

Kansas State University Excellence in Engagement Award

Project Title: Future Vets Helping Future Pets

Abstract: The shelter medicine program at the College of Veterinary Medicine (CVM) provides spay/neuter procedures for regional shelters and other humane organizations, most of which do not employ a veterinarian. Senior veterinary students perform sterilization (spay/neuter) procedures under the supervision of a CVM faculty member, Dr. Brad Crauer. A registered veterinary technician (Ron Orchard, RVT) and DVM intern (Dr. Kyla Krissek) support the work of the students. The work is completed in a mobile surgery unit consisting of a 32-ft goose-neck trailer with two surgery tables equipped with gas anesthetic and monitoring equipment, a prep area/table with dental care capability, and heated recovery cages. The mobile unit departs each day from the CVM complex to partner organizations. The mobile surgery unit serves a variety of organizations managing unwanted pets including municipal shelters, non-profit humane societies, rescue organizations, and community-based trap-neuter-release programs. In addition, the faculty member provides consultation services on request for these organizations, and mobile unit personnel participate in the Hill's Pet Food regional shelter day, outreach activities (e.g. Paws in the Park, Helping Hands Humane Society), fund-raising events, and public education seminars for partner organizations. Services are provided at no-cost to regional organizations, with the exception of the provision of lunch for students. The service goal of the shelter medicine program is to improve the health and adoptability of lost and relinquished pets, and to strengthen student awareness of the homeless pet population. Since inception (May, 2015), the mobile surgery unit has performed 6,200 spay/neuter procedures during 290 trips for 12 partner organizations.

The Partnership: Participating organizations range from municipal shelters, non-profit humane societies, rescue organizations, and community-based trap-neuter-release programs. Since inception, the mobile surgery unit has made 290 visits to these 12 regional partners:

Salina Animal Services
Helping Hands Humane Society (Topeka – one veterinarian)
Prairie Paws Animal Shelter (Ottawa)
Lawrence Humane Society (one veterinarian)
Emporia Animal Shelter
Cat Tails Feline Rescue (Manhattan)
Riley County Humane Society
Beatrice Humane Society
Clay County Animal Rescue and Education Center
Topeka Community Cat Fix (trap-neuter-release)
Hutchinson Animal Shelter
Friends of Felines (trap-neuter-release Wichita)

The mobile unit departs each day (Monday through Friday, every other Saturday) from the CVM complex to these facilities, located within two hours of Manhattan, Kansas. Some facilities are visited weekly, others monthly. Students are exposed to diversity in humane service organizations. Because they are interacting with so many organizations, students experience a variety of challenges in available resources, organizational structure, endemic infectious diseases, and challenges in animal care.

Partner organizations coordinate their daily activities to accommodate mobile surgery unit visits. Shelter managers, employees, and volunteers ensure sufficient numbers of healthy animals are available and are appropriately prepped for surgery on the day of the visit. Partner organizations commit their entire day to interacting with students and assisting with efficient workflow of the mobile surgery unit.

The senior veterinary student educational experience encompasses population medicine (infectious disease management), animal welfare, shelter management, preventive medicine, and surgical skills. Students prepare a consultation report for at least one partner organization focused on infectious disease management or humane care, and perform an average of 51 spay/neuter procedures during the two-week rotation. The shelter medicine program equips students with the inclination, awareness and tools to support local humane organizations in their practice area after graduation.

Two of these organizations are managed entirely through foster care (no physical location). Services are provided for these organizations at the Manhattan PetSmart location (two Saturdays each month). The visibility of the trailer in the parking lot attracts customers to the mobile unit to ask questions about spay/neuter procedures and pet care in general. Whenever possible, we bring an additional student (DVM underclassman employee) along on those days to talk with the public, who invariably knock on the door.

Program support has been a collaborative effort. No state or tuition dollars have been used to fund this program. The shelter medicine unit is funded by private gifts, grants, donated materials and the [Pet Friendly License](#) plate program. A grant from [PetSmart Charities](#) provides funding for supplies and supports a portion of the faculty member's salary. A private donor provided funding to purchase the mobile unit, tow vehicle, surgical equipment, and technician salary. Anesthetic, analgesic, and antibiotic medications and vaccinations have been donated by [Zoetis Inc](#), representing approximately \$90,000 in support. Participating shelters do not pay for surgery or consultation services. Some organizations have eliminated voucher programs, and are now able to exclusively place surgically sterilized animals on their adoption floor (eliminated adoption of intact animals). In some instances, shelters had previously paid regional veterinarians a reduced (at-cost) fee for spay/neuter services. Our services allow regional shelter organizations to invest these resources into infrastructure for animal comfort, infectious disease control, and adoption services.

Lessons Learned and Best Practices:

Describe the challenges the university and community partners have faced through this collaboration.

The initial challenge was to obtain support for the shelter/university partnership from the community veterinarians (private practitioners). Some regional veterinarians were performing at-cost surgical procedures, and were happy to discontinue this service. Others expressed concern that the mobile surgery unit would perform low-cost surgeries for the public, which would impact their practice. A few practitioners were concerned adoption of sterilized animals would reduce their post-adoption spay/neuter caseload.

Describe how these challenges were addressed and overcome.

It was important to inform community veterinarians about the scope and intent of the program and obtain their permission to enter their communities. Prior to signing a formal agreement for service, shelter organizations were required to contact regional veterinarians, discuss the program, and gain consent. If practitioners had concerns, the department head of Clinical Sciences called or visited the

practice to clarify the intent of the program. If practitioners continued to have concerns, the shelter site was eliminated as a site for service. Regional veterinarians agree to provide post-operative care if complications arise, and the mobile surgery unit refers animals requiring prolonged care to regional veterinarians. This dialogue between shelters, the college and regional veterinarians lead to the tagline “future vets helping future pets,” which clarified the mission of the mobile surgery unit for everyone (students benefit from this experience, and service is limited to relinquished animals). This process strengthened our relationship with regional veterinarians and strengthened the relationship between animal welfare organizations and private veterinary practitioners that share the same community. The challenges of animal welfare and pet population are a community issue. Working together, we have improved the quality of care. Only one shelter organization was eliminated due to ongoing concerns from a local veterinarian.

What benefits or impacts have emerged from this partnership for the university and the community?

Development of this service-based program emphasizing the rapidly evolving specialty of shelter medicine benefits K-State in scope and visibility, regionally and nationally with the public, academia, donors and prospective students. Students involved in the program are exposed to shelter medicine, have an opportunity to experience diverse animal welfare models, and obtain extensive, repetitive surgical experience. Participating students indicate they are more practice-ready upon graduation and are more likely to engage in philanthropic activity post-graduation. The animal welfare partners receive services, both surgical and medical triage, free of charge allowing them to raise the bar of care to animals under their roof and reallocate funds to maximize their impact at the local level.

What knowledge or intellectual property has been created from this engaged work?

The program is tracking cornerstone shelter organization metrics to document impact at the shelter level. Metrics of interest to humane organizations are live release rate, length of stay, and throughput. Improvement in these metrics support the mission of the organization, strengthen their efficiency, and position them to attract external funding from charitable sources. Current data demonstrates consistent and sustainable improvements as a direct result of the shelter/K-State partnership. In addition, a course impact study is being done to measure the effect on participation on students’ surgical skills, confidence and likelihood to volunteer.

Please summarize (one or two sentences) plans for publication or communication of this work.

Targeted journals for publication of this work are the [Journal of the American Veterinary Medical Association](#) and the [Journal of Veterinary Medical Education](#), respectively. Additionally, the shelter medicine intern Dr. Krissek (KSU DVM ’16) is studying the impact of declaw on aggressive cats. The mobile unit student employee Jason Banning (KSU DVM ’19) is collecting data to document the population effect of trap-neuter-release in a defined community region. These studies will also warrant publication targeted towards veterinary practitioners.