
PAWtners: An Affordable Veterinary Care Partnership

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ABSTRACT

Affordable veterinary health care in the Laramie community is often not very accessible for low-income individuals, and this is cause for concern. The general well being of animals is compromised with the lack of accessible pet care. There is a public health concern with animals not up to date on vaccinations like rabies, and untreated illnesses can place unneeded strain on the emotional connection between pet and owner. The overall goal of this study is to create a sustainable and affordable veterinary care partnership, justify the need for this program, and demonstrate the mental health benefits of pet ownership. By partnering clients from the DTC, a low-income primary health clinic in Laramie, with local veterinary clinics, the Wyoming State Veterinary Laboratory (WSVL), LAWS, and the Wyoming Pre-Veterinary Club can enable an affordable pet care program for low-income Albany residents. To create this PAWtnership, numerous meetings were held with various entities including the Animal Shelter, LAWS, local veterinary clinics, and WSVL faculty. A survey was conducted in which 61 of the current DTC clients were interviewed regarding vaccination and spay/neuter status of pets as well as their ability to afford veterinary care. This survey also included an assessment of the emotional relationship between low-income pet-owners and their animals. Integrating this program into the Wyoming Pre-Veterinary Club will ensure its longevity and sustainability, since motivated and caring pre-veterinary students will continue to provide much needed accessible pet care to those in need.

INTRODUCTION

The bond between pet and owner is one of a kind and invaluable. The companionship and emotional support they bring is truly irreplaceable. This sort of connection, friendship, and love is especially impactful for low-income and homeless individuals. Studies conducted by Kidd & Kidd as well as several others have assessed the attachment homeless individuals have to their animals, and it is generally agreed that homeless people have a stronger connection to their pets than individuals of higher socioeconomic status (2). Homeless people often see their pets as their only source of love and friendship and pets offer protection and a way to foster social connections (1). In another study conducted by Harmony Rhoades, Hailey Winetrobe, and Eric Rice, 398 homeless youth were interviewed in the Los Angeles area and the association between pet ownership and their mental health was assessed. The youth pet owners displayed fewer signs of depression and loneliness than those who did not own animals (3). This study also corroborates the finding that companion animals provide loving relationships and valuable emotional support for low income people. There is a notable positive association between the mental wellbeing of homeless youth and owning a pet with 85% of pet-owning individuals reporting that their animals kept them company and 80% agreed with the statement, “My pet makes me feel loved”(3). The findings of this study highlight the special connection pets offer homeless people and the positive impact on their mental health.

The documentation of homelessness and pet ownership has been well characterized in literature. However, there is a lack of research pertaining to the connection between low-income individuals and their companion animals in Laramie, WY. In Albany County, the homeless

population is not very large with the entire state of Wyoming only documenting an average of 548 individuals experiencing homelessness on any given day in 2019 (5). According to the US Census Bureau, as of 2019 the estimated population in Albany county was 38,880 and 16% of individuals live in poverty (4). The low income demographic is much more prominent in this community and will primarily be the focus of this study . It is possible that the trends observed in the homeless population do not hold true for low income people, however there have been several studies that have assessed the general physical and psychological benefits of companion animals, regardless of socioeconomic status.

The physical and psychological health benefits of owning an animal have been well documented. The simple act of petting an animal has been linked with a transient decrease in blood pressure and pet ownership has also been correlated to lower cholesterol and serum triglyceride levels (7). In a study conducted by Friedmann & Thomas, it was found that after a heart attack, pet owners had a significantly higher 1-year survival rate than non-pet owners and dog owners were 8.6 times more likely to still be alive (6). In addition to improving cardiovascular health, pets have been associated with reduced stress via the release of neurotransmitters involved in relaxation pathways (7, 9). Pets can also improve immunity by stimulating the production of the antibody IgA (7, 9). Animals not only provide numerous physical health benefits, but can also improve mental health outcomes. Multiple investigations have allowed researchers to conclude that animals help reduce depression, anxiety and loneliness while also enhancing general well-being of pet owners (8). Animals are also known to improve the self-esteem of their owners while also stimulating feelings of competence and autonomy (10, 11, 12, 14). Companion animals also offer consistent loyalty and unconditional love. A study

assessing the bonds between pets and women of color found that this type of reciprocity was what held the greatest value (7, 13). Pets clearly offer many health and emotional benefits to owners. The unique bonds formed between pet and owner can be even more meaningful for those of the homeless/low income demographic due to the connection and relationship remaining as one of the few consistent and stable aspects of their lives. These relationships are so important to maintain, but the lack of accessible veterinary care for these individuals could compromise the health of pets and put a strain on the relationship.

As previously stated, the connection between low-income people and their pets in Albany County, Wyoming has not been well studied. This has made it difficult for proper and affordable veterinary programs to be established. Approximately 6,220 people are living in poverty and the median household income during the years of 2015-2019 was \$49,322 while the per capita income was \$29,146 (4). With such an extensive low income population, the Laramie Downtown Clinic (DTC) provides free primary healthcare to

ELIGIBILITY REQUIREMENTS	
1.	Alban County resident or homeless
2	No insurance of any kind
3.	Not eligible for Medicaid, Medicare or VA benefits
4.	Not a full-time University of Wyoming student
5.	Household income at or below 175% of the Federal Poverty Line (about \$1400 per month per person). Individuals can also be exempt from the Affordable Care Act and below 200% of the Federal Poverty Line.

Figure 1: A list of requirements patients must meet before they are eligible to be seen at the DTC. These eligibility requirements will also be useful when determining which individuals qualify for the accessible vet care program.

low-income and uninsured residents of Albany County. All patients seen at the DTC meet the Eligibility Requirements detailed in Figure 1. If these individuals are struggling to finance their own health care, pet owners are likely finding it difficult to afford veterinary care. There is a need for accessible pet care to not only increase the well being of animals but to also promote the longevity of pet-owner relationships and the positive effects pet companionship offers to low

income individuals. This study helps quantify the need for an affordable veterinary care program in Albany county, details its creation, plans for its sustainability, and a future assessment of the program's efficacy and impact in the community. Ultimately, the goal is to partner the DTC with a local veterinary clinic and other local entities to offer basic veterinary care for a free or reduced cost.

METHODS

Since the idea is to partner the DTC with various organizations to offer affordable pet care, the very first step was to reach out to the director of the DTC, Pete Gossar, and determine contributions from the clinic. This discussion occurred in person November of 2019.

A meeting with Animal Control Officer, Teresa Bingham, at the Laramie Animal Shelter on January 24th, 2020 was then set up to determine if there would be any overlap with other programs already in place. A discussion with Teresa prompted research into Murdoch's partnership with VIP Petcare. VIP Petcare is a program committed to providing convenient and affordable preventive veterinary care. They have both wellness centers as well as community clinics all across the country. In Laramie, WY there is a community clinic present in the ranch supply store, Murdoch's. Following the meeting with Tresa Bingham, another in person conference was set up with the Laramie Animal Welfare Society (LAWS) on February 6th, 2020. On February 9th, 2020 a member of the Wyoming Pre-Veterinary Club, Payton Halstead conducted some research on an affordable Spay/Neuter clinic in Fort Collins, Colorado. Then, an initial in-person meeting with the director of the Wyoming State Veterinary Laboratory (WSVL),

Dr. Will Laegreid on February 13th, 2020 was set up to discuss laboratory diagnostic contributions. The proposal presented can be found in Appendix 1. A follow up meeting with the entire WSVL faculty was held via zoom on April 1st, 2020.

Once it was established that an affordable veterinary program did not exist in Laramie, and there was confirmation from WSVL that there was faculty and discogenic support, it was now appropriate to reach out to the local veterinary clinics. A partnership proposal was created that outlined the goal of this partnership, the current support and the potential contributions from the veterinary clinics. A full version of the proposal can be found in Appendix 2. On June 22nd, 2020 proposals were sent out to Dr. Crystal Gill and Dr. Kelsie Speiser at Gem City Veterinary Services, Dr. David Evertson & Dr. Dana Petersen at Alpine Animal Hospital, and Dr. Shawn Sanders at the Animal Health Center.

Follow up emails had to be sent to all of the clinics, as well as a few phone calls to get a response. From these responses, an in-person meeting was set up with Dr. Sanders from the Animal Health Center on July 9th, 2020. The first meeting with Dr. Speiser from Gem City was held on December 1st, 2020 with Dr. Brant Schumaker. The next meeting with Dr. Speiser and Dr. Schumaker was initially planned for February 10th, 2021 but was rescheduled for February 23rd, 2021. A meeting with the entire DVM and administrative staff at Gem City was requested. Unfortunately, due to some class scheduling conflicts, I was unable to attend in person. A video recording was made that explained where the idea for the program came from, the goals and what is still needed to make it become a reality. The intention was for this video to be played at the Gem City meeting on April 12th, 2021. However, the meeting got canceled and due to busy schedules, and unfortunately I do not believe the video ever got played at a later date. The video

can be found in Appendix 3.

Following the meetings, it was deemed necessary to quantify the need for an affordable pet care program. On October 28th, 2020 an initial paper version of the survey was left at the DTC to be passed out as clients came in for appointments. This survey included questions relating to demographics, vaccination and spay/neuter status of pets, ability to afford vet care as well as an assessment of the emotional relationship owners have with their pet. The paper version of survey had very limited success so an online version was created, but it was not possible to send it out to all of the clients. A flyer with a QR code was then made and placed at the entrance of the DTC with the hope that patients would scan the code and take the survey while they waited for their appointments. Unfortunately, there was also no success with this approach, so the next idea was to stand outside of the DTC and ask people the questions in person as they walked in. However, due to COVID, there were a reduced number of visits and 30 minutes between appointments so it was not feasible. Remote access to the DTC patient database was then granted and each active client was called. Clara Delahaye and Payton Halsted called the English speaking clients, and Jewel Jackson called the Spanish speaking clients. The survey questions in both English and Spanish can be found in Appendix 4. An additional survey was created to assess the efficacy of the program. The goal of this survey was to ask clients about their pet care prior to the program vs. after. This survey provides a baseline of what animal care was by evaluating the cost, vaccination record, and the general health of animals. The survey questions can be found in Appendix 5.

To ensure the longevity of the program, it will be integrated into the Wyoming Pre-Veterinary Club. As of now an affordable pet care committee has been created as a joint

officer position with Payton Hallstead, Madison Blaeser, and Mackenzie Faircloth as the elected officials. They will be in charge of taking over the program and will be the main points of contact between the club and the other entities involved in this partnership.

RESULTS

It was very important to get the DTC on board because of their mandatory eligibility screening. All clients seen at the DTC must meet the requirements previously mentioned in figure 1 and this allows the affordable vet program to be focused specifically on the low-income demographic. After my discussion with Pete Gosar, his support and excitement for the program was apparent when he offered the clinic's help in any way possible. This was great to hear since the DTC's cooperation would be crucial not just for the eligibility screening but also in terms of survey distribution.

Once it was determined that the DTC was on board, I met with Teresa Bingham from the Laramie Animal Shelter. From this meeting I gathered some helpful information about the shelter. It is city run and once the animals are received, they are placed in a 5 day holding period. Any veterinary bills during that time are paid for by the city of Laramie, and if the animal is claimed within that period, then the owner reimburses the city. However, if the owners are not able to, then the city will cover the cost. After the 5 day holding period, LAWS picks up the bill for anything like dentals, bite wounds, and flea/tick treatment (this is not preventative, only if the animal currently has them). LAWS also covers the expense to spay or neuter any animal adopted from the Laramie Animal Shelter. This partnership between LAWS and the animal shelter allows

the animals to reach a certain health status so they can get adopted, afterwards the future costs are the new owner's responsibility. The shelter also has a companion pet agreement which means that they waive the adoption fee for people who only have one pet and who are 65 years or older. In terms of why pets are in the shelter, Teresa stated that some pets are surrendered due to health costs.

In addition to a discussion about the animal shelter, I asked about Rockin' E Dog Training & Consulting. Teresa is a co-owner of this program that offers obedience classes, canine conditioning, therapy certifications, agility classes, private training, behavior consultations as well as service dog training. Details services offered as well as costs can be found in Appendix 6 (15). In the future, a hopeful partnership between Rockin' E and this program could offer affordable behavioral/pet training classes to low-income individuals. Since Teresa is only a co-owner, she was not able to speak for everyone or make any commitments. At the moment, rescued pets and their owners get a 10% discount on a class. They also recently added a new Canine Good Citizen (CGC) training scholarship. This is offered annually and applicants must write an essay and receive a veterinarian's letter of recommendation. This scholarship is not solely based on need, but income is considered. In the past, Rockin' E has donated 6 gift certificates to local fundraisers. If Rockin' E would be willing to donate some gift certificates to this program, it could be a potential fundraising idea to cover some costs of these affordable pet clinics.

Teresa then suggested looking into Murdoch's partnership with VIP Petcare. Murdoch's is a ranch supply store that offers anything from animal feed to fencing and garden gear. VIP Pet care works to offer affordable, convenient, and preventive veterinary care. In Laramie, this

partnership between Murdoch's and VIP Petcare offers services like microchipping, vaccinations, flea and tick control, heartworm prevention, testing and deworming, and titer testing. Anyone is eligible to get these services, who they see is not based on income. The pricing for these tests can be found in Appendix 7. Though this partnership helps with basic vet care, it fails to cover other necessary treatments and services for example spays and neuters. Additionally, although this program exists, 40% of DTC pet owners surveyed stated that their animals are not up to date on vaccinations. This further demonstrates the need for my affordable pet care program.

The meeting with the LAWS staff was very productive. Support for the program was clearly expressed, and it was pointed out that some of the individuals seen at the DTC might not have a vehicle or the means of transportation to get to a veterinary clinic. Some of the veterinary clinics in Laramie are a bit out of town and might not be within walking/biking distance. LAWS has liability coverage and they offered to provide transportation once the affordable vet care program is underway for people that might not be able to make it to the clinic. They also mentioned the Compassionate Care Program which is for individuals who are hospitalized or arrested and are pet owners. These pets can be put temporarily in foster care or the animals are kept in their homes and approved volunteers take care of them. In addition to this program, LAWS offers low-cost microchipping 2-4 times a year. LAWS also offers spay neuter coupons for dogs, cats and rabbits in Albany County. The coupons are not a guarantee but are there to try and help offset the cost for some of the people that need it the most. Individuals must fill out an application, where they are asked if the annual household income is less than \$30,000 a year.

Payton Halsted, a member of the Wyoming Pre-Veterinary club, looked into the Animal

Friends Alliance program in Fort Collins, Colorado. This program is by appointment only and they see individuals from in and around Fort Collins. The program is a non-profit organization and services are subsidized, not free. This clinic uses a program called Prevent a Litter Plus (PAL+) for services like spays and neuters and people can donate to cover the cost for low-income pet owners. PAL+ can also be applied to rabies vaccinations, distemper combo vaccinations, and microchipping. PAL+ funds cover the entire cost of a spay/neuter surgery minus a \$20 co-pay for cats and \$25 copay for dogs. PAL+ is only present in Larimer County, Colorado but setting up something similar to this in Larmie could be a possibility for the longevity of this affordable pet care program.

From the initial meeting with the director of WSVL, Dr. Will Laegreid, there was support for the program, but before agreeing to anything he wanted to get a sense of the demand. He mentioned that it could be a good idea to talk to diagnostic companies and ask for donated materials like a parvo snap test. Some of the cost from WSVL could be offset by the foundation funds and Paws to People offers some seed grants. The lab could also offer access to lab coats, gloves, and from this preliminary meeting Dr. Laegreid saw no problem with having cytologies read at the lab and running fecals. He also mentioned that grooming could be part of this low cost clinic in the future. Dr. Laegreid provided some good ideas for funding including American Society for the Prevention of Cruelty to Animals (ASPCA), Kiwanis, or possibly the city of Laramie itself.

At the follow up meeting with the entirety of WSVL faculty, it was stated that the lab could cover the costs of basic diagnostic tests. If the test only requires the time of the professional (for example reading a cytology slide) it can just be written off. Direct expenses can

either be done at cost or they could be covered by foundation funds. Overall it depends on the types of test, but it was generally agreed that the testing can be done at cost. Dr. Jonathan Fox, the Department Head of Veterinary Sciences, said that there is department support as well as flexibility with the foundation account. Dr. Jenn Malmberg, a pathologist, is prepared to help in any way possible. She is willing to give her time to vaccinate, look at lumps, etc. Dr. Berit Bangoura, a parasitologist, is able to do parasitic tests that are relatively low cost, for example, skin scrapings or fecals. In terms of funding, it was mentioned that ASUW might be able to help out with survey funds, and if a GoFundMe is set up, students can send out the link to faculty to spread the word. Another potential idea would be to link this program with more long term research projects. For example, a summer project could be set up for an extern and they could look into the types of prevalence of parasites in pets owned by low-income individuals. This would provide direct benefit to the lab because of the plethora of data that could be accessed as well as allow for easier access to the foundation funds.

When it came to the meeting with Dr. Sanders from the Animal Health Center, there was definite hesitance. The meeting began with him listing off his concerns for the program. These included that the affordable care program would drive down the value of private vet practice. If he were to provide free services to low-income people then it would in turn raise prices for everybody else. He also believes that this program would encourage people to have pets they can't afford. Finally, he was concerned with who would be eligible, and also believes people would abuse the system. The discussion then transitioned from concerns to what Dr. Sanders already does to help the community. For LAWS and Black Dog Animal Rescue, he does not charge exam fees, and there is a 10% discount on every service. He also does not charge for

anesthesia for spay/neuter on top of a discount. Dr. Sanders did not provide me with all the costs, but he gave me a few examples. A cat spay is \$81 (which is about a \$35 discount) and includes a nerve block. A 30-60lb dog spay is \$114 (which is about half the cost). No blood work is performed before the spays and neuters, so that is a risk that owners run. There was no full support of the program from Dr. Sanders, but after asking him what he would be willing to contribute he said he would be willing to help and provide some services at a discount, but not offer anything for free. He believes that if they waive the exam fee individuals should be accountable for a \$30-40 vaccine. In terms of partnering with WSVL and running diagnostic labs there instead of in house, he would charge for what was done in the clinic, for example collecting the skin scrape and then sending it to the lab for the testing. He was willing to offer what he does for LAWS and Black Dog for this program, but grants and/or private funds would be needed to cover the difference as he mentioned he would not work pro bono. He did say he would prefer the affordable clinic to just be scheduled as needed, but if we needed to use his clinic space more regularly, Saturday afternoons would work best.

Multiple email correspondences were sent out to Alpine Animal hospital with no response. Finally, Taylor Haley, the officer manager, sent me an email stating that the clinic was not willing to pursue this partnership. The transcript from the refusal email can be found in Appendix 8.

From the primary meeting with Dr. Speiser on December 1st, 2020, it was determined that identifying the amount of demand was important. She was on board to provide her time and professional help with annual exams and any other services that we see fit. For example, fecals, fine needle aspirates, skin scrapings, fungal tests, prescribing antibiotics, eye ointments, and

possibly blood work but these treatments have a high upfront cost. Dr. Speiser thought it might work if the clinic was set up where we had a list of services we could offer and then if individuals wanted extra tests then it would be on them. Treatments like X-rays could be covered by a GoFundMe or the foundation account. Dr. Speiser mentioned holding these clinics quarterly to make sure it is successful and sustainable, then increasing frequency based on interest. Dr. Speiser also believes it would be beneficial to have the Pre-vet club in charge of some of the administrative aspects of the clinic. This would include: checking patients in, paperwork, and crowd control. She also said that a few veterinary technicians that she knows would be willing to donate their time as well for these clinics. Dr. Speiser also mentioned that the clinic has a certain level to which they can reduce the cost of service. A lot of the clients donate medications that their pets no longer need so that could be offered.

At the second meeting with Dr. Speister on February 23, 2021 she mentioned that the clinic would have to figure out how insurance would work alongside this program. Since she is an associate veterinarian, it was important for her to speak with Dr. Crystal Gill and Dr. Jacque Murray who are the practice owners. From this meeting, it was determined that the next steps would be to get both Dr. Gill and Dr. Murray on board with using the clinic space. Once that is established we could start thinking about fundraising and the logistics of hosting the first clinic. It was mentioned that there might be hesitance with using the Gem City Clinic space for this program, so Dr. Speiser suggested that we should think about alternative places. For example borrowing a microscope from WSVL for fine needle aspirates, or potentially using University space since this is a Pre-Vet club affiliated program.

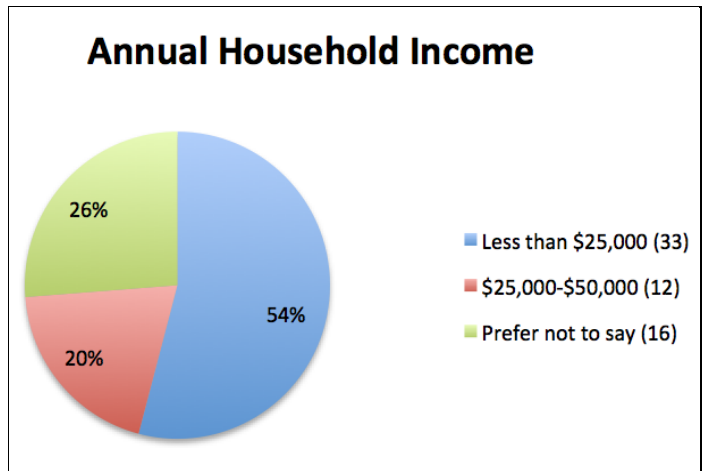
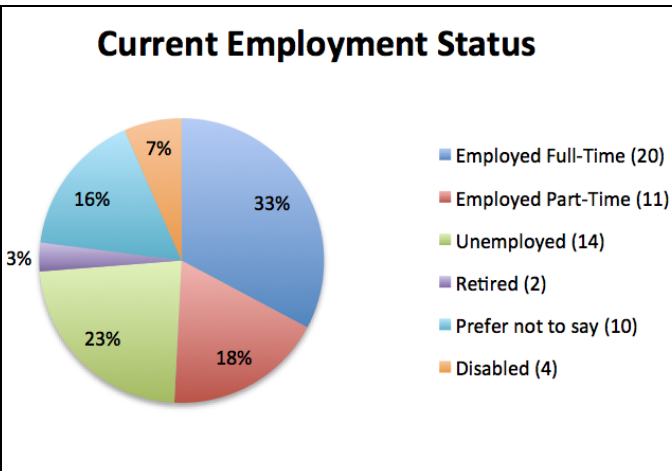
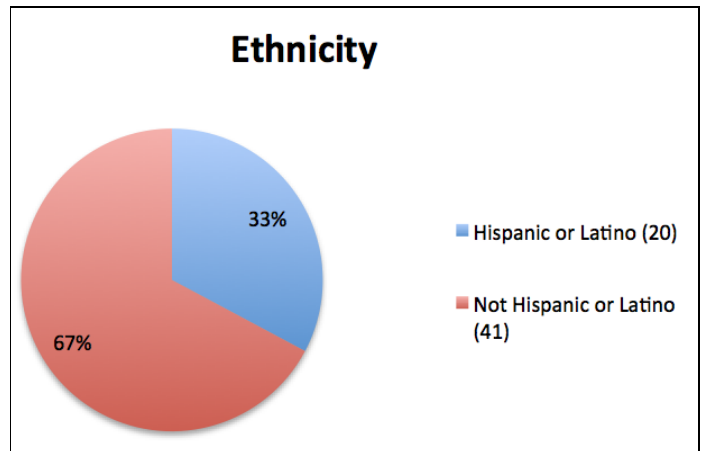
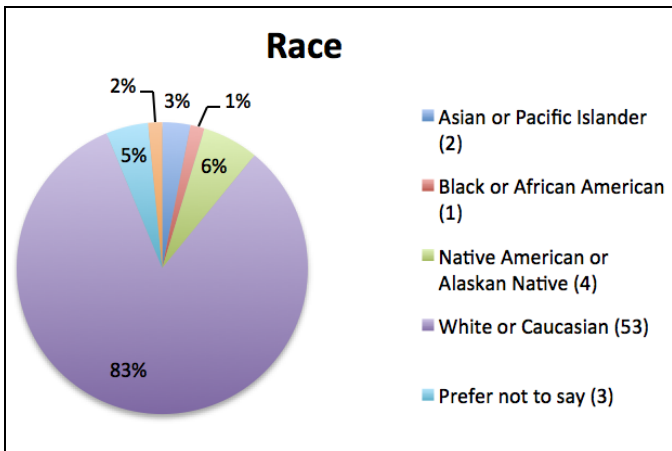
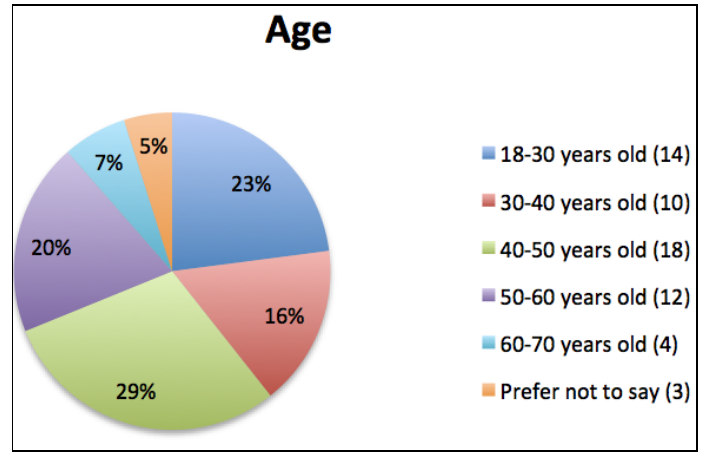
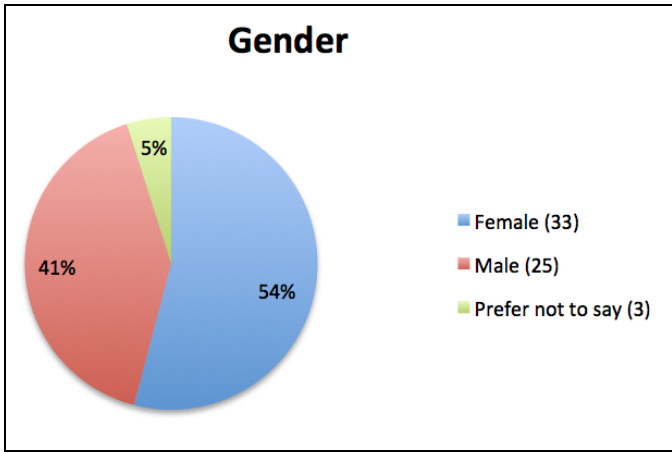
On March 8, 2021 I received this email from Dr. Speiser, "Since we last talked a lot has

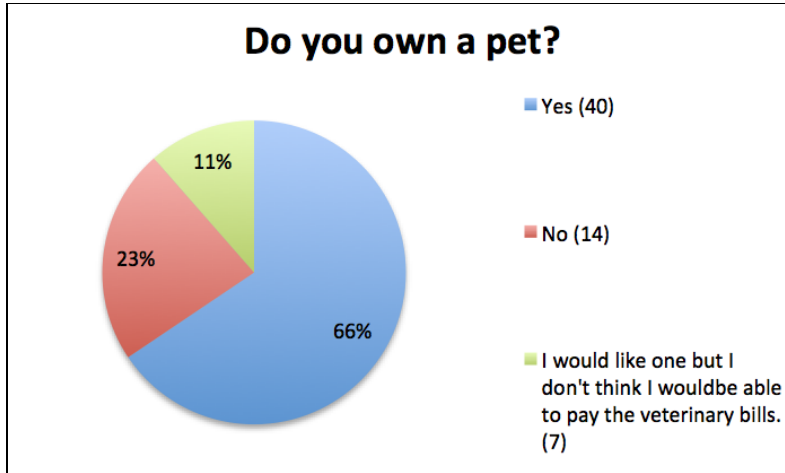
happened at the clinic and I'm just not sure that adding anything else to Crystal and Jacques plates will work. I am happy to ask, but both owners are really overwhelmed currently with practice management. We have a doctors meeting this coming Monday from 12-1 (April 12th). I will ask about you all doing a short presentation if that day would work in your schedules. My worry is that they will see this as one more thing that they cannot handle right now, so just that warning. I really think the entire idea might be dismissed because of the priority focus being straightening out the business. I am personally and professionally willing to help, so I honestly wonder about using a different venue so this can actually move forward." Trying to find a time to speak to the management and owners of Gem City was a bit difficult. I made a video to be played at their meeting that explained the program and asked if there would be any possibility for the affordable clinics to be held at Gem City.

Results from Survey #1

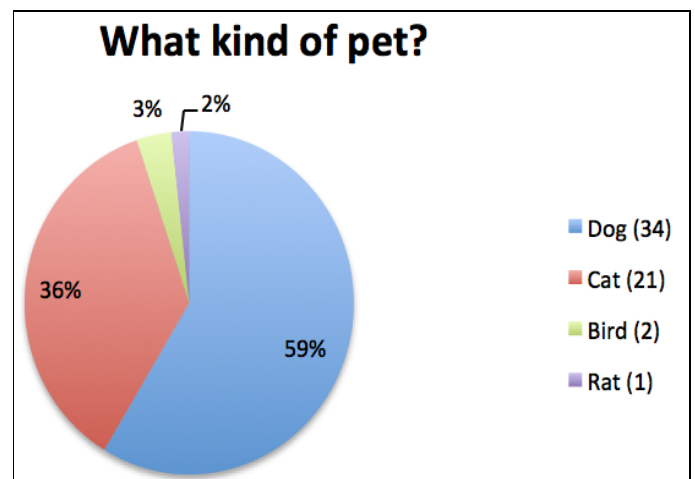
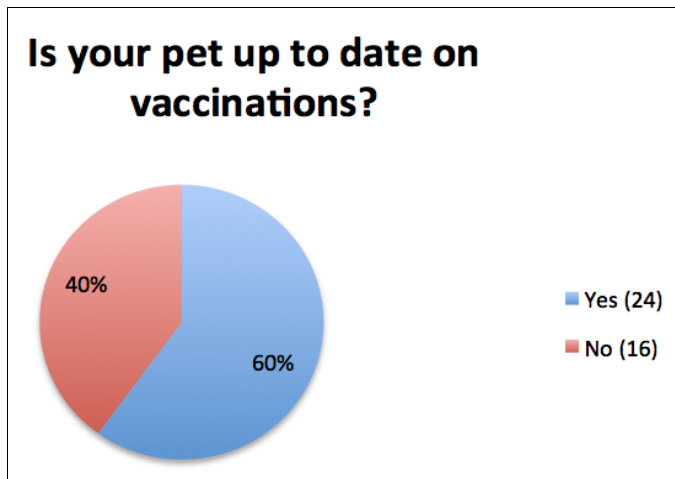
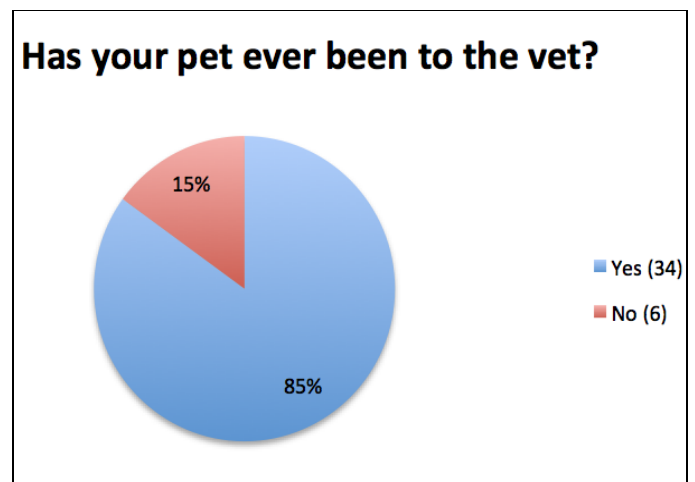
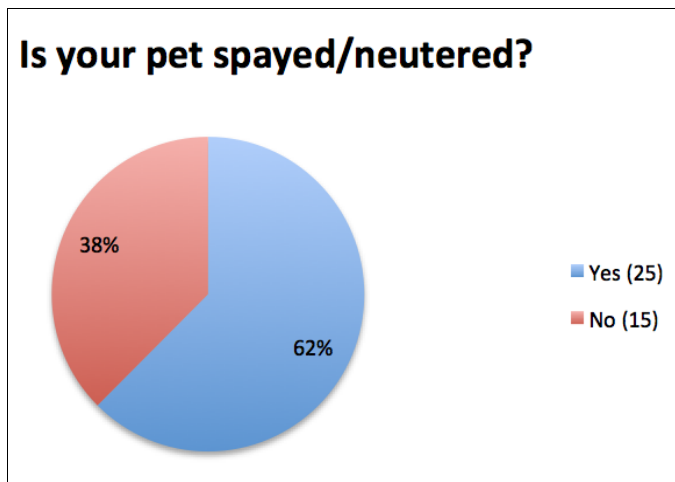
61 individuals responded to the survey. All 61 participants were asked to answer 6 general demographic questions pertaining to gender, age, race, ethnicity, employment status, and annual household income. The remaining questions pertaining to pet ownership were only asked to the 40 participants who stated they were pet owners. One caveat to this is the last question pertaining to the emotional relationship between pet and owner. Due to some surveying errors, only 28 individuals got asked that question. The survey results can be found below.

General/Demographic questions (total participants=61)

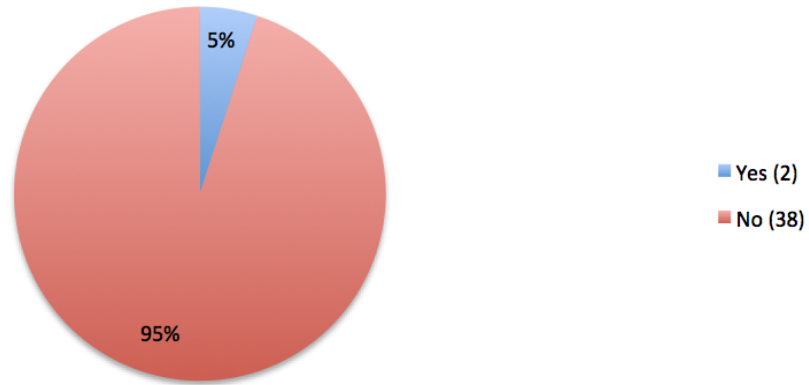




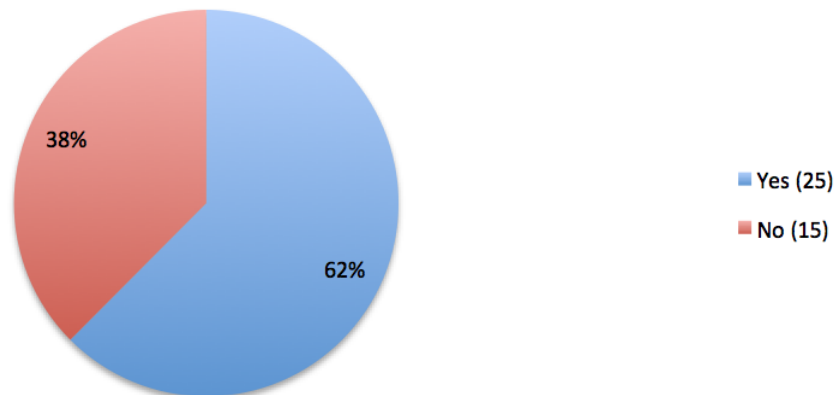
Questions specific to pet owners (total participants= 40)



If your pet required an emergency treatment that costs more than \$500, would you be able to afford it?

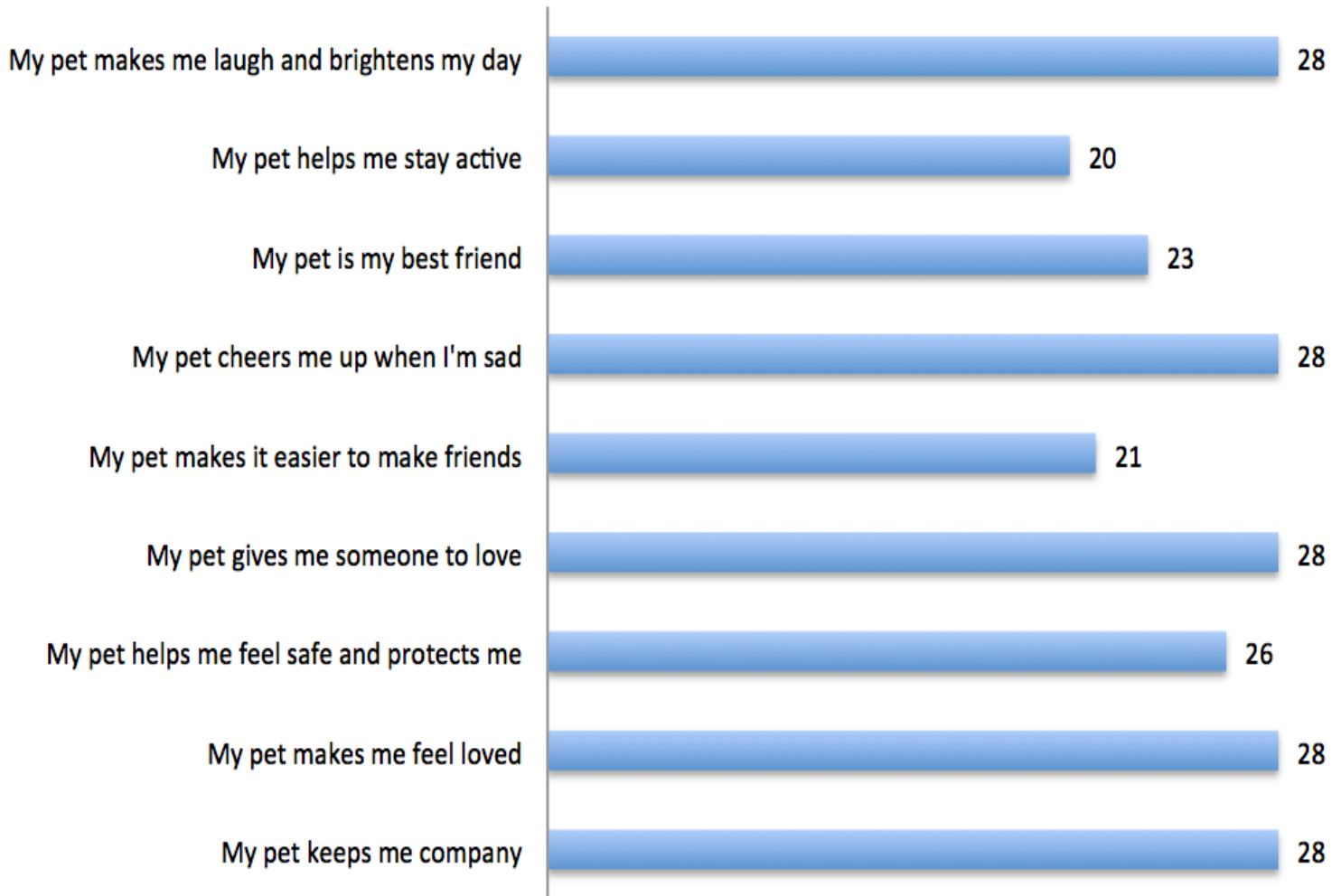


Have you ever denied veterinary treatment because you were worried about the cost?



Emotional connection between pet and owner (total participants= 28)

Select every statement you agree with



Results form survey #2

The second survey to assess the efficacy of the program was made but the results from it have yet to be gathered. This survey is more of a future direction.

CHALLENGES

The COVID-19 pandemic made some aspects of this research project challenging. Due to the limited number of volunteers allowed, I wasn't able to physically be in the DTC, thus getting participation in the survey was difficult. I tried many different methods to obtain the survey data, but the paper version as well as sending the survey via email was not successful. This slowed down the process of gathering the data, and resulted in Payton, Jewels and I calling people individually which was a large time commitment. Additionally, people do not always answer their phones, have functioning voice mails or even working phone numbers. Jewels is one of the AmeriCorps volunteers at the DTC, and has a lot of other obligations and responsibilities. With this time commitment, having her gather the surveys from the spanish speaking clients was not the most effective. Also, many of the surveys filled out by Jewels did not contain responses to the survey question that assessed the emotional connection between pets and owners. Despite these obstacles, a decent amount of useful data was compiled via one-on-one phone calls. The need for this program was quantified and useful data regarding the medical status of animals in the low income demographic was collected. The survey also looked into the psychological and emotional connections people have with their pets.

The pandemic also made setting up meetings difficult. People are not always great at checking and replying to emails, which slowed down the progress of certain parts of the program. Veterinarians are very busy individuals so it was especially hard to get things set up with Dr. Speiser. I tried to work on what was in my control and progress on what I could, but Dr. Schumaker was very helpful in acting as a liaison between the both of us.

Overall, everything seemed to move at a much slower pace once the pandemic started. In-person conversations go a lot smoother with these kinds of projects when there are numerous moving parts. Waiting for email responses and difficulties with finding meeting times that work for everyone became one of the most complicated aspects of this project.

DISCUSSION

From the survey results, it is clear that there is a definite need for this program in our community. First, in terms of the general well being of animals. With 62% of individuals who have denied veterinary care because of cost and 95% of survey participants who would not be able to afford a pet emergency that cost more than \$500, the general well being of animals is compromised. Cost is evidently a barrier that prevents low-income individuals from providing necessary care to their pets. Additionally, there is a public health concern aspect. With 40% of pets not up to date on vaccinations like rabies, this could pose an additional threat to the general health of the laramie community. Equally as important, is the emotional connection that accompanies a pet-owner relationship. Out of 28 participants who were asked to select statements they agreed with, 100% of them agreed that their pet brightens their day, gives them someone to love, makes them feel loved, cheers them up when they are sad, and keeps them company. A majority of participants agreed with all of the other statements, and this indicates that there is a strong emotional connection between low-income pet owners in Laramie and their animals. The companionship pets provide is truly invaluable and lack of access to affordable veterinary care threatens these connections. Sick pets are a source of stress and if the illness is

not treated properly, the threat of broken emotional bonds could compromise the companionship aspect of these relationships. This program and its mission is an important contribution to keep these animals healthy in order to support these relationships and help with the emotional and physical health of low income people in the Laramie community.

It is of the utmost importance that this program is sustainable and remains in operation after I graduate from the University of Wyoming. I have already started the process of integrating the program in the Pre-Veterinary Club by creating a committee that will be in charge of the affordable care clinic, but there is still work to be done to make sure this program is self-sustaining. I need to pass on all of the information I have gathered through this process to the individuals that will be continuing operations. I also plan to continue working on this partnership through the summer to make sure that the pre-vet club has a strong foundation to start off of in the fall semester.

The second survey that is intended to gauge efficacy of the program will be sent out before the start of the program and an annual follow up survey will be sent out to assess if and how the care has improved. By involving this efficacy survey in the next steps it would allow us to show that the program led to participants with an increase in pet care as assessed by the various factors measured.

Throughout this process there were many lessons learned. First and foremost I gained invaluable skills relating to patience and flexibility. I learned to work on what was in the realm of my control and be patient with the people and aspects of the program that were outside of my control. There were many ideas that needed to be modified or changed and this allowed me to become more flexible and adapt based on the circumstances. There were numerous obstacles I

faced throughout this process, but ultimately helped develop my determination and perseverance. During this research I was prompted many times to find alternative solutions when things do not work out as planned. It also became clear to me that there are so many wonderful people in the community that truly care about others and are willing to do what they can to make sure this program is successful. It was extremely inspiring to see how many people care deeply and want to contribute their time and efforts to this affordable veterinary program.

ACKNOWLEDGMENTS

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REFERENCES

1. Cronley, C., Strand, E. B., Patterson, D. A., & Gwaltney, S. (2009). Homeless People who are Animal Caretakers: A Comparative Study. *Psychological Reports, 105*(2), 481-499. doi:10.2466/pr0.105.2.481-499
2. Kidd, A. H., & Kidd, R. M. (1994). Benefits and liabilities of pets for the homeless. *Psychological reports, 74*(3 Pt 1), 715-722. <https://doi.org/10.2466/pr0.1994.74.3.715>
3. Rhoades, H., Winetrobe, H., & Rice, E. (2015). Pet ownership among homeless youth: associations with mental health, service utilization and housing status. *Child psychiatry and human development, 46*(2), 237-244. <https://doi.org/10.1007/s10578-014-0463-5>
4. U.S. census bureau Quickfacts: Albany County, Wyoming. (n.d.). Retrieved March 09, 2021, from <https://www.census.gov/quickfacts/fact/table/albanycountywyoming/PST045219>
5. Wyoming homelessness statistics. (2019, January). Retrieved March 15, 2021, from <https://www.usich.gov/homelessness-statistics/wy>
6. Friedmann, E., & Thomas, S. A. (1995). Pet ownership, social support, and one-year survival after acute myocardial infarction in the Cardiac Arrhythmia Suppression Trial (CAST). *The American journal of cardiology, 76*(17), 1213-1217. [https://doi-org.libproxy.uwyo.edu/10.1016/s0002-9149\(99\)80343-9](https://doi-org.libproxy.uwyo.edu/10.1016/s0002-9149(99)80343-9)
7. Walsh, F. (2009), Human-Animal Bonds I: The Relational Significance of Companion Animals. *Family Process, 48*: 462-480. <https://doi-org.libproxy.uwyo.edu/10.1111/j.1545-5300.2009.01296.x>
8. Friedmann, E., & Tsai, C. C. (2006). The animal-human bond: Health and wellness. *Animal-assisted therapy: Theoretical foundations and practice guidelines*. A. Fine.
9. Charnetski, C. J., Riggers, S., & Brennan, F. X. (2004). Effect of petting a dog on immune system function. *Psychological Reports, 95*(3_suppl), 1087-1091.
10. Kidd, A. H., & Kidd, R. M. (1985). Children's attitudes toward their pets. *Psychological Reports, 57*, 15 - 31.
11. Levinson, B. M. (1972). *Pets and human development*. Springfield, IL: Charles C Thomas.

12. Robin, M., & ten Benschel, R. (1985). Pets and the socialization of children. *Marriage and Family Review*, 8, 63 – 78.
13. Risley-Curtiss, C., Holley, L. C., Cruickshank, T., Porcelli, J., Rhoads, C., Bacchus, D. N., ... & Murphy, S. B. (2006). “She Was Family” Women of Color and Animal-Human Connections. *Affilia*, 21(4), 433-447.
14. Wells DL. The effects of animals on human health and well-being. *Journal of J Soc Issues*. 2009;65(3):523–543.
15. Bingham, T., Steinkraus, H., & Kauffman, M. (n.d.). Classes and Services: Rockin' E. Retrieved April 17, 2021, from <https://www.rockinedogtraining.com/classes-and-services>

Appendix 1

Background

The Downtown Clinic Mission Statement: “We believe that healthcare is a right deserved by all regardless of financial status.”

The Downtown Clinic (DTC) in Laramie, WY provides free primary healthcare opportunities for over 500 low-income, uninsured residents of Albany County. All patients seen at the DTC meet the following Eligibility Requirements:

1. Albany County residents or homeless
2. No insurance of any kind
3. Not eligible for Medicaid, Medicare or VA benefits
4. Not a full-time UWyo student
5. Household income at or below 175% of the Federal Poverty Line. This is about \$1400 per month per person. They can also be exempt from the Affordable Care Act and below 200% of the Federal Poverty Line.

It has been roughly estimated that over half of the DTC clients are pet owners.

Objectives

- Partner the DTC with local veterinary clinics, WSVL, and the Wyoming Pre-Veterinary Club.
- Offer basic veterinary care for a free/ reduced cost.

Potential Services

**These are just some examples and we would love to work with you to craft a list of services that you and your clinic would be willing to provide.

- Annual physical exams
- Vaccines
- Dewormers
- Dentals
- Prescriptions
- Lumpectomie
- Spay/neuter

We have volunteer help!!

- The Wyoming Pre-Veterinary Club is full of motivated and interested students that would be available to volunteer to make these low-cost clinics run smoothly.

- Not only would this reduce the amount of staff needed to run these clinics, but it would allow pre-veterinary students to get some hands on experience with restraining animals, administering vaccines, etc.
- The pre-vet club would also be willing to work with you for fundraising if you deem necessary. We put on a pet wash every semester and some of those funds could potentially go towards offsetting the costs.

Appendix 2

PROPOSAL SENT TO VETERINARY CLINICS

Dear veterinary clinic,

My name is Clara Delahaye and I am about to embark on my senior year at the University of Wyoming studying Animal and Veterinary Science. I am writing to discuss partnering with you in hopes of providing low-income individuals in the Laramie community with accessible pet healthcare. The idea came about after spending the last three years volunteering at the Downtown Clinic (DTC). The DTC provides free primary healthcare opportunities for over 500 low-income, uninsured residents of Albany County. All patients seen at the DTC meet the following Eligibility Requirements:

1. Albany County residents or homeless
2. No insurance of any kind
3. Not eligible for Medicaid, Medicare or VA benefits
4. Not a full-time UWyo student
5. Household income at or below 175% of the Federal Poverty Line. This is about \$1400 per month per person. They can also be exempt from the Affordable Care Act and below 200% of the Federal Poverty Line.

After speaking with Pete Gosar, the director of the DTC, it was roughly estimated that over half of the DTC clients are pet owners. If these individuals are struggling to receive adequate health care for themselves, their pets are most likely also in need. **My goal is to partner the DTC with local veterinary clinics, the Wyoming State Veterinary Laboratory, and the Wyoming Pre-Veterinary Club to offer basic veterinary care for a free/reduced cost.**

Meetings with the Laramie Animal Shelter and LAWS allowed me to determine that no such program was already in place in the Laramie area. LAWS noted that low-income individuals may not have access to a vehicle and offered to provide pet transport. The Wyoming State Veterinary Laboratory is also discussing diagnostic support for the program. Specifics will depend on the needs and demand for services.

With several agencies already on board, I was hoping to discuss partnering with you as well as potential services. These are just some examples and we would love to work with you to craft a list of services that you and your clinic would be willing to provide.

- Annual physical exams
- Vaccines
- Dewormers
- Dentals
- Prescriptions
- Lumpectomies
- Spays/neuters

I also have volunteer help! The Wyoming Pre-Veterinary Club is full of motivated and interested students that would be available to volunteer to make these low-cost clinics run smoothly. Not only would this reduce the amount of staff needed to run these clinics, but it would allow pre-veterinary students to get some hands on experience with restraining animals, administering vaccines, etc. The Pre-Veterinary Club would also be willing to work with you for fundraising if you deem necessary. We put on a pet wash every semester and some of those funds could potentially go towards offsetting the costs.

Dr. Schumaker, the Pre-Veterinary Club advisor, and I would like to set up a zoom meeting with you to discuss this idea in a little more detail and to answer any questions. Please let us know if you have any availability during these chaotic times.

Thank you very much for your time and consideration,
-Clara Delahaye

Appendix 3

VIDEO PLAYED AT GEM CITY MEETING

Clara's Affordable Vet Care Video: <https://use.vg/zhtjRm>

Appendix 4

SURVEY QUESTIONS (IN ENGLISH)

What gender do you identify as?

Female

Male

Transgender Female

Transgender Male

Gender variant/non-conforming

Prefer not to say

How old are you?

18-30 years old

30-40 years old

40-50 years old

50-60 years old

60-70 years old

Over 70

Prefer not to say

Please specify your Race.

Asian or Pacific Islander

Black or African American

Native American or Alaskan Native

White or Caucasian

Please Specify your Ethnicity.

Hispanic or Latino

Not Hispanic or Latino

What is your current employment status?

Employed Full-Time

Employed Part-Time

Unemployed

Retired

Disabled

Prefer not to say

What is your annual household income?

Less than \$25,000

\$25,000-\$50,000

More than \$50,000

Prefer not to say

Do you have a pet?

Yes

No

I would like one but I don't think I would be able to pay the veterinary bills.

What kind of Pet?

Dog

Cat

Hamster

Rabbit

Bird

Other

Has your pet ever been to the vet?

Yes

No

Is your pet spayed/neutered?

Yes

No

Not sure

Is your pet up to date on vaccinations?

Yes

No

If your pet required an emergency treatment that costs more than \$500, would you be able to afford it?

Yes

No

Have you ever denied veterinary treatment because you were worried about the cost?

Yes

No

Please check every statement that you agree with.

My pet keeps me company

My pet makes me feel loved

My pet helps me feel safe and protects me

My pet gives me someone to love

My pet makes it easier to make friends

My pet cheers me up when I'm sad

My pet is my best friend

My pet helps me stay active

My pet makes me laugh and brightens my day

If you are interested in hearing more about affordable vet care please include your name and phone number.

SURVEY QUESTIONS (IN SPANISH)

¿Con que genero te identificas?

Mujer

Masculino

Prefiero no decirlo

¿Cuantos años tienes?

18-30 años

30-40 años

40-50 años

50-60 años

60-70 años

Más de 70

Prefiero no decirlo

Por favor especifique su raza.

Asiático o isleño del Pacífico

Negro o afroamericano

Nativo americano o nativo de Alaska

Blanco o caucásico

Especifique su origen étnico.

hispano o latino

No Hispano o Latino

¿Cuál es su situación laboral actual?

Empleado de tiempo completo

Empleado a tiempo parcial

Desempleados

Retirado

Desactivado

Prefiero no decirlo

¿Cual es tu ingreso anual?

Menos de \$ 25,000

\$ 25,000- \$ 50,000

Más de \$ 50,000

Prefiero no decirlo

¿Tienes una mascota?

Sí

No

Me gustaría uno, pero no creo que pueda pagar las facturas del veterinario.

¿Qué tipo de mascota?

Perro

Gato

Hámster

Conejo

Pájaro

Otro

¿Tu mascota ha ido alguna vez al veterinario?

Sí

No

¿Está su mascota esterilizada / castrada?

Sí

No

No estoy seguro

¿Está tu mascota al día con las vacunas?

Sí

No

Si su mascota necesitara un tratamiento de emergencia que cuesta más de \$ 500, ¿podría pagarlo?

Sí

No

¿Alguna vez le negó un tratamiento veterinario porque estaba preocupado por el costo?

Sí

No

Marque todas las afirmaciones con las que esté de acuerdo.

Mi mascota me hace compañía

Mi mascota me hace sentir amada

Mi mascota me ayuda a sentirme segura y me protege

Mi mascota me da a quien amar

Mi mascota hace que sea más fácil hacer amigos

Mi mascota me anima cuando estoy triste

Mi mascota es mi mejor amiga

Mi mascota me ayuda a mantenerme activo

Mi mascota me hace reír y me alegra el día.

Si está interesado en saber más sobre la atención veterinaria asequible, incluya su nombre y número de teléfono.

Appendix 5

SURVEY TO ASSESS EFFICACY OF THE AFFORDABLE PET CARE PROGRAM

Survey stipulations: This survey will be sent out prior to clients having access to affordable veterinary services. It will then be sent out again a year from now to assess the success and efficacy of the partnership.

Survey Questions:

1. Is you pet up to date on all major vaccinations?

DOGS:

- a. Canine parvovirus

Yes

No

- b. Distemper

Yes

No

- c. Canine hepatitis

Yes

No

- d. Rabies

Yes

No

- e. Bordetella

Yes

No

- f. Leptospira bacteria

Yes

No

CATS:

- a. Feline herpesvirus 1 (FHV1)

Yes

No

- b. Feline calicivirus (FCV)

Yes

No

- c. Feline panleukopenia virus (FPV)

Yes

No

d. Feline leukemia virus (FeLV - kittens)

Yes

No

e. Rabies

Yes

No

2. Is your pet spayed/neuter?

a. Yes

b. No

3. How accessible is affordable veterinary care?

a. Very accessible

b. Somewhat accessible

c. Not accessible

4. Has your pet ever been to the vet?

a. Yes

b. No

5. How would you rate the general well being of you pet based on the following characteristics:

a. Is your pet in pain?

Yes

No

b. Is your pet overweight?

Yes

No

c. Is your pet underweight?

Yes

No

d. Does your pet have one or more unaddressed medical problems?

Yes

No

e. Does your pet need to see a groomer? (i.e. your pet's hair is very mated)

Yes

No

f. Would your pet benefit from obedience/behavioral classes?

Yes

No

Over all assessment: My pet's health condition is

Great- If you answered no to all of the above questions

Good- If you answered yes to 1-3 of the above question

Poor- If you answered yes to 5 or more of the above questions

Appendix 6

ROCKIN' E DOG CLASSES AND SERVICES (15)

Private lessons: one on one training covering basic obedience	One 60-min session	5 60-min sessions
At our facility	\$40	\$180
In your home/other location (Laramie)	\$50	\$200
Behavioral consultation: for dogs exhibiting behaviors such as separation anxiety, aggression, obsessive-compulsive behaviors	Initial 90-min consultation	60-min follow-up
At our facility	\$95	\$40
In your home/other location (Laramie)	\$95	\$50

Group Classes	Goals	Suitable For	Description	Cost	Test Only
Early Einsteins	Help owners begin the training process while encouraging socialization and manners with young puppies.	Dogs < 6 months without previous training	Play time, basic skills including: attention to name, sit, down, stay, off, say hello, walking on leash and come.	\$105/6 weeks	N/A
Beginning DaVincis	Help owners begin the training process while encouraging socialization and manners with	Dogs > 6 months without previous training	Appropriate meet and greet behavior, basic skills including: attention to name, sit, down, stay, off, say hello, walking on leash and come.	\$105/6 weeks	N/A

	older puppies or adult dogs.				
Nearly Newtons	A focus on timing and refining skills.	Dogs that have passed Early Einsteins or Beginning DaVincis, or with instructor approval.	Working on hand only signals, improving speed of reaction to cues, and expanding your dog's attention with increasing distractions. Also, a decreased reliance on treats will be encouraged.	\$100/6 weeks	N/A
Canine Good Citizenship	Prepare and test for the AKC's CGC certification.	Dogs that have passed Early Einsteins or Beginning DaVincis, or with instructor approval.	This class is structured around the AKC's CGC test. We will work on the required test items, manners, and increasing your dogs response to basic skills over the first five weeks. The final week of class we will test you and your dog.	\$100/6 weeks	\$20
Therapy Dog Certification Preparation	The therapy class is designed to prepare your dog to be tested and certified to do therapy work.	Dogs with CGC certification.	This class should prepare you to be successful on any therapy test offered as well as preparing you for the realities of therapy work. Most therapy teams will repeat this class several times prior to being tested.	\$95/6 weeks	\$30 class participants/\$40 non-class participants
Shakespeare in the Park	This is a class that works on high level "reality" training in parks around Laramie.	Dogs with CGC certification.	This class is offered in the summer and involves going to a different park in Laramie each week. Some of the skills worked on during this class include	\$95/6 weeks	N/A

			distance stays, heel off leash, recalls with high level distractions, and obstacles.		
Advanced Aristotles	This is a class that works on high level training.	Dogs with CGC certification.	Some of the skills worked on during this class include distance stays, heel off leash, recalls with high level distractions, and obstacles.	\$95/6 weeks	N/A
Beginning Agility	You and your dog will be introduced to safe use of the agility equipment.	Continuing Rockin E client or instructor approval.	Some of the agility rules and guidelines will be discussed, but the focus for this class is simply to have fun safely and continue building a positive relationship with your dog. Class is held at our matted, indoor facility.	\$100/6 weeks	
Intermediate Agility	You and your dog will engage with more difficult agility obstacles.	Dogs with CGC certification or instructor approval.	This class will include more difficult obstacles and less instruction than the beginning course, but again the focus for this class is simply to have fun safely and continue building a positive relationship with your dog. Class is held at our matted, indoor facility.	\$100/6 weeks	
DDRP (Dog-dog reactive program)/BAT (behavior	This class is specifically for dogs who act in a reactive manner toward people and	All DDRP/BAT participants MUST attend one behavior session prior to	DDRP is a 6 week class limited to 4 dogs and their owners. The first week is without your dog! Necessary equipment – Hands Free Leash or 6’leather leash,	\$115/6 weeks	

adjustment training)	other dogs (barking, highly aroused, out of control behaviors).	enrollment or have permission of the instructor if already attending a class.	Shoulder-clip Body Harness (available from RockinE).		
Scent work	Introduction to scent work.	Dogs that have passed Early Einsteins or Beginning DaVincis, or with instructor approval.	This course focuses on teaching your dog to identify, locate, and alert to a scent. Depending on weather, this class may include an outdoor component.	\$110/6 weeks	
Canine conditioning		Instructor approval.		\$110/6 weeks	

Appendix 7

VIP PET CARE AT MURDOCK'S-PRICES FOR SERVICES

Dog Services	Cost
Rabies Vaccine	\$25
5-in-1 Vaccine (DA2P + Parvovirus)	\$37
Bordetella Vaccine	\$37
Leptospirosis Vaccine (4-Way)	\$37
Lyme Disease Vaccine	\$37
Rattlesnake Vaccine (Regional)	\$39
Influenza Vaccine	\$43
Intestinal Parasite Screening	\$32
Heartworm/Tick-Borne Disease Test	\$32
Heartworm/Tick-Borne Disease Test (with a 12-month purchase of Heartworm Preventive)	\$22
Microchip Pet ID	\$25
Deworming	\$21
Tapeworm Treatment (treatment and cost based on weight)	\$33+

Cat services	Cost
3-in-1 Vaccine (FVRCP)	\$38
Rabies Vaccine (adjuvanted)	\$25
PureVax® Rabies Vaccine (non-adjuvanted)	\$40

Feline Leukemia Vaccine (FeLV)	\$37
Intestinal Parasite Screening	\$32
Feline Retroviral Test (FeLV/FIV)	\$46
Microchip PET ID	\$25
Deworming	\$21
Tapeworm Treatment (treatment and cost based on weight)	\$33

Appendix 8

REFUSAL EMAIL FROM ALPINE ANIMAL HOSPITAL

Email from: Taylor Haley, Office Manager for Alpine Animal Hospital and Laramie All Pet Clinic

“At this point in time we are not going to proceed with setting up a community veterinary clinic setting. Thank you for contacting us again and forwarding your proposal to us.

I hope you have a great senior year!”