

Master of Public Health
Applied Practice Experience

***VETERINARY HOSPITAL EVALUATIONS AND
SUGGESTIONS TO MAXIMIZE USABILITY FOR CLIENTS
WITH MOBILITY DISABILITIES
&
PROMOTING PUBLIC HEALTH THROUGH PET THERAPY***

by

Emma Winkley

MPH Candidate

submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

Graduate Committee:

Dr. Kate KuKanich

Dr. Ellyn Mulcahy

Dr. Justin Kastner

Applied Practical Experience Site:

Kansas Disability and Health Program

May 2018 – August 2018

Riley County Health Department

May 2018 – August 2018

Applied Practical Experience Preceptor:

Dr. Dorothy Nary (KDHP)

and

Jan Scheideman (RCHD)

KANSAS STATE UNIVERSITY

Manhattan, Kansas

2019

Table of Contents

Chapter 1 - Portfolio Products

Portfolio Products.....	2-3
Table 1.1 Summary of Portfolio Products	3-4
Table 1.2 Portfolio Products and Competency Addressed.....	5

Chapter 2 - Competencies

Table 2.1 Summary of MPH Foundational Competencies	6-9
Table 2.2 MPH Foundational Competencies Course Mapping	9-10

Appendices

1 - Usability Survey	11-13
2 – Veterinary Hospital Evaluation Report.....	14-30
3 – Research Poster	31
4 – Assistance Animal Flyer	32
5 – Children’s Animal Behavior Game.....	33

Chapter 1 - Portfolio Products

My Applied Practice Experience (APE) consisted of two parts. The first was a project focused on evaluating the usability of veterinary hospitals for people with mobility disabilities. This was a collaborative effort between Kansas State University and the Kansas Disability and Health Program. This usability project involved two main components – veterinary hospital evaluations and a survey. My major professor, Dr. KuKanich, and I, visited 10 veterinary hospitals in Kansas to evaluate their usability for people with mobility disabilities after being trained and certified by the Community Health Environment Checklist for Mobility (CHEC-M). Each veterinary hospital received an individualized report created by our research team describing usability strengths as well as short- and long-term suggestions for areas of improvement (Appendix 2). In addition to performing veterinary hospital visits, a survey was distributed to Kansas veterinarians online and at a local conference to collect additional baseline data (Appendix 1). In order to continue spreading awareness of potential usability concerns in Kansas veterinary hospitals, our research team created an educational flyer titled, “Top 10 Ways to...Maximize Usability of Your Veterinary Hospital for Clients with Mobility Disabilities”. We plan to share this with many veterinarians through an article in the Journal of the American Veterinary Medical Association (JAVMA) and additional presentations in the future. Finally, a research poster was created to summarize this project and was presented during an oral poster session at the annual Kansas State University Research and the State poster session and KSU College of Veterinary Medicine Phi Zeta Research Day (Appendix 3).

The second part of my APE focused on promoting public health through pet therapy. I partnered with the Riley County Health Department (RCHD) to complete this portion of my APE. The difference between service, therapy and emotional support animals can be confusing. The news has recently been filled with reports about fake service animals in grocery stores and unusual emotional support animals, like peacocks, boarding planes. These untrained and uncertified animals pose health and safety risks to the public, making it imperative that pet owners do not falsely claim their pets are service or emotional support animals. Therefore, it is important for the public to be educated about what defines a service, therapy, and emotional support animal. This was the focus of the assistance animal flyer that was created and distributed at the RCHD's annual influenza vaccine event called Okt-FLU-ber Fest (Appendix 4). In addition to the flyer, I created a fun game for kids to play to teach them about how to recognize safe and concerning dog body language in dogs and how to safely approach dogs (Appendix 5). Several volunteers

and I interacted with children about the difference between therapy and service animals and the importance of not approaching a service animal in public because they are busy doing a critical job for their owner and need to stay focused on the task at hand.

The products produced from my APE address many of the Master of Public Health (MPH) foundational competencies and helped me to practice skills I will utilize in my future career.

Table 1.1 Summary of Portfolio Products

Portfolio Product		Description
1	Veterinary Hospital Evaluation Reports	An individualized report was created for each hospital describing strengths as well as short and long-term suggestions for areas of usability and accessibility improvement.
2	Usability Survey	A survey (n=59) was created and distributed to Kansas veterinarians online and at a local conference. Topics covered in the survey included demographics of the veterinarians, their experience with serving clients with disabilities, and their ability to self-assess their veterinary hospitals for accessibility and usability barriers.
3	"Top 10 Ways to...Maximize Usability of Your Veterinary Hospital for Clients with Mobility Disabilities" Flyer	An educational flyer was created and will be distributed to many veterinarians via a JAVMA article in the future (if accepted).
4	Research Poster	A research poster summarizing the study focused on evaluating usability and raising accessibility awareness for veterinary clients with mobility disabilities was created for and presented at the KSU Research and the State poster session and Phi Zeta Research Day.
5	Assistance Animal Flyer	A flyer was created describing the differences between service, therapy, and

		<p>emotional support animals, along with the basics of service animal etiquette and the steps to safely approach dogs in public. These flyers were distributed to the public at the RCHD's annual Okt-FLU-ber Fest flu vaccine event.</p>
6	Children's Interactive Animal Behavior Game	<p>A poster-board game was designed to facilitate interactions with children at the Okt-FLU-ber Fest event to teach them about assistance animals, learning how to approach dogs, and recognizing safe and concerning body language in dogs.</p>
7	Paws for People Organization	<p>A new service organization called Paws for People (P4P) was founded and consists of students, faculty, staff, and community members who have a passion for therapy animals and the human-animal bond. P4P provides a streamlined communication tool designed to promote connections between certified therapy animal handlers and places in the community interested in receiving pet therapy visits. The mission of P4P is to promote public health through pet therapy.</p>

Table 1.2 Portfolio Products and Competency Addressed

Portfolio Product		Number and Competency Addressed	
1	Veterinary Hospital Evaluation Report	18, 16	16 – Apply principles of leadership, governance, and management, which include creating a vision, <u>empowering others</u> , <u>fostering collaboration</u> , and guided decision making 18 – Select communication strategies for different audiences and sectors
3	“Top 10 Ways to...Maximize Usability of Your Veterinary Hospital for Clients with Mobility Disabilities” Flyer	18, 21	18 – Select communication strategies for different audiences and sectors 21 – Perform effectively on interprofessional teams
4	Research Poster	4, 19	4 - Interpret results of data analysis for public health research, policy or practice 19 - Communicate audience-appropriate public health content, both in writing and through oral presentation
5	Assistance Animal Flyer	18	Select communication strategies for different audiences and sectors
6	Children’s Interactive Animal Behavior Game	18	Select communication strategies for different audiences and sectors
7	Paws for People (P4P) Organization	16, 21	16 – Apply the principles of leadership, governance, and management, which include creating a vision, empowering others, fostering collaboration, and guided decision making 21 – Perform effectively on interprofessional teams

Chapter 2 - Competencies

Table 2.1 Summary of MPH Foundational Competencies

Number and Competency		Description
4	Interpret results of data analysis for public health research, policy, or practice	Through analysis of the data collected from the usability survey and hospital evaluations, patterns and trends were recognized and used to identify common areas for potential improvement of usability in veterinary hospitals. This information from data analysis was used to create the “Top 10” flyer, hospital reports, and research poster.
16	Apply principles of leadership, governance, and management, which include creating a vision, empowering others, fostering collaboration, and guided decision making	Through the creation of a service organization, Paws for People, I was able to apply many principles of leadership and management as I began with a vision and then worked to gather a team and foster collaboration to turn my vision into reality. Through this organization I feel that I have empowered other students and community members by providing opportunities to increase their knowledge about therapy animals and to give back to their community through service. I also applied this competency when working on the individualized hospital reports as I worked to gain feedback and collaborate with others on our research team. Our hope is that these reports empowered other veterinarians to become more attentive to usability concerns within the profession and potentially make changes to their own hospitals to increase usability for clients with mobility disabilities.
18	Select communication strategies for different audiences and sectors	When producing the hospital reports, Top 10 flyer, animal assistance flyer, and animal behavior game it was important to take into consideration what audience I was trying to reach and how I could best communicate with that audience. By taking into account the target audience, communication of public health topics can become more effective.

19	Communicate audience-appropriate public health content, both in writing and through oral presentation	This competency was applied when writing many of my APE products and when presenting my research poster at KSU Research and the State poster competition and at Phi Zeta Research Day.
21	Perform effectively on interprofessional teams	Working on interprofessional teams was a rewarding and major part of my MPH APE. I had the privilege of working closely with Dr. Dot Nary who works for the Kansas Disability and Health Program. I also collaborated with many therapy animal handlers who work outside of veterinary medicine, one a piano teacher and another a librarian. Additionally, I was welcomed onto the Raising Riley team this past summer at the RCHD.

The work I completed and products produced from my Applied Practice Experience helped me exercise many MPH Foundational Competencies. I will focus on the five that applied most directly to my work which include numbers 4, 16, 18, 19, and 21.

By analyzing data from both the usability survey and veterinary hospital visits, I fulfilled MPH foundational competency #4 which is “interpret results of data analysis for public health research, policy, or practice”. Through analysis of these data, I was able to understand more clearly the current awareness of usability and accessibility concerns amongst veterinarians as well as begin to see trends in areas for potential improvement, such as lowering reception counters and increasing the size of restrooms. This part of my MPH APE allowed me to practice transforming data into a meaningful narrative for different audiences in order to promote positive change in the veterinary community by increasing awareness of usability for clients with mobility disabilities.

Foundational competency #16 states “apply principles of leadership, governance, and management, which include creating a vision, empowering others, fostering collaboration, and guided decision making”. This competency was addressed in both my usability project and my therapy animal project. Creating a new service organization, Paws for People, required many principles of leadership including organizational skills, creating vision, gathering and managing a team, and fostering interdisciplinary collaboration. It also took a collaborative effort to complete the veterinary hospital evaluations and scoring as well as writing the individualized reports for each of the ten hospitals visited. Having the opportunity to practice leadership and management skills through my MPH experiences will be a benefit to my future career.

Selecting communication strategies for specific audiences is critical to conveying information effectively. I believe one of the biggest keys to the success of my MPH APE was communication. I communicated with many veterinarians during hospital evaluations, and then our team worked to develop organized reports of each hospital's strengths and areas for improvement. I exercised interdisciplinary communication when exchanging ideas and edits with Dr. Dot Nary from the Kansas Disability and Health Program. I also worked alongside the Raising Riley Program staff at the Riley County Health Department. For the Okt-FLU-ber Fest event I determined who my audience would be and how to best engage them. This is why I choose a fun game for engaging children in how to interpret safe and concerning dog body language, and the steps to approaching a dog in public. A simple easy-to-read flyer was distributed for older children and adults explaining the differences and similarities between therapy, service, and emotional support animals. I fulfilled foundational competency #18 through the many opportunities I had to practice communication skills, and determine how to communicate most effectively with specific audiences.

Another foundational competency that I utilized during my APE was #19, which entails communicating audience-appropriate public health content, both in writing and through oral presentation. I had two opportunities to formally present my veterinary hospital usability research. I created a research poster which I presented at the KSU Research and the State poster competition as well as at Phi Zeta Research Day at the Kansas State University College of Veterinary Medicine. These events gave me the opportunity to greatly improve upon my communication skills both orally and in writing.

I attained foundational competency #21, which is to perform effectively on interprofessional teams, by collaborating with Dr. Dot Nary (PhD) at the Kansas Disability and Health Program as well as Megen Devine (Editorial Professional) at the occupational training program at Washington University in St. Louis who provided the CHEC-M training and completed the scoring for each veterinary hospital evaluation. Through the therapy animal project, I had the opportunity to meet and work with several individuals who work in areas other than veterinary medicine and public health, including a piano teacher, preschool teacher, and librarian. I also worked with Early Childhood Facilitators on the Raising Riley team during my time at the Riley County Health Department (RCHD). By doing an internship with the RCHD, I was able to learn more about the breadth of important work that goes on within our local health department and how it is structured as well as gain additional knowledge about our U.S. health care system.

My APE prompted me to exercise many of the MPH foundational competencies and refine skills such as leadership, written and oral communication, and interdisciplinary teamwork.

Table 2.2 MPH Foundational Competencies Course Mapping

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
Evidence-based Approaches to Public Health					
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	x		x		
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	x	x	x		
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	x	x	x		
4. Interpret results of data analysis for public health research, policy or practice	x		x		
Public Health and Health Care Systems					
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings		x			
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels					x
Planning and Management to Promote Health					
7. Assess population needs, assets and capacities that affect communities' health		x		x	
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs					x
9. Design a population-based policy, program, project or intervention			x		
10. Explain basic principles and tools of budget and resource management		x	x		
11. Select methods to evaluate public health programs	x	x	x		
Policy in Public Health					
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence		x	x	x	
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes		x		x	x
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations		x			x
15. Evaluate policies for their impact on public health and health equity		x		x	
Leadership					
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making		x			x
17. Apply negotiation and mediation skills to address organizational or community challenges		x			

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
Communication					
18. Select communication strategies for different audiences and sectors	DMP 815, FNDH 880 or KIN 796				
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	DMP 815, FNDH 880 or KIN 796				
20. Describe the importance of cultural competence in communicating public health content		x			x
Interprofessional Practice					
21. Perform effectively on interprofessional teams		x			x
Systems Thinking					
22. Apply systems thinking tools to a public health issue			x	x	

Appendix 1: Usability Survey

Survey Investigation into Awareness and Accessibility for Clients with Disabilities at Veterinary Practices in Kansas

- | | |
|---|---|
| <p>1. How many years have you been working in the veterinary profession?</p> <ul style="list-style-type: none">a. Less than 1 yearb. 1 - 5 yearsc. 5 - 10 yearsd. Greater than 10 years <p>2. How many veterinarians are at your current practice?</p> <ul style="list-style-type: none">a. 1b. 2c. 3d. 4e. 5+ <p>3. Choose the answer that best describes the geographic location of your practice.</p> <ul style="list-style-type: none">a. Northeast Kansasb. Southeast Kansasc. Northwest Kansasd. Southwest Kansase. Central Kansasf. I do not practice in Kansas <p>4. Choose the answer that best describes the general location of your veterinary practice.</p> <ul style="list-style-type: none">a. Rural (less than 10,000 people)b. Suburban (10,000 to 100,000 people)c. Urban (Greater than 100,000 people) | <p>5. Choose the answer that best describes the patients of your veterinary practice.</p> <ul style="list-style-type: none">a. Small animal predominant (greater than 75% dogs, cats, pet birds and/or pocket pets)b. Large animal predominant (greater than 75% food animal and/or equine)c. Mixed animal (varied species with at least 25% from companion animal and 25% from either food animal or equine) <p>6. In your time of working in the veterinary community, have you ever served clients with disabilities? (circle one)</p> <p style="text-align: center;">Yes No</p> <p>7. In your current place of work do you serve any clients with disabilities? (circle one)</p> <p style="text-align: center;">Yes No</p> <p>8. If you answered yes to question #7, please check any disabilities you have recognized in your clientele, including elderly clients.</p> <ul style="list-style-type: none">a. Mobility ____b. Cognitive ____c. Sight ____d. Hearing ____e. Other: _____ <p>9. Are you aware of any specific areas in your veterinary practice that clients have difficulty using? (circle one)</p> <p style="text-align: center;">Yes No</p> |
|---|---|

If yes, please share details of concern or suggestions for change:

10. Are you comfortable with your knowledge of the current ADA (Americans with Disabilities Act) requirements for accessibility? (circle one)

(https://www.ada.gov/2010_regs.htm)

Yes

No

11. Does your practice have one or more designated parking spaces with adjacent access aisles (at least 16 feet wide) for clients with disabilities?

____ Yes (I measured, and at least 1 parking space & aisle together measure 16 feet wide)

____ Yes (I did not measure, but think 1 parking space & aisle together measure 16 feet wide)

____ No (I measured, and we don't have a parking space & aisle together measuring 16 feet wide)

____ No (I did not measure, and I don't think we have a parking space & aisle together measuring 16 feet across)

12. Does your practice have a step-free entrance for people who use a wheelchair or walker? (circle one)

Yes

No

13. Does your practice have any reception counter low enough so that a person using a wheelchair could comfortably interact with your staff? The goal is to have a portion of the reception counter 36 inches from the floor or lower.

____ Yes (I measured, and at least part of our counter is 36 inches from the floor or lower)

____ Yes (I did not measure, but I think our counter is low enough)

____ No (I measured, and all of our counter is 36 inches from the floor or higher)

____ No (I did not measure, but I do NOT think our counter is low enough)

14. Have you ever made or considered making accessibility improvements to your practice to better accommodate your clients? (circle one)

Yes

No

If yes, please provide a short description of the changes that were made or considered (i.e. van-accessible parking spaces, etc.)

15. Have you encountered barriers in improving accessibility? Please check all that apply.

____ No, I have not encountered barriers

____ Lack of knowledge about what is required, recommended, and helpful

____ Expense

____ Lack of space

____ Lack of support or agreement among colleagues

____ Other: (comment below)

16. How confident are you in meeting the specific needs of your clients with disabilities? (circle one)

- a. Not confident
- b. Somewhat confident
- c. Very confident

17. How confident are you in your ability to correctly and respectfully speak to or refer to clients with disabilities? (circle one)

- a. Not at all confident
- b. Somewhat confident
- c. Very confident

18. Do you feel that the veterinary community as a whole (veterinarians, veterinary technicians, receptionists, etc.) would benefit from further education regarding ways to improve their service to individuals with disabilities? (circle one)

Yes No

19. How receptive are you to further education on ways to best serve clients with disabilities? (circle one)

- a. Not at all receptive
- b. Somewhat receptive
- c. Very receptive

20. Additional Comments?

Thank you for your participation in this survey.
Your contribution to our research project is very
much appreciated

VETERINARY PRACTICE ASSESSMENT AND SUGGESTIONS TO MAXIMIZE USABILITY FOR CLIENTS WITH DISABILITIES

ANIMAL HOSPITAL
(IDENTIFYING INFORMATION REMOVED TO MAINTAIN ANONYMITY)

Kansas State University | Emma Winkley | September 11, 2018

CHEC EVALUATORS:

Dr. Kate KuKanich (DVM, PhD, Dip ACVIM (SAIM), Kansas State University)

Ms. Emma Winkley (DVM/MPH student, Class of 2020, Kansas State University)

PROJECT COLLABORATOR:

Dr. Dot Nary (PhD, University of Kansas, the Kansas Disability and Health Program)

This report was supported by Grant/Cooperative Agreement Number DD000006 from CDC, National Center on Birth Defects and Developmental Disabilities, Disability and Health Branch. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC, NCBDDD, Disability and Health Branch.

COVER LETTER

Dear Doctor:

Thank you for participating in the One Health collaborative study “Investigation into the Awareness and Accessibility for Clients with Disabilities at Veterinary Practices in Kansas.” This study was a joint effort between Dr. Kate KuKanich, Ms. Emma Winkley, and Dr. Dot Nary. The goal of this study was to evaluate veterinary practices in Kansas for usability for clients with mobility-related disabilities, and to provide practical suggestions for improvement if indicated. The investigators had formal training using a standardized Community Health Environment Checklist for people with mobility limitations (CHEC-M), an online tool that can help people in the community determine if a facility such as a veterinary hospital will be accessible for their needs. The following report summarizes an evaluation of your hospital, providing strengths and suggestions for ways to improve usability in both the short and long-term as well as the CHEC score. Additional resources have been included at the conclusion of the document. We thank you again for your participation in this study and your continued efforts in providing excellent service to the veterinary clients and pets in our Kansas community. We would be happy to further discuss any aspects of this report with you at your convenience.

Sincerely,

A handwritten signature in black ink that reads "Kate KuKanich". The signature is written in a cursive, flowing style.

Kate KuKanich, DVM, PhD, ACVIM (SAIM)

Emma Winkley, DVM/MPH student, Class of 2020

Dot Nary, PhD

TABLE OF CONTENTS

CHEC Evaluators and Project Collaborator	1
Cover Letter	2
Table of Contents	3
Understanding and Interpreting the CHEC.....	4-5
Observations and Recommendations:	
Entrance	6-8
Using the Building	9-10
Restroom	11-12
CHEC-Mobility Scores	13
Conclusion.....	14
Additional Resources	15-16
Appendix A, CHEC Evaluation Form	17-21
Appendix B, Copy of Consent Form	22
Appendix C, Top 10 Ways to Maximize the Usability of Your Veterinary Practice	23

WHAT IS THE CHEC?

The CHEC is a tool to measure how usable public spaces are for people with disabilities. It is **not** a comprehensive ADA assessment, but rather is a usability tool focusing on key concerns identified by people with disabilities.

The CHEC was developed by researchers at the Washington University School of Medicine in St. Louis. This tool is used to assess public spaces like restaurants, stores, doctor's offices, and now, veterinary practices. CHEC assessors are trained to complete a standardized evaluation of measurable features in a site, which produces a score based on 100 as the optimum.

Please consider watching this brief 2 minute video produced by the University of Kansas Research and Training Center on Independent Living to learn about the CHEC program:

<https://www.youtube.com/watch?v=2vJHjBlxS2s>.

CHEC ASSESOR TRAINING:

The goal of this project was to assess the usability of veterinary practices for people with mobility disabilities. To reach this goal, Dr. KuKanich and Ms. Winkley received formal training and were certified through the CHEC program to perform a standardized usability evaluation of community sites.

CHEC SCORING:

After completing veterinary practice evaluations, results were provided anonymously (not labeled as to which practice they are linked to) to the CHEC developers at Washington University who then converted the evaluation results into 3 section scores (Entrance, Using the Building, and Restroom) and determined an overall score with 100 as optimum. These scores have been included in this confidential report.

DETAILED TOUR OF THE CHEC WEBSITE:

The CHEC website is a unique and helpful tool for people with disabilities to “check-out” how usable a specific site is, such as a store, restaurant, or medical facility, before they travel. For a specific example of how the CHECpoints interactive website can be used, please click on the following link: <http://checpoints.com/>. Once there, please click on the dropdown menu that reads “State” and select KS, then click the dropdown menu that reads “Select a category” and

select “Restaurants.” Then click “search.” The google map will highlight any restaurants in KS that have been evaluated through the CHEC program and have had their evaluations uploaded onto the CHECpoints map. Next, click the red marker pointing to Wamego, KS and you will find that the famous Toto’s Tacos restaurant in Wamego has received a CHEC evaluation. Next, click on “Open Page.” This will take you to details of the CHEC evaluation for Toto’s Tacos restaurant. If you scroll down the page slightly you will see the overall evaluation scores, but if you click on the tab “CHEC-M”, which stands for CHEC mobility, you will be able to see a detailed breakdown of the evaluation. Feel free to play around with this site. Make sure to check-out how many doctor’s offices have been evaluated in Missouri using the dropdown menu options! The CHEC program was initiated in Missouri and is just starting to include Kansas locations; at this point, no veterinary practices have been included on the CHEC website.

The CHEC scores and report for the veterinary practices included in this study are strictly confidential. Information collected during visits and submitted to obtain scores was anonymous, without including practice or veterinarians’ names. You may give consent to have your practice’s scores and evaluation included on the CHECpoints interactive map to benefit clients with disabilities. This would make your results available online so clients could find your veterinary practice on the website. If you would like to discuss the possibility of having your practice’s results included on the CHEC website, please contact Dr. KuKanich to discuss this option; this would require an additional consent form to be signed and will not happen without your written consent.

CHEC-MOBILITY EVALUATION FORM:

Appendix A (pages 17-21) shows an example of the CHEC form used to evaluate each veterinary practice.

ENTRANCE

STRENGTHS OBSERVED:

- ❑ **Multiple van-accessible parking spaces and access aisles are present and are sufficiently wide (greater than 16 feet), giving clients using a wheelchair the ability to park and exit their vehicle safely and comfortably.** It is ideal that these parking spaces and access aisles together measure at least 16 feet wide to allow plenty of room for a van's side door, lift, and/or ramp (see images below). (For further information, please visit the link in #9 of the additional resources on page 16)



- ❑ **The accessible parking spaces are marked with an accessible sign and are adjacent to the most accessible entrance.** Signs that are easily recognizable allow clients with disabilities to effortlessly find and use the most accessible entrance.
- ❑ **The pathway to enter the building is clear, wide, and has a gently sloped sidewalk.** There is a curb ramp directly beside each of the accessible parking spaces, and the sidewalk would be easy for a person with a mobility disability to maneuver.
- ❑ **The first entrance door was propped open.** Although this first entrance door to enter the strip mall walkway will likely not always be able to be propped open due to weather, it is helpful and welcoming for clients with disabilities, especially mobility disabilities, to not have to maneuver through two entrance doors.
- ❑ **The entrance doors are both sufficiently wide (38 inches).** This is a valuable feature for your clients who use wheelchairs or walkers.

AREAS FOR IMPROVEMENT:

- **The entrance to your building is very accessible. One minor area for improvement is maintenance of the cracks at the top of the curb ramps.** At the top of one of the curb ramps near the entrance of your hospital there are pretty significant cracks. Over time these could become problematic to people using mobility devices. Clients using wheelchairs can use the other curb ramps to avoid these cracks, but it would not be obvious to them from the parking lot which route is the smoothest.



- **The entrance doors are heavy and may be difficult for some clients to open.**

SUGGESTIONS FOR IMPROVEMENT:

SHORT-TERM SUGGESSTIONS

- **Even with an accessible parking lot and entrance it can be challenging for a client with a disability or an elderly client to maneuver with a pet into the hospital.** It can be very helpful if the front desk staff is aware when clients who might benefit from extra assistance arrive and have a staff member assist them in entering the building with their pet when possible. Consider having an alert on the schedule when such clients are known to be coming in and watching for them to arrive. Alternatively, if permitted by the other stores in the area, you could post a sign directly beneath the accessible parking signs that states something along the lines of “For assistance into the building call 785-537-8482. We are happy to help”.
- **Consider filling in the cracks at the top of the curb ramps near the entrance to your hospital.** Keeping the route to the accessible entrance free of loose gravel, large cracks, debris, and uneven pavement can make the path much safer and welcoming.

LONG-TERM SUGGESTIONS

- **If front entrance doors are to be replaced it is recommended that either automatic (ideally) or lightweight entrance doors be installed.** Automatic doors are an added bonus to help all of your clients easily enter the building. They are especially helpful to have at the entrance to veterinary practices because the client does not have to worry about opening a door while also bringing in their pet(s). As this may not be feasible right away, encouraging staff to help clients from the car into the hospital when needed, including opening doors for them, might be greatly appreciated and would remove the potential challenge of opening a heavy door for some clients. Visit the link in #12 of the Additional Resources on page 16 to learn about ways to make a door automatic.

USING THE BUILDING

STRENGTHS OBSERVED:

- **The friendly staff are always available to help their clients.** Having staff who are cognizant of specific clients who may need extra assistance and being eager to provide this assistance to these clients is important for optimal client service and satisfaction.
- **Although the entire reception counter is higher than 36 inches from the floor (42 inches), there is open space beside the counter allowing for comfortable interaction between front desk staff and clients using a wheelchair.** Your hospital's design of open space beside the high counter is a valuable feature for clients who use wheelchairs.
- **The small animal lobby has an open layout.** This allows clients using a wheelchair or other mobility device to easily make their way to the front desk.
- **The seating arrangement in the lobby allows a person with a mobility device to remain in line with other seats (i.e. not sticking out in the aisle or blocking passageways).** This type of arrangement can make clients who use wheelchairs feel more welcomed and comfortable. Training front desk staff to regularly check to make sure there is at least one open space in line with the other chairs for a client using a wheelchair would be very helpful in order to maintain this strength.
- **All doorways and public pathways are wide, open, and clear, creating a comfortable environment in which clients and their pets can move.**
- **The exam room on the right (nearest to the restroom) is large, providing an uncrowded setting for clients.** There is plenty of space within this exam room for clients with mobility devices to move about with their pet(s). Large exam rooms are a great accommodation that your hospital provides.
- **Interior doors (exam room doors) are light enough to be opened with the strength of only two fingers and are sufficiently wide (35.5 inches).** Light and wide doors like the ones within your practice are a valuable feature.
- **While visiting front desk staff were observed offering water and coffee to their clients.** This is a very nice service to all your clients.

AREAS FOR IMPROVEMENT:

- **The entire reception counter is higher than 36 inches from the floor.** The current height of the reception counter can make the interactions between staff and a client using a wheelchair challenging and may make the client feel uncomfortable or less welcomed. Again, the open space beside the counter is helpful, but having at least a portion of the counter lowered would be ideal.

SUGGESTIONS FOR IMPROVEMENT:

LONG-TERM SUGGESTIONS

- **If the reception counter at your hospital is renovated or replaced, explore the possibility of lowering at least a portion (ideally at least 36 inches wide) to be no higher than 36 inches from the floor.** In the meantime, continue to encourage reception staff to use the open spaces beside the reception counter to interact with clients using wheelchairs more directly, rather than over the tall counter itself.



RESTROOM

STRENGTHS OBSERVED:

- ❑ **The location of the restroom.** The restroom is directly next to the lobby making it easy to find and access.
- ❑ **The restroom door can be opened in both directions using the strength of only 2 fingers and is sufficiently wide.**
- ❑ **Grab bars are available and are sturdily mounted close to the toilet.** These allow for safe transfers.
- ❑ **The sink, soap, paper towel dispenser, and light switch are all no more than 48 inches from the floor.** The height of these important restroom features allows clients who use wheelchairs to reach them.

AREAS FOR IMPROVEMENT:

- ❑ **The current handle on the restroom door is a round knob.** This circular type of handle can be challenging for some people who have limited hand dexterity.
- ❑ **The restroom does not have a 5 foot circular open space to access the sink/soap/paper towel features.** This is a helpful design element for people who use wheelchairs or walkers. Although the restroom does not have this 5 foot open space around these restroom features, it is a fairly spacious restroom, measuring 53 inches x 98 inches.
- ❑ **There is a vanity style sink in the restroom (i.e. there is not clear space under the sink for knee clearance).** Without space underneath the sink clients using wheelchairs may not be able to comfortably reach the faucet and soap to wash their hands.

SUGGESTIONS FOR IMPROVEMENT:

SHORT-TERM SUGGESTIONS

- ❑ **Consider changing round door knobs to more of a lever style handle so that they could be opened with a closed fist.** This style of door opener is considered more usable for people who may not be able to grip and turn a circular knob.



LONG-TERM SUGGESTIONS

- **Consider installing a new sink in the restroom that has open space beneath it for knee clearance for those using wheelchairs.** It is recommended that the bottom of the sink measures at least 29 inches from the floor and that the sink rim is no higher than 34 inches from the floor.

CHEC-MOBILITY SCORES

These scores are based off a 100 point system, with 100 as optimal. Rather than focusing solely on the score, we encourage you to focus on your hospital's strengths, areas for improvement, and suggestions for improvement in the short and long-term described above. These scores are confidential and will only be included on the CHEC website should you choose and with your signed consent.

ENTRANCE: 91.23

USING THE BUILDING: 100.00

RESTROOM: 75.90

TOTAL: 91.82

REASONS FOR REDUCTIONS (DETAILED EXPLANATIONS ABOVE)

- ☐ Heavy entrance door
- ☐ Restroom does not have at least a 5' diameter space to access sink/soap/dryer features
- ☐ Restroom does not have clear space under sink for knee clearance

CONCLUSION


Overall, the veterinary practices assessed in this study were found to be quite usable for clients with mobility disabilities. As many veterinary practices are located in older buildings with structural limitations, several common challenges were recognized among these practices. While structural changes may be challenging to implement, additional short-term suggestions included in this report may also be quite helpful to advance usability, and ultimately, improve service to clients with disabilities. Creating and maintaining accessible and usable veterinary hospitals is inviting to people with disabilities and allows them the ability to participate fully in their pet's veterinary care. To view a summary of the areas consistently observed for improvement after visiting all participating veterinary practice's click on the link in #10 of Additional Resources below on page 16 or view Appendix C on page 23.

If you would like to discuss having your hospital's scores be uploaded to the CHECpoints.com website for the benefit of people with disabilities, elderly home care takers, etc. please email Dr. Kate KuKanich at kstenske@ksu.edu and she will call you to discuss this further and have you sign the consent form seen in Appendix B (page 22). Again, your scores are currently confidential and will remain so unless further consent is granted by you to add them to the CHEC interactive map. Should your hospital undergo renovations or changes where accessibility/usability improvements are made, an optional follow-up visit and re-evaluation/rescoring opportunity can be scheduled if you are interested; please contact Dr. Kate KuKanich to schedule a time at your convenience.


Thank you again for participating in this important study. If you would like to discuss anything further or have any additional questions or concerns please contact Dr. Kate KuKanich at 785-532-4282 or kstenske@ksu.edu. Please use the additional resources below if needed to further increase your knowledge and awareness of the ADA and usability.

ADDITIONAL RESOURCES

INFORMATION FROM THE AMERICANS WITH DISABILITIES ACT (ADA):

1. The U.S. Department of Justice provides a document to help small business owners understand the 2010 ADA accessibility standards. Although this document is not directed to veterinary practices specifically, it is a helpful resource to increase veterinarian's awareness of ADA requirements for businesses. To view this helpful document, [click here](#).
2. To read a more comprehensive version of ADA standards, [click here](#). The section of the ADA most applicable to state and local government facilities (including public universities) is Title IIa. The section of the ADA most applicable to public accommodations and commercial facilities (small businesses) is Title III.
3. ADA Quick Tips – Customer Service for Front Line Staff:
<https://adata.org/factsheet/quicktips-customer-service>
-  4. To contact your regional ADA center, [click here](#) or contact Ray Petty at raypetty@aol.com or 785-842-4317. Ray Petty is a Community Integration Specialist [who](#) has been with the Great Plains ADA Center (<https://www.gpadacenter.org/>) since 1995. He is currently responsible for the delivery of ADA Network services throughout the State of Kansas. In addition to provided training, technical assistance and consultation to individuals and entities in the state of Kansas, he conducts outreach and capacity building activities.
5. The local ADA Coordinator for the Manhattan area is Charlotte Self (charlotte@ksu.edu; 785-532-1868).
6. There are tax incentives for increasing accessibility. [Click here](#) to see what the ADA website says about tax credits. [Click here](#) to view the K-37 Disabled Access Credit document. For more information on this, email Ray Petty (info above).

THE UNIVERSITY OF KANSAS RESEARCH AND TRAINING CENTER ON INDEPENDENT LIVING PRODUCED THE FOLLOWING DOCUMENTS TO PROVIDE EDUCATION TO THE PUBLIC:

7. A fact sheet summarizing the Americans with Disabilities Act of 1990. To view this ADA fact sheet, [click here](#).
-  8. A brochure titled “Guidelines: How to Write and Report About People with Disabilities” was designed for people studying and writing reports about people with disabilities. It is a great read for anyone interested in learning more about the power their words have on shaping the public's view of people with disabilities. To view the brochure, [click here](#)! For a quicker overview on how to speak to or refer to people with disabilities, [click here](#)!
9. KU Graduate Research Assistant Alice Zhang conducted a study titled “Analyzing the Effects of Different Signs to Increase the Opportunity of Designated Van Accessible

Parking Spaces”. As part of her project she designed a Fact Sheet on Parking Equity that can help people better understand the importance of Van Accessible Parking Spaces for people with disabilities and reserving them for lift- or ramp-equipped van users. To view the helpful fact sheet, [click here](#).

MORE HELPFUL DOCUMENTS AND SITES



10. [Click here](#) to read about the “Top 10 Ways to Maximize the Usability of your Veterinary Practice for Clients with Mobility Disabilities”.
11. [Click here](#) to find purchasable accessible entrance signs.
12. [Click here](#) to find purchasable automatic door openers.
13. [Click here](#) to find purchasable threshold and wheelchair ramps.
14. [Click here](#) to view a brief video explaining how offset hinges can be used to extend the width (1-2”) of a doorway if needed.



= highly recommended resource

Appendix 3: Research Poster



KANSAS STATE UNIVERSITY | Master of Public Health
Interdisciplinary Program

VETERINARY HOSPITAL EVALUATION AND SUGGESTIONS TO MAXIMIZE USABILITY FOR CLIENTS WITH MOBILITY DISABILITIES

Emma Winkley¹, Kate KuKanich¹, Dot Nary², Joe Fakler³

¹Master of Public Health Program and Department of Clinical Sciences, College of Veterinary Medicine; ²Department of Research and Training Center on Independent Living, University of Kansas; ³Concordia Small Animal Clinic



Disability and Health Program
Someone with disabilities can be healthy

INTRODUCTION

According to the Census Bureau about 23 million Americans had a mobility-related disability in 2017. Rates of disability increase with age and therefore, with the forecasted growth in the aging population in the coming years the percentage of people with a mobility disability will likely increase. All these individuals are potential pet owners and veterinary clients. Therefore, two concepts need to be addressed by the veterinary community. First, how hospitals can be constructed or structurally modified to increase accessibility and usability. Second, awareness of the overall veterinary visit experience for clients with mobility disabilities. In order to begin to address these concepts we set out to gather baseline data on usability of veterinary hospitals in Kansas as well as gain insight about veterinarians' current knowledge of potential barriers to usability and Americans with Disabilities Act (ADA) regulations.

METHODS

A survey (n=59) was distributed to Kansas veterinarians online and at a local conference. Topics covered in the survey included demographics of the veterinarians, their experience with serving clients with disabilities, and their ability to self-assess their veterinary hospitals for accessibility and usability barriers. Two researchers (EW, KK) were certified by Community Health Environment Checklist for Mobility (CHEC-M) and used the CHEC-M standardized forms to evaluate 10 veterinary hospitals in Kansas. These forms were then scored by a blinded CHEC-M personnel. Each hospital received 3 section scores (entrance, using the building, and restroom) and an overall score. In addition to the CHEC report, an individualized report was created by our research team for each hospital describing strengths as well as short- and long-term suggestions for areas of improvement.

WHAT IS THE CHEC?

The Community Health Environment Checklist (CHEC) is a tool to measure how usable public spaces are for people with disabilities. It is not a comprehensive ADA assessment, but rather it is a usability tool focusing on key concerns identified by people with disabilities. The CHEC was developed by researchers at the Washington University School of Medicine in St. Louis. This tool is used to assess public spaces like restaurants, stores, doctor's offices, and now, veterinary practices. CHEC assessors are trained to complete a standardized evaluation of measurable features in a site, which produces a score based on 100 as the optimum. CHEC evaluations can be posted online (chechpoints.com) for public viewing as a tool when deciding which public places will be most usable for their needs.

RESULTS

Key Findings:

- 1) Veterinarians serve clients with disabilities, yet might not be fully aware of potential usability concerns for people with mobility disabilities.**
 - 93% (55/59) of surveyed veterinarians reported serving clients with mobility disabilities.
 - Every veterinary hospital visited had at least 1 area identified on the CHEC form which could be addressed to improve accessibility for their clients with mobility disabilities, yet only 51% (30/59) of surveyed veterinarians reported being aware of any specific areas within their veterinary hospital that clients may have difficulty using.
 - Only 38% (22/58) of surveyed veterinarians reported being comfortable with their knowledge of current ADA requirements for accessibility.
- 2) Most veterinary hospitals have potential barriers to people with mobility disabilities.**
 - Tables 2-4 list the most common areas identified for improvement in visited Kansas veterinary hospitals.
- 3) Problem areas identified in visited hospitals were self-reported with similar frequency via survey.**

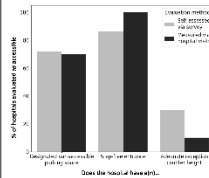


Figure 1. These three criteria (parking spaces, step-free entrance, and counter height) were assessed via hospital visits and survey self-assessment. The results suggest that if veterinarians are given a specific accessibility requirements manual can accurately self-assess their hospitals and become aware of potential areas for improvement.

- 4) Veterinarians may encounter barriers in improving accessibility.**
 - 36% (21/59) of veterinarians reported **expense** as a barrier
 - 25% (15/59) of veterinarians reported **lack of space** as a barrier
 - 20% (12/59) of veterinarians reported **lack of knowledge** about what is required, recommended, or helpful as a barrier
- 5) Veterinarians were receptive to receiving further education and suggestions on ways to improve their service to individuals with disabilities.**
 - 87% (48/55) of veterinarians reported that they feel the veterinary community as a whole (veterinarians, technicians, receptionists, etc.) would benefit from further education regarding ways to improve their service to individuals with disabilities.
 - 93% (54/58) of veterinarians were receptive to receiving further education on ways to best serve clients with disabilities.

Hospital Visit Results:

CHEC Category	Average Score (100 pts. scale)
Entrance	89.18
Using the Building	91.46
Restrooms	93.60
Overall	83.71

Table 1. Overall, the veterinary hospitals assessed were found to be quite usable for clients with mobility disabilities. As many veterinary hospitals are located in older buildings with structural limitations, several common challenges were recognized. Strengths and areas for improvement amongst each of the three CHEC categories are displayed in the tables below.

Strengths	Areas for Improvement
<ul style="list-style-type: none">7/10 hospitals had stairs designating adequately wide and accessible parking spaces close to the entrance (Figure 2).9/10 had clear entrance routes free of level changes.9/10 had adequately wide doorways (>32 inches wide)	<ul style="list-style-type: none">6/10 hospitals had heavy entrance doors. Aim for automatic or lighter user friendly entrance doors.3/10 hospitals had gravel parking lots which can cause wear and tear on wheelchair's tires.4/10 hospitals had too high of entrance thresholds (>0.25").

Figure 2. To maximize usability veterinary hospitals should provide at least 1 paved and accessible parking space designated by a sign near the entrance on an accessible route. Parking space + access side at least 30' wide

Using the building:

Table 3. Strengths and areas for improvement for using the veterinary hospitals.

Strengths	Areas for Improvement
<ul style="list-style-type: none">8/10 had waiting lobbies with a ramp or stairs that allow for space for a wheelchair to fit amongst a row of chairs (Figure 3).9/10 had embossed and/or wide pathways (36" wide) and doorways (32" wide)	<ul style="list-style-type: none">Only 1/10 of the hospitals had at least a portion of their reception counter at an accessible height (<36" from the floor).

Figure 3. Quick fix to creating a wheelchair-friendly lobby:



Restrooms:

Table 4. Strengths and areas for improvement for restrooms.

Strengths	Areas for Improvement
<ul style="list-style-type: none">7/9 had two sturdy mounted9/10 had grab bars forallow for safe transfers.	<ul style="list-style-type: none">4/6 hospitals had wide enough restroom/stall doors (>32")Only 3/9 hospitals had accessible paper towel/dryer height (<48" from floor).Only 3/9 hospitals had an accessible (not vanity style) sink.

Additional ways to make veterinary visits positive for all:

- Have proactive and helpful staff available to assist clients who may need extra assistance into the building with their pet and throughout their visit.
- Consider the needs of a person who may benefit from a larger room to interact more easily.
- Ask directly to clients with disabilities. Do not avoid eye contact or speak only to a client's companions.
- Use people first language (i.e. "person with a disability" instead of "disabled person" or "person who uses a wheelchair" rather than "wheelchair bound").

Veterinarians serve clients with mobility-related disabilities; therefore it is critical that veterinarians are aware of the accessibility and usability of their veterinary hospitals, to provide optimal service. Improving awareness of client needs in addition to providing practice-specific suggestions for improving and maintaining accessible veterinary hospitals is a positive step towards allowing clients to fully participate in their pet's veterinary care. Through education, the Kansas veterinary community can become more cognizant of potential physical barriers to people with mobility-related disabilities, including our increasing elderly population, and can make action plans for short and long term modifications to their hospitals to remove barriers and improve access for all.

Moving toward a comprehensive assessment of accessibility and development of educational resources:

In the future, similar projects can be carried out to identify potential barriers in veterinary hospitals for people with other disabilities (i.e. low vision, hearing, cognitive, etc.). Continued work could lead to the development of a comprehensive veterinary hospital usability assessment as well as educational materials to encourage improvement of accessibility for all people with disabilities. Future collaborative work with ADA experts could result in increased educational materials to help veterinarians become more comfortable with their knowledge of ADA requirements.

Any sites that receive CHEC assessments are invited and encouraged to have their scores and forms posted online to the CHEC website for the benefit of people with disabilities.

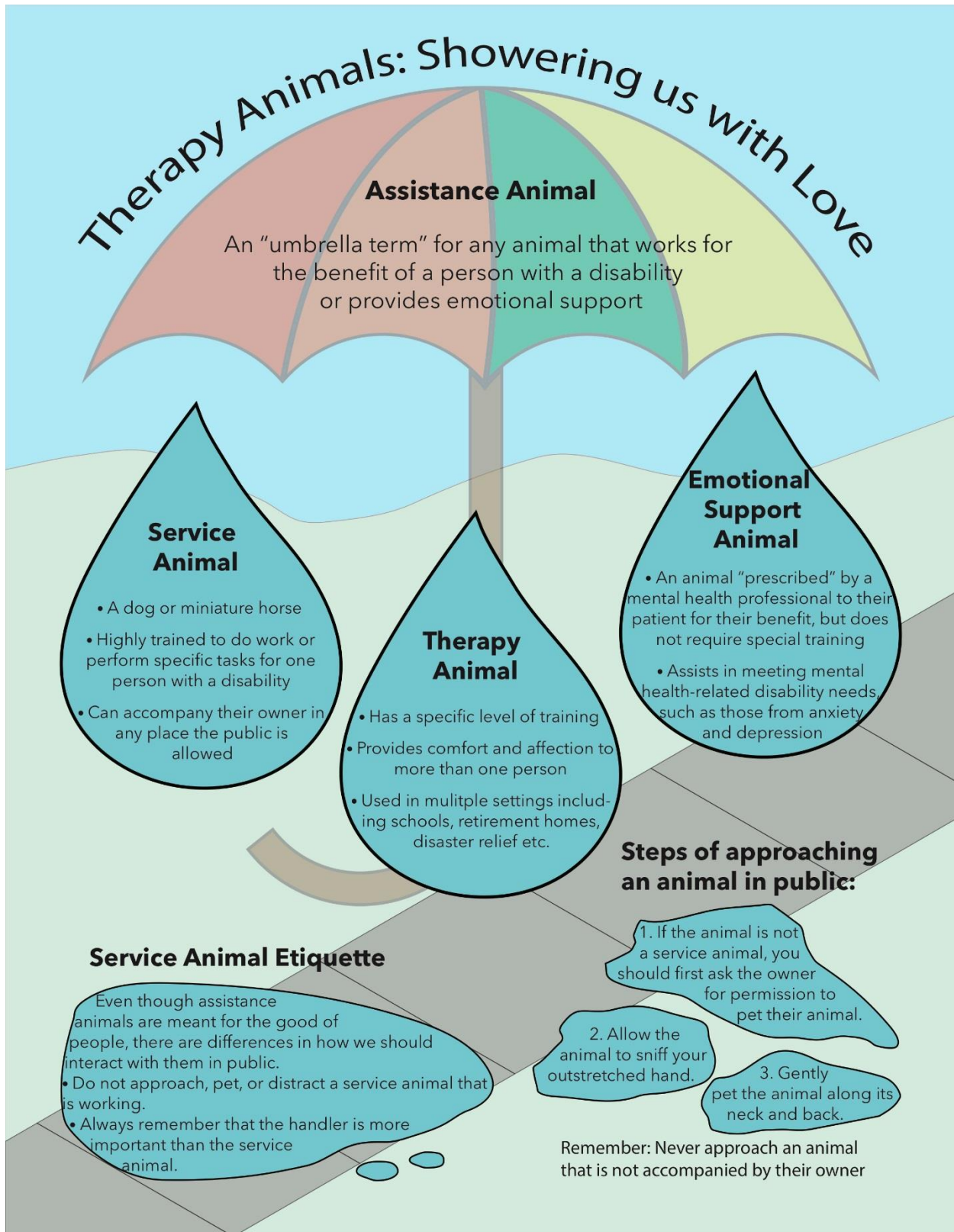
ACKNOWLEDGEMENTS

The authors would like to thank all the veterinary practices that participated in the visits and all the veterinarians who contributed to this project by completing the survey.

This research was supported by Grant/Cooperative Agreement Number: D0000006 from the US Centers for Disease Control, National Center on Birth Defects and Developmental Disabilities, Disability and Health Branch.

The authors would also like to thank Kansas State University College of Veterinary Medicine and the Master of Public Health Program.

Appendix 4: Assistance Animal Flyer



Appendix 5: Children's Animal Behavior Game

