's future work, this study adds to the previous literature by examining how the HHC operates. The current study identifies the types of human and animal services available at HHC clinics. It also assesses whether the HHC is reaching the population that it hopes to serve. Pittsburgh is not immune to the nation's housing and homelessness crises, and as outlined above, the target population includes people who are experiencing poverty, housing insecurity, and homelessness. The goal of the program is to address the barriers to care that this population faces, and the goal of this thesis is to examine how those barriers are being addressed.

As an implementation study, the main research question was: How are the program and its services being implemented? As a subset of this question, the study also sought to determine the following: 1) Is the program reaching its target population? 2) Are clients aware of the services available to them? 3) Are pet owners participating in the program more likely to accept health services for themselves when they receive care for their companion animal? 4) What improvements can be made to the program?

Applied and Public Sociology.

This thesis reflects applied and public sociology as it applies sociological methods and takes place outside of academia in a collaborative setting with the broader community (Burawoy 2005). The outcomes of this study may have implications beyond the field of sociology as the public implements changes informed by the results and potentially gains future funding through its support. The direct public in this case are staff members from HARP and AHN who work for the HHC initiative. They have influenced some of the study's direction, including a couple of interview questions for pet owners, such as their employment status and interest in spaying and

neutering services for their pets. The public who can benefit from this research may also include those who conduct One Health Model programs in other locations.

This thesis fulfills the academic requirements for a master's program and is a less accessible report to provide to the broader public. Instead, I will create a final report for the organization, with deliverables including the results discussed in this academic thesis, a few case examples, and suggested areas for further examination or research. This final report is explained in further detail in the Discussion section.

METHODS

The Humane Health Coalition

The Humane Health Coalition (HHC) is a collaborative initiative between Humane Animal Rescue of Pittsburgh (HARP) and Allegheny Health Network (AHN). The Coalition launched in September 2023 and provides clinics where individuals can receive veterinary care for their pets, and medical and social services for themselves. The clinics last four hours and occur twice each month in different locations around Pittsburgh.

As a member of HARP's Junior Advisory Council (JAC), I volunteer my time to meet bimonthly with other young professionals and organize fundraising events or assist established HARP programs in helping the organization increase donations, volunteers, and domestic animal adoptions. I heard about the development of the HHC early in 2023 and was very interested in its fascinating partnership between an animal welfare organization and a hospital network. Through my involvement in the JAC, I had a connection with the staff implementing the HHC, and they agreed to let me research the program for my thesis. My study draws upon multiple sources of data collected at each HHC clinic utilizing the following sociological methods: observations,

interviews, and quantitative analysis synthesized from administrative data. Most of the data collection was completed by December 2023. All data collection and analysis described below received prior approval from Duquesne University's Institutional Review Board (IRB) at the exempt level of review. The exemption notification is attached as Appendix A.

Observations

Observational data came from every HHC clinic held between September and December 2023. I attended eight clinics, which took place on the following dates: September 7th and 14th, October 5th and 26th, November 2nd and 16th, December 7th, and December 21st. All clinics ran for four hours from 10 am to 2 pm; occasionally going overtime. I completed about 28 hours of observation in total over these clinics. My observational notes contain descriptions of the clinic locations, services offered, staff present, and the number of appointments initially made. I also noted the amount of time I spent at the clinics, interactions I observed or participated in, and questions that arose regarding changes that may be made for future HHC events. After the clinics, I typed my handwritten notes, adding relevant information as needed.

Interviews

During six of the eight clinics I attended, I conducted semi-structured interviews with 27 people utilizing HHC services. Since many people attend each clinic and their attention is often on their pet receiving care, I was not able to interview everyone but tried to speak with as many people who were willing to answer my questions. My interview guide included questions about how clients heard about the initiative, how they felt about their experiences, and if they had recommendations for future clinics. I also added a few questions that program administrators were interested in collecting, such as participants' employment status and interest in services to

have their pets spayed or neutered. Some interview questions were adjusted, removed, or added to the interview guide during the research period. For example, I learned that the intake paperwork already asked clients if they receive government assistance and removed that question from my interview guide. Likewise, I initially asked if clients were satisfied with their experience at the clinic but revised the question to "How have you felt about your experience today?" to allow for open-ended responses.

Copies of the interview guides are in the appendix, with the three iterations as Appendices B through D. I printed copies of the questions beforehand to use as a guide and wrote down client responses as I spoke with them. This meant that I generally was not able to record direct quotes from clients. I did not ask for personally identifiable information aside from first names but tried to acquire the pets' names as well so that the two paired together would enable matching their interview responses with the administrative data later. The interviews were semi-structured, so I made additional notes when the conversation deviated from the outline and was relevant to the topic. As with the observations, I typed up my handwritten notes from the interviews after the clinics.

I also conducted semi-structured interviews with 13 HHC staff members. Due to the demands of their roles and the limited timeframe of HHC clinics, most staff interviews took place outside of the HHC clinics. These were conducted at the convenience and preference of the staff member, whether that was in-person, remote, or through email. For most of the in-person and remote interviews with staff, I had my computer and was able to type their responses as we spoke, rather than taking notes by hand. This enabled me to capture several direct quotes from staff members since I type faster than I write. Otherwise, I typed my notes after completing the

interview. Four staff members elected to email me their responses, and if follow-up questions were needed from any participating staff member, they were also generally requested through email. Questions included their role within the initiative, how they define what makes the program successful, and how they feel the program could be expanded in the future, in whatever way they wanted to interpret "expansion." The two iterations of the staff interview guide can be found in Appendices E and F. Participating staff included an AHN nurse, HARP's marketing director, HARP's Director of Community Programs, a veterinary technician, the HHC Coordinator, and a staff member of Animal Friends–the organization that distributes pet food and supplies at SDC clinics. I also interviewed the program manager of Pittsburgh's Reaching Out on Our Streets (ROOTS), the HHC's program manager, and HARP's director. These three individuals have been particularly instrumental in the HHC's development and implementation. Interviewing HHC clients and staff provided a deeper understanding of the HHC's services and implementation, as well as insight into potential program improvements.

Administrative Data

In addition to observations and interviews of the clinics, this study included an analysis of data collected by the program. The program seeks to serve those who are experiencing poverty, housing insecurity, and homelessness, so this analysis investigated how well the HHC is meeting its goal of connecting this population with healthcare services. To determine this, I examined clients' ZIP codes, housing status, and whether they receive government assistance, lack access to a vehicle, or were interested in human services at the clinics. This data was gathered from the intake paperwork that clients completed, and veterinary staff added to, with notes regarding the health of the clients' pets and the veterinary care they received. A blank copy

of this intake paperwork is in Appendix G. At the time of my study, the HHC was just beginning to digitize this data, so I obtained copies of the physical paperwork and transcribed the responses into an Excel spreadsheet before analyzing. The paperwork is separated by the date of the HHC clinic and includes the names of both pet owners and pets. 115 animals and 92 humans received HHC services during the research period. 14 people attended multiple clinics, sometimes bringing different pets; the dataset's sample size without repetition is 78 human clients.

My main research question regarding the program's implementation, in addition to its sub-question of what improvements can be made, was answered through the integration of my data collection methods. As I attended the clinics, made observations, conducted interviews, and examined the administrative data, the HHC's structure and services became apparent. Likewise, as I employed these research methods, suggestions for improvement were offered by staff and clients. I also developed other ideas through my observations or while examining the administrative data and determining that some questions in the intake paperwork could be adjusted. Results for the other research questions were also found through this integration of quantitative and qualitative data, but often one or the other methods was explicitly relevant, as explained in the following paragraphs.

Methods of Analysis

Analysis of the administrative data. To determine if the program is reaching its target population, I began by marking the clinic locations on an existing map from The Pittsburgh Neighborhood Project (2022) that depicts the socioeconomic class levels in Pittsburgh. The result (Figure 1) illustrates where HHC clinics are in proximity to areas of low socioeconomic class, which is relevant to the HHC's goals in serving those who struggle financially to provide

for their pets. Additional context for the map is provided in the Results section. I then transcribed the HHC's intake paperwork into a spreadsheet. I calculated client percentages for parameters related to the target population, such as clients' ZIP codes, housing statuses, and whether they received government assistance. I calculated these percentages for each clinic individually, as well as across all clinics. These descriptive statistics are presented in Table 1, which can be found in the Results section. These statistics provide an overview of HHC clients' circumstances and how well they reflect the program's intended population.

Analysis of the observations and interviews. My analysis of the qualitative data was an iterative process that I engaged in from the beginning of the study, adjusting interview questions as new ideas or redundancies became apparent. After transcribing the interview and observation data from my handwritten notes, I used a thematic method of analysis with open codes. This meant that my codes were developed as I read through all the interviews and observations, looking for themes and patterns across the qualitative data (Gordon, 2020). The themes and patterns that emerged with the greatest frequency related to the program's target population and HHC staff and client awareness of available services.

Regarding the first theme, one of the staff interview questions explicitly asked, "Do you feel that the HHC is currently reaching the targeted population?" The direct answers to this inquiry as well as the ways this topic was referenced indirectly throughout the interviews–such as when asked how they defined a successful event–appeared thematically significant. Staff perspectives differed on the program's success in reaching the intended population, and their quotations provided valuable insight for my research question. From my observations, some

clinics appeared to reach the target population more successfully than others, largely due to location, and the other data methods corroborated this.

A second theme emerged through my interviews and observations as I noted clients' hesitancy toward and unawareness of human services. This theme was reflected in staff interviews as a disconnect between the two types of services became apparent. Some veterinary staff members acknowledged their unawareness of human services, potentially contributing to human service under-utilization by clients. Although these interviews provided valuable insight, my research question of whether people are more likely to accept health services for themselves when receiving care for their companion animal could not be answered directly. This was due to a lack of administrative data from the HHC's human services side, which will be explained in further detail in the Discussion section.

RESULTS

Program Implementation and Target Population

Shortly before the start of 2023, the HARP solicited a consulting firm, Fourth Economy, to create its business plan. This plan was completed in March 2023, six months before the HHC's launch. It describes the HHC's basis on the One Health model and defines the current conditions that signify its need, such as the economic hardship many people face in caring for themselves and their animal companions. As part of its description of the target population, the plan also identifies five target ZIP codes for the initiative. These ZIP codes were selected due to their residents' elevated utilization of HARP's services, based on HARP's internal data. Specifically, these areas show high rates of residents either surrendering their animals or becoming patrons of HARP's pet pantry which provides food and other pet supplies monthly for

people who otherwise could not afford to retain their pets. There are also high rates of stray animals coming to the shelter from these specified ZIP codes as well, and many are also areas with lower household income levels (Fourth Economy, 2023).

The HHC conducted eight clinics during my study, in various locations. Figure 1 is a modified map sourced from The Pittsburgh Neighborhood Project (2022) that depicts where the clinics were held. I placed seven markers on the map since two of the eight clinics were conducted at the same location, in Allegheny Center. As noted in the legend, the shading correlates with the socioeconomic class determined by the specified median household income range, with darker areas indicating upper socioeconomic class and lighter shading indicating lower socioeconomic class. This map provides a glimpse of how well the HHC is reaching its target population and may capture areas of need better than the five target ZIP codes specified in the HHC's business plan (Fourth Economy 2023). Although ZIP codes are useful for the U.S. Postal Service, research has shown that they "often contain widely disparate demographic and socioeconomic characteristics" and are "rarely appropriate for rigorous social science research" (Sperling, 2012:221-222).

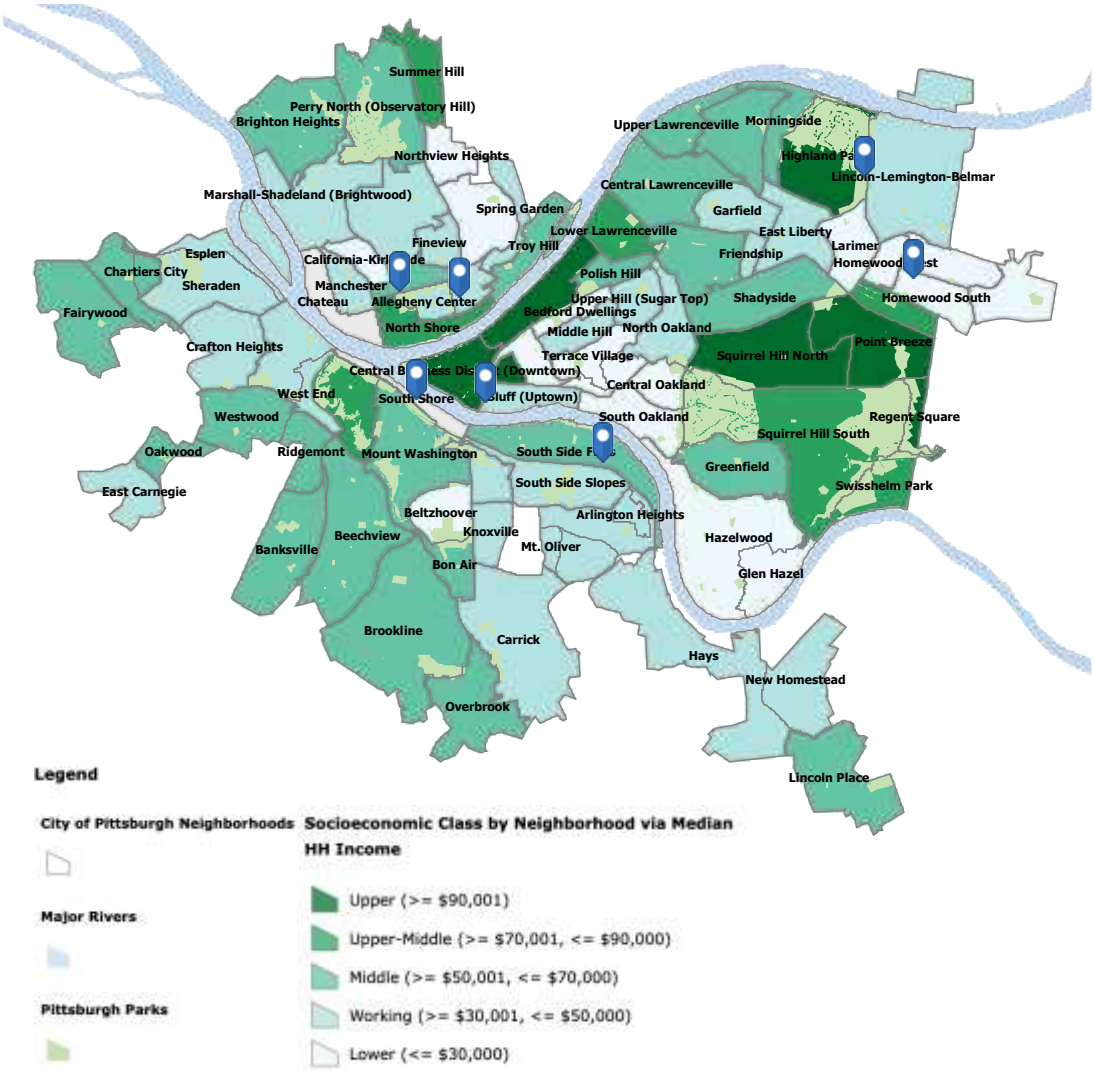

Figure 1. Pittsburgh Neighborhood Project's Pittsburgh Neighborhood Need Map with Seven Markers Indicating the Eight HHC Clinic Locations During the Study

During HHC clinics, HARP operates its veterinary services from a mobile unit equipped for animal examinations, vaccinations, and even minor surgeries. Free pet food and other supplies are available for pet owners to take. On the human services side, tents or other temporary accommodations are set up for medical staff and social workers. These personnel are ready to assist those interested in health screenings, connections to primary care, and resources for accessing employment, housing, or other social services. All services at HHC clinics are

currently provided for free and appointments are made ahead of time, though walk-ins are accepted for the last hour of each event.

Reaching the Target Population

Due to the context of the HHC's business plan (Fourth Economy 2023) and overall mission, I asked staff members if they felt that the intended population was being reached by the program. Some staff responses reflected their roles in the HHC. For example, one staff member responded "100%" and noted that their human health services were utilized at almost every clinic. Another stated, "Based on the statistics I collect after each event, I believe the events are reaching the intended population very well." Overall, staff expressed mixed views on the topic, with many mentioning the impact of clinic location on the program's ability to reach the intended population. One person expressed that AHN's Center for Inclusion Health (CIH) spaces, frequently used for the SDC clinics, enable the program to "form relationships and be a consistent presence in the community allowing them to reach the intended population." Several other individuals talked about the success of past clinics held at or near outreach centers and other community areas people in the target population frequent. For instance, a staff member pointed to the clinics held at the Homewood YMCA and 2nd Ave Commons shelter as being "right in the thick of it."

Most responses alluded to the initiative's current limitations as a new program. A few referenced groups of people the program will not reach unless it goes directly to where they are, such as people living in encampments, or nursing homes. Many used phrases such as "beginning stages," "just tapping into," "starting to reach the intended population," and "for the most part."

These expressions capture the prevailing feeling that it may take time to establish relationships with the intended population and "develop a presence" in their communities.

Based on my observations of the clinics, the HHC's presence appeared to be more visible at some locations than others. Clinics held on the Northside were all SDC clinics, now operating under the HHC's umbrella but with some distinctions such as separate funding, and the animal welfare organization called Animal Friends providing pet food and supplies, rather than HARP. These three clinics took place at AHN's outreach center and Trinity Church, with people in the vicinity who were not there with animals but to access other services provided simultaneously at the site. With so many people moving in and out, it was difficult to distinguish how many received HHC services. On the other hand, some clinics felt very sparse due to location, such as those held at Highland Park or Highmark Stadium. The event at Highland Park was the HHC's official launch and, in terms of HARP's administrative data, it had a surprisingly high turnout of 17 pet owners. Meanwhile, the event at Highmark Stadium received almost half the number of participants, and the fact that neither area is easily accessible to pedestrians made them interesting location choices. For the Highmark Stadium clinic, some clarity is provided in understanding that the Riverhounds soccer team is a HARP supporter and had offered the use of their location to the HHC. It is also interesting to note that AHN offers transportation to clients for the clinics if needed, via rideshare apps such as Uber and Lyft. This assistance may increase access to HHC services and make it less vital to locate clinics in areas of greatest need.

Table 1 outlines descriptive statistics demonstrating how effectively the HHC is reaching people within relevant variables as well as the target population parameters discussed in its business plan (Fourth Economy 2023). All data is separated by the clinic, so the sample size, *N*,

varies, as indicated by the Total Served column. The table's rows distinguish each clinic while columns categorize the target population variables. The number of clients present at the clinic who met that variable is indicated first, followed by the percentage of the total clients served. Since fourteen clients came to more than one clinic, there is repeat data across the eight clinic rows. Some clients brought multiple pets to one clinic, but the relevant target population variables for those individuals were only counted once per clinic.

The percentage of the population who live in the HHC's target ZIP codes varied across clinics, ranging from 0% to 69%. The clinics with the most clients present from the target ZIP codes were November 16th (69%) and December 7th (45%). However, some clients who did not record a ZIP code in the intake paperwork indicated that they were unhoused, also qualifying them as part of the Coalition's target population. The total number of individuals who selected Unhoused, Transitional, or Homeless as their current housing situation ranged from 6% to 60%. Individuals who receive government assistance ranged from 45% to 100% across the eight clinics. Clients' primary means of transportation were of interest, due to the mobile nature of the clinics. The percentage of clients who did not report having access to a vehicle varied, ranging from a low of 11% to a high of 76%. Lastly, clients who attended the October 26th clinic held at Highmark Stadium expressed the most interest (56%) in human services compared to other clinics, which ranged from 20% to 55%. The Total row provides an overview of all eight clinics combined, with 78 total clients served during the study period. Almost 40% live in one of the HHC's five target ZIP codes, and just over 30% are in transitional housing or homeless. Almost 70% of the clients were receiving government assistance, 41% lacked access to a vehicle, and less than half indicated that they were interested in the clinic's human services.

Table 1. Descriptive Statistics of Target Population by Clinic

Clinic Location	Clinic Date	Total Served (by pet owner)	Lives in Target ZIP Code	Unhoused/ Transitional/ Homeless	Receives Government Assistance	Lacks access to a vehicle	Interested in Human Services
Southside	9/7/23	5	0 (0%)	3 (60%)	5 (100%)	3 (60%)	1 (20%)
Highland Park	9/14/23	17	6 (35%)	6 (35%)	11 (65%)	4 (24%)	8 (47%)
E. Ohio St	10/5/23	7	2 (29%)	2 (29%)	6 (86%)	3 (43%)	2 (29%)
Highmark Stadium	10/26/23	9	3 (33%)	4 (44%)	5 (56%)	1 (11%)	5 (56%)
E. Ohio St	11/2/23	10	4 (40%)	4 (40%)	7 (70%)	3 (30%)	3 (30%)
Homewood YMCA	11/16/23	16	11 (69%)	1 (6%)	10 (63%)	7 (44%)	5 (31%)
Trinity Church	12/7/23	11	5 (45%)	2 (18%)	5 (45%)	4 (36%)	6 (55%)
2nd Ave Commons	12/21/23	17	6 (35%)	5 (29%)	15 (88%)	13 (76%)	3 (18%)
Total:	(All clinics)	78	30 (38%)	24 (31%)	52 (67%)	32 (41%)	31 (40%)

Note: N = varies per clinic, as indicated by Total Served column. Some clients repeat across clinics but never within a singular clinic.

Improvement Needed in Awareness and Acceptance of Services

Clinics based on the One Health Model are, by nature, made up of many moving parts. Clients are completing paperwork, speaking with the veterinary team, and approaching or being approached by social or medical workers. Meanwhile, dogs are tugging on their leashes, being fitted for new harnesses, and sniffing at terrified feline patients in their crates. The atmosphere can be that of barely contained chaos, so it is pivotal for pet owners and staff members to be communicative and well-informed. This is especially relevant for the utilization of human services, as it may not always be clear to clients, or all staff, what services are available at the clinics.

Out of 27 interviews conducted with clients, seven (26%) indicated that they were unaware of available services. More than half of the clients interviewed (55%) were either not asked about their utilization of human services, or it wasn't clear if they were aware that those services were available. As mentioned in the Methods section, the interview questions evolved over the research period, and not every question was asked every time. There were, however, times during an interview in which it became evident that the person either was not aware of available services or perhaps did not think that what they needed could be obtained at the clinic. For example, a person would mention that they needed help accessing food stamps, or social security payments, or had just obtained housing and needed to find furniture. In each of these cases, I was able to connect them with a human services staff member who could respond to their need. One person was not initially interested in human health services until I mentioned that eye exams were available, and they obtained an exam later that day. Another individual had not made an appointment but was able to have their pet seen as a walk-in. They had not known that

human health services were available but expressed interest upon learning of them and even called their spouse, who was waiting in the car, to encourage them to utilize the services.

On the other hand, I interviewed five (18%) others who indicated that they had either already spoken with someone about their health at the clinic or planned to. One person had their blood pressure checked before speaking with me, another told me that they were planning to get their blood pressure checked, and I walked with a third person to the human services area and held their dog's leash as they spoke with medical staff. I did not observe the interactions that the other two clients said they had with the medical staff.

Through my observations, there appeared to be a disconnect between the two types of services offered at HHC clinics, which is understandable for any collaborative operation. It is important to recall as well that staff have other full-time responsibilities, only coming together to hold a clinic twice each month and in locations that may not always be conducive for smooth operations. The disconnects were acknowledged by most of the 13 HHC staff members I interviewed, with some admitting, "I don't typically know how the human services side runs or how many people are utilizing those services," and others expressing that they had only a general idea of what was offered for human services. One person simply said they had seen "a lot of [pet] owners go to the healthcare services to get info or looked at." A couple of people mentioned their hope that those offering human services would either start or continue to be proactive in engaging with clients.

Challenges regarding location and the physical proximity of human and veterinary services also came up multiple times in staff interviews. One staff member felt that most people utilizing their human health services were at the location for reasons other than the clinic, such as

the one held on the Northside at Trinity Church that overlapped with free hot meals being served. Another mentioned that things seem to work out better when AHN is set up closer to where people are at clinics, which was not the case most notably with the clinics at Homewood's YMCA and 2nd Ave Commons. In Homewood, the human services side was located across the parking lot from the veterinary team's mobile van, a setup one person described as "problematic" since that distance may have deterred clients from engaging with staff about their health or other needs. Despite the lack of awareness among some staff about available human services, I did notice a few instances at the Homewood clinic where staff made an explicit effort to ask clients if they were interested in services such as the eye exams that were offered that day and pointed out where AHN was set up. This reflected my observations of staff investment in helping clients and adapting to less-than-ideal locations.

Another situational issue that came up involved clients' proximity to their pets. One person mentioned that they had not anticipated people sticking closely to their pets the whole time. Another added to this idea, explaining that [it is] "difficult is when someone is there with a dog and it's just them." Staff members may try to help hold their dog so they can go get an eye exam, but the timing does not always work out. This was a challenge I noted in my observations and while interviewing as well. It was difficult to speak with someone without interrupting their interactions with veterinary staff or getting in the middle of an altercation between two or more dogs. Not all animals are seen inside HARP's mobile van, due to size constraints, animal behavior issues, and multiple animals being cared for at a given time. This means that pet owners are not often without their pets and that can place an added barrier to their interest in or ability to utilize available human services.

Ultimately, some staff members concluded that clients' awareness of available services is not enough to guarantee that they will use them. One staff member said that usage numbers indicate that people really do prioritize their pets, with another echoing, "I don't see as many people utilizing the AHN side, but that seems to be common with some of the folks who come– they're more worried about their pet than themselves." Another stated that more than any other factor, negative past experiences with medical professionals lead many people in the target population to feel hesitant or distrustful toward health services at HHC clinics. Someone else said, "I think that a lot of people don't want to admit that they need care. I think that once that barrier is broken…we will see a lot more people getting care for themselves." A final staff member expressed their feeling that even if people do not initially accept all the services provided, having exposure to, and understanding of what is offered can still build trust.

DISCUSSION

Implications of Results

The results of this study reflect the barriers faced by this population and the strong bonds they share with their pets, as described in the literature. As an implementation study, my research adds to the previous literature in its examination of the services the HHC provides and how well it is reaching the population it intends to serve. These findings provide insight that can inform both future research as well as HHC clinics. The study also gives insight and comparison for other One Health model-based programs to view and learn from. One of my research questions was whether pet owners participating in the program were more likely to accept health services for themselves when they were receiving care for their companion animal. This is a major goal of the HHC, as it acknowledges the barriers this population faces and seeks to increase access

and rebuild trust. While my study was not able to directly answer this question, I was able to examine whether the target population was being reached and the experiences of clients in accessing services. My results suggest that the HHC is reaching a large portion of its target population, and helping to dismantle some barriers that those clients face in accessing care, at least for their animals. The HHC addresses these barriers by conducting clinics in various locations, providing free care and transportation–when needed–and allowing walk-ins during a portion of clinic hours. Improvements are needed to better connect the two types of services and increase human service utilization.

Reporting back to the Program

Due to this study's basis in applied and public sociology, its outcomes reach beyond this thesis and impact the program. For example, I have reported back to the HHC periodically and attended their weekly HHC planning meetings as often as possible. In addition to creating a spreadsheet for the HHC's Project Manager to track human services utilization, I have disseminated some of my results along the way. These include a spreadsheet I created of target population data that can be added to for future data collection and tracking, as well as suggestions for improving the intake paperwork. The latter was adopted immediately, as I met with the HHC Coordinator and suggested changes to certain questions that seemed to provoke confusion for clients. I am currently compiling a final report to provide to the organization. This report will include the results discussed in this thesis, suggested areas for further examination or research–such as communicating an expectation that clients visit with human services–as well as a few case examples. These case examples will be produced by merging my client interview data with the administrative data to provide greater context to the clients I interviewed. I will write a

brief synopsis of deidentified information about the clients, the services they received, how they felt about their experience with the HHC, and their suggestions for improvements. The HHC could utilize these narratives in grant proposals or descriptions of the program to personalize its impact. I have also been invited to present my findings to HARP's Junior Advisory Council and Board of Directors.

Limitations and Ideas for Future Research

This study has several limitations, including its small timeframe, sample size, and specificity to the HHC. As mentioned in the previous paragraph, AHN was not consistently collecting data for clients using human services. This was largely due to the delay in hiring a Program Manager, who began work in November and has taken measures to gather this clinic information moving forward. Due to these factors, I was not able to analyze human service utilization, which is a limitation of my study. The indications that human services are underutilized came from the observational and interview data, so those impressions could be verified or refuted by a future study of the newly collected data. Ideally, that data would gauge who is using the human services and whether the program is effectively building trust with the target population's needs.

It would also be informative for the human services side of the program to track follow-up appointments that they schedule for clients with other providers. AHN staff has access to that information if the patients have a follow-up appointment within the AHN network. As referred to in the Results section, AHN's provision of transportation for clients to clinics would also be interesting to track and analyze. This data could show how much funding is utilized for that

purpose and whether the clients could be served more efficiently by conducting clinics in areas that may not have been considered.

Future research could examine demographic data such as race and gender to assess if these have an impact on clinic utilization. Another suggestion is that the HHC adjusts its data collection by reimplementing some intake paperwork questions that were part of the SDC's paperwork but removed from the HHC's paperwork. The discontinuation of these questions was another limitation of the study since they were only asked at one clinic during my study period and thus would not have produced a meaningful analysis. These questions include the age of the client, which is important to assess the initiative's inclusion of the elderly in its target population, and how the client heard about the HHC clinics. I added the latter question to the interviews I conducted with clients, and sixty percent reported hearing about the clinics from other people, such as family members, friends, or social workers. Future research could benefit from reinstating this question to examine the role of social networks in connecting people with services. It might also be interesting for the program to reimplement the questions of how many pets the client has in total, and the length of time a client has been unhoused, if applicable.

Broader Implications of the Program

The apparent disconnect between services and lack of awareness for both clients and staff regarding what services are available indicate that improved communication is needed, especially among staff. My findings suggest that the primary motivation for clients to attend clinics is receiving veterinary services for their pets, so additional effort can be made by veterinary staff to hand off clients to human services. Clients may be more receptive to human services if HHC staff members on the animal side are knowledgeable about what services are

being offered and relate that information to the pet owners in an encouraging manner. During my brief time interacting with clients, I was often surprised at how openly they would speak with me. Additional HHC staff who could simply lend a listening ear and direct people toward resources could make a difference in human service utilization. Additionally, one staff member suggested that all HHC staff be trained in animal handling, which would improve the safety of all in attendance and help overcome the barrier some clients may face in keeping their pets close throughout the clinic and bypassing services for themselves.

Overall, there is room for improvement within the initiative for staff to better understand each other's work and how they overlap. More training is needed for all staff to fully appreciate the ways that animal and human health are intertwined. That is the broader implication for this program and others based on the One Health Model. Even at an imperfect level, there are already conversations that happen at HHC clinics that are unique from any occurrence at a medical or veterinary office. These institutions are traditionally treated as strictly separate from one another, even as research demonstrates health benefits associated with pet ownership, and that animal health can be indicative of human health (Kidd & Kidd 1994; Slatter, et al. 2012; Geller 2022; Arkow 2015). This program is an example of intersectional collaboration that can be amplified to meet the needs of the target population more fully.

CONCLUSION

Through my implementation study of the HHC, I was able to conduct observations, and interviews, and analyze administrative data to examine how the program provides services. The target population specified by the HHC needs access to healthcare for themselves and their pets. My findings suggest that even when access is provided, these individuals are often hesitant to

accept human services, but will readily accept care for their animal companions. These results will be shared with the Coalition and can inform how it may adapt to best address the needs of the community. These adaptations may include where future clinics are held, what questions are asked of clients in the intake paperwork, and training that can prepare staff to remove as many barriers to human service utilization as possible.

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Appendix A. IRB Exemption Notification

Attachments:
- Exemption Notification - IRB ID: 2023/10/2.pdf

Institutional Review Board
DUQUESNE UNIVERSITY

Duquesne University IRB *Protocol Exemption Notification*

To: Anita Zuberi
From: David Delmonico, IRB Chair
Subject: Protocol #2023/10/2
Date: 10/20/2023

The protocol **2023/10/2. Assessing how the Humane Health Coalition connects Veterinary Services with Healthcare** has been verified by the Institutional Review Board as **Exempt** according to 45CFR46.101(b)(2, 4): (2) Tests, Surveys, Interviews, (4) Secondary Research Uses of Data or Specimens on 10/20/2023.

If applicable, the consent form and/or recruitment flier have been stamped and are attached to this email or are accessible via Mentor. Please use these stamped versions to distribute or display.

Exempt status means there is no specific expiration date, and you are not required to file annual reviews or termination reports. However, any unanticipated problems, adverse effects on subjects, or protocol deviations must be immediately reported to the IRB Chair before proceeding with the study.

Further, any changes to your study requires the filing of an amendment and is subject to the approval of the IRB Chair. You must wait for approval before implementing any changes to the original protocol. Changes to your protocol may affect the exempt status of your research.

Please contact me if you have any questions regarding this study.

Best wishes in your research,

David Delmonico, Ph.D.
Institutional Review Board, Chair
irb@duq.edu

Appendix B. Semi-structured Interview Questions for Pet Owners (First Iteration, utilized for client interviews during October 5th clinic)

Name:

Pet's Name:

- How did you hear about this event? (HHC and or SDC)
- Have you been to one of these events before?
- You brought your pet to get veterinary care/food for them; have you talked to anyone today about your own health?
- Are you aware of all the services that the HHC/SDC offers?
- What other services would be helpful for you at these events? (such as food pantry items)
- How many pets do you own?
- Are any/all of them spayed or neutered?
- If not, are you interested in free S/N services? Why or why not?
- Are you currently employed?
- Are you receiving governmental assistance?
- Is there a certain time of day or location that would be more convenient for you if you were to attend one of these events again?
- Were you satisfied with the service you received today?

Appendix C. Semi-structured Interview Questions for Pet Owners (Second Iteration, utilized for client interviews during October 26th through November 16th clinics)

Name:

Pet's Name:

- How did you hear about this event? (HHC or SDC)
    - Have you been to one of these events before?
    - Did you make an appointment?
- How many pets do you own?
- Have you talked to anyone today about your own health?
- What other services would be helpful for you at these events? (such as food pantry items)
- Is there a certain time of day or location that would be more convenient for you if you were to attend one of these events again?
    - Do you know anyone else who might be interested in these events?
    - Are there other times or locations that would be better for them?

<u>Questions the program is interested in collecting information about:</u>

- Are any/all of your pets spayed or neutered?
    - If not, are you interested in free S/N services? Why or why not?
- Are you currently employed?
- Are you receiving government assistance?
- How have you felt about your experience today?

Appendix D. Semi-structured Interview Questions for Pet Owners (Third Iteration, utilized for client interviews during December clinics)

Name:

Pet's Name:

- Would you mind sharing a little about your pet? (age, behavior)
- How many pets do you have?
- How did you hear about this event?
- Have you been to one before?
- Did you make an appointment?
- What drew you to come today?
- What would have made this more convenient for you?
- Have you ever struggled to find housing because of restrictions around pet ownership?
- You obviously care a lot about your pet's health; is it challenging to care for your own health?
- Are there other services that would be helpful at these events? (such as food pantry items)

Questions the program is interested in collecting information about:

- Are any/all of your pets spayed or neutered?

  If not, are you interested in free S/N services? Why or why not?

- Are you currently employed?

- How have you felt about your experience today?

Appendix E. Semi-structured Interview Questions for Staff (First Iteration, utilized for staff interviews conducted in October)

Name:

Title:

- What is your role with the HHC?
- How do you feel that animals allow rapport/trust to be built?
- Do you feel that the HHC is currently reaching the targeted population?
- What would you like to see the program offer that is not being offered currently?
- How do you see the HHC expanding in the future?
- Do you feel that the program is running at full capacity?
- What does a successful HHC event look like to you?

Appendix F. Semi-structured Interview Questions for Staff (Second Iteration, utilized for staff interviews conducted November-January)

Name:

Title:

- What is your role with the SDC/HHC?
- How did you first hear about the SDC/HHC and what made you want to be involved?
- How is building trust important to your work?
- Do you feel that animals allow trust to be built? How so?
- What would you like to see the program offer that is not being offered currently?
- How do you see the SDC/HHC expanding in the future?
- Has anything about the SDC/HHC events surprised you?
- How do you feel the events have gone so far?
- What would it look like to you for the program to be running at full capacity?
- Do you feel that the SDC/HHC is currently reaching the intended population?
- How do you feel the reception is toward the human/healthcare services at the events?
- What do you think makes an SDC/HHC event successful?
- Is there anyone else involved in the SDC/HHC that you feel I should talk to?
- What do you wish people knew that you've learned from your work?

Appendix G. HHC Intake Paperwork

Date:_____ **Location:**_____ **Staff Initials:** _____

Owner's Name: _____ **Pet's Name:**_____

Secondary Owner: _____ **Secondary Pet Name:** _____

Veterinarian: _____ **Technician:** _____

OWNER INFORMATION:

What is your current housing situation? □ Unhoused (shelter, tent, etc.) □ Transitional □ Vehicle □ Veteran Housing

_____

Street/Apt No City State Zip

Telephone: (_____)_____ Email: _____

Can we photograph you for our records/website? □ Yes □ No □ Only my pet(s)

Signature:_____

What is your primary means of transportation? □ Car □ Bike □ Walk □ Public Transportation (bus/train/tram etc.)

Are you currently receiving any government assistance (disability, SNAP, etc.)? □ Yes □ No

Do you have health insurance or are you covered by Medicaid? □ Yes □ No

Are you a Veteran? □ Yes □ No

How do you identify your gender? □ Woman □ Man □ Transgender □ Non-Binary/Fluid □ Prefer not to share

How do you identify your race/ethnicity? □ American Indian or Alaskan Native □ Asian □ Black or African American □ Hispanic or Latino/a/x □ Native Hawaiian or Other Pacific Islander □ White □ Prefer not to say

Are you interested in any of our human health services? □ Yes □ No

PET INFO:

□ Dog □ Cat

□ Male □ Female

Spayed/Neutered? □ Yes □ No

Pet Name: _____ Age/DOB: _____

Breed: _____ Color/Markings: _____

Would you like a voucher for free S/N services □ Yes □ No (if no, why?) _____ □ Already altered

Date of last vaccinations? _____ □ Don't know □ Never vaccinated

Date of last heartworm test? _____ □ Don't know □ Never tested

Is your pet currently taking heartworm prevention? □ Yes □ No

Is your pet currently taking any flea/tick prevention? □ Yes □ No

Allergic to vaccinations? □ Yes □ No □ Don't know

Current diet and/or medications or supplements? _____

Any recent travel? Are you planning to travel? If so, where? _____

Pet Name: _____ Last Name: _____

Date: _____ Location: _____

Wt: _____ lbs Temp: _____ Pulse: _____ Resp: _____ MM: _____ CRT: _____

BCS: _____/9 Pain: _____/5

History/reason for visit:

_____

_____

_____

_____

	WNL	ABN	Describe
General Appearance:	☐	☐	_____
Gait:	☐	☐	_____
Circulatory:	☐	☐	_____
Respiratory:	☐	☐	_____
Eyes:	☐	☐	_____
Ears:	☐	☐	_____
Oral:	☐	☐	_____
Skin:	☐	☐	_____
L. Nodes/Thyroid:	☐	☐	_____
Musculoskeletal:	☐	☐	_____
Abdomen:	☐	☐	_____
Genitourinary:	☐	☐	_____
Neurological:	☐	☐	_____

Other: _____

Vaccines (place all stickers below):

Rabies: ☐ 1yr or ☐ 3yr Location administered _____ **Rabies tag no:** _____

DA2PPV: ☐ 3-4wk or ☐ 1yr or ☐ 3yr Location administered _____

FVRCP: ☐ 3-4wk or ☐ 1yr or ☐ 3yr Location administered _____

Lepto: ☐ 3-4wk or ☐ 1yr Location administered _____ (not a core vaccine)

Bordetella IN: ☐ yes ☐ no

Prevention:

Deworm: ☐ Pyrantel _____mls PO ☐ Praziquantel _____mls

HW test: ☐ Positive ☐ Negative

HW Prev: ☐ No ☐ Yes, product: _____

☐ Oral ☐ Topical ☐ Administered Number of doses _____

Microchip (if requested): ☐ No ☐ Yes (place sticker below) ☐ Already Chipped _____

Flea/Tick Prevention: ☐ No ☐ Yes, product: _____

☐ Oral ☐ Topical ☐ Administered Number of doses _____

S/N voucher: ☐ No, declined ☐ Yes ☐ N/A

Vaccine stickers/notes/other veterinary treatment/follow-up required:

_____

_____

_____

_____

Did the pet owner photograph the front/back of this form & any other documents? □ Yes □ No (no camera phone)

Did the pet owner leave with the following? □ S/N Voucher □ Rabies Tag/Certificate □ Pet Supplies/Food www.thestreetdogcoalition.org

_____

For Staff Use Only:

Initial Once Entered In Clinic Software: _____

Initial Once Stats Recorded: _____