ESTABLISHING AND MAINTAINING A LOW-COST COMMUNITY SPAY/NEUTER CLINIC

By

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OVERVIEW OF SPAY / NEUTER.

It is thought that man has been civilizing for the past 12,000 years, beginning as nomads and following the seasons and the herds of wild animals. As early man cooked meals and cast off leftovers, wolf-like creatures tagged along scavenging what the humans discarded. The first dog domestication is estimated to have begun 9,000 years ago. In exchange for free food and the protection of humans, these primal animals evolved from camp scavengers to become early warning sentinels, and with their pack instinct, natural guardians.

The cat, on the other hand, is thought to be a much more recently domesticated animal. Experts estimate that approximately 4,000 years ago when huge settlements of ancient Egypt, with farming and granaries, created the concentrated rodent population that made easy pickings for Felis lybica, a northern Africa wild cat. To this day, it is the only variety that can be domesticated. Of importance here is that kittens of a tame cat, which grow up never touched by humans, revert to a non-domestic (feral) state. By four to five months of age, a feral cat is nearly impossible to redomesticate. This phenomenon of the cat’s first generation reversal to feral has a big impact on our efforts of population control. In contrast, dogs, which have 5,000 or more years of domestication and breed manipulation, born into feral conditions can be redomesticated far more easily.

Our livestock species began to be domesticated too - sheep, goats, cattle, horses, pigs, etc. – and early on, neutering (castration) was presumed to be practiced on these domesticated farm animals. Due to the exposure of the testicles, castration of male livestock was possible without anesthetics. Additionally, and of significance, is the fact that it was ascertained that the animal is better off when neutered at a very young age. The process was far less stressful on the patient, with less chance of complications. This early neutering practice is still in effect today; however, we have better equipment than what we might presume the ancients used.

Castration of the dog probably was deemed “unnecessary” therefore rarely done. It is of interest to note that the first report in the Journal of American Veterinary Medicine (JAVMA) of a dog castrated by a veterinarian using anesthetic and modern techniques was in 1915. It probably is not unreasonable to assume that male cats were sterilized at a much earlier date in time.

Due to the location of the ovaries, the neutering of the female of any species was impossible until the advent of anesthesia. The first recorded use of an anesthetic as we know it, was in 1842 when a physician used ether to remove a tumor from a man’s neck. It took a well-publicized jaw operation on October 16, 1846, performed in Massachusetts by dentist Dr. Morton, to firmly establish the practice of using ether to anesthetize a patient.

The spaying of female dogs and cats got a real boost in the mid-1920s with the development of Sodium Phenobarbital (a non-gas anesthetic). During that same era, an Ohio State University professor introduced a uterine retrieval hook-like instrument that now bears his name: the “Snook” hook. This device is a “must have” for veterinarians doing volume spays.

Very little neutering of dogs and cats went on during the depression and WWII years. The recovery years of the ‘40s saw a significant change in the status of pets. Be it in urban or rural areas, outdoor animals moved inside to become home companions and a part of the family unit. This love affair with pets, coupled with the growth of rural America into urban America, which took place from the ‘50s through the ‘60s, created a condition of too many puppies and kittens being born. Vaccines influenced longer-lived pets by protecting them from sweeps of natural deaths by disease. This pet population explosion sent animals to shelters and the resulting increase in euthanasia began to demand attention.
In early 1970s, the national movement and battle cry became Legislation, Education, Sterilization = LES. As a result, we began to see legislation enacted to encourage doing the right thing about pet overpopulation. Education at all levels was happening and results were being seen. Sterilization was happening and common. Early on, however, spay clinics had a bad reputation, and too often deservedly so. From the mid- to late-70s and forward, modern, well-run clinics were developed and evolved and were excellent at their work.

Since the 1970’s, a new generation of anesthetics, suture, and support equipment along with streamlined techniques, has produced astonishing surgical efficiency. A high volume of spay/neuter surgeries can be performed while assuring greater patient safety and less discomfort.

As we come to the end of the 90s, clinics or practices limited to well-animal services with emphasis on surgical sterilization (spay/neuter clinics) are becoming more commonplace. Our ability to provide sterilization with much greater efficiency allows us the ability to lower the cost to the general pet owning public, who will, in turn, use our services. As surgeons capable of prepubescent neutering of animals as young as 7 weeks of age, we provide temporary care givers a place to have their wards Neutered Before Adoption (NBA) which allows them reproductive control of all pets going to new homes.

The creative genius of the benevolent has generated many programs that additionally help the needy with financial assistance. In a program called Trap/Neuter/Return, very special and generally overlooked group of people, often working alone and in secret, brings in ferals for neutering. Their mission is to stop the breeding without exterminating our rodent control specialists.

One big negative in the effort to curb pet overpopulation is that none of these specialty spay/neuter clinics happen without some level of local veterinarian resistance. This resistance may range from moderate to unfathomable. It is embarrassing that a profession charged and oathed to relieve pain and suffering will stand in the way of doing the right thing. It is a fact, however, that the human resistance to change coupled with the shortsighted belief of disastrous financial impact to one’s self can detrimentally impact a sincere effort do the right thing.

The future of sterilization clinics is an exercise in thoughtful prognostication. There has been, and continues to be, work on alternatives to surgical birth control. Hope springs eternal and there are some “new” products available. One product used extensively in Europe, Delvostrone, is a synthetic progestin with no progesterone activity. It is a pituitary blocker of gonadotropin. It is an injectable and it renders dogs or cats, male or female, sterile for six months but must then be repeated. The Europeans love it. As a result, they do very little surgical sterilization. It is, of course, very safe!

Introduced in the USA, Neutersol, a zinc compound, is a product injected directly into the testicle without anesthetic. If you have to anesthetize, you might as well castrate. Test results indicated sterility in 24 hours and testicles shrunk in nine months, but there was still male hormone being produced. This product is currently on the market here in the USA.

Zonavax vaccine, manufactured by Zonagen, destroys the egg so no ovarian activity takes place to support the development of the egg. The development of this product was first reported in early 1990 and has yet to hit the market.

A new oral vaccine is especially aimed toward feral cats. Using genetic engineering and biotechnology, a veterinary student has altered a strain of Salmonella to sterilize the female cat from its food source. This is a very exciting concept.
In summary, while viable alternatives are on the horizon, surgical sterilization is very well established and accepted, and unless there is a great change in its convenience and cost, or a huge marketing push for some of these other new age alternatives, it will probably be the method of choice for some time to come.

**TYPES OF OWNERSHIP/SPONSORSHIP**

**Who is in charge** is a logical and important question. When a clinic begins to take shape physically (real estate), who signed the lease for the space and is therefore obligated to pay the rent; who bought the land for the future building; who is providing the cash needed to make your space a functional clinic; who is responsible for paying the costs incurred for the service provided, and who will set the fees that provide income for services provided?

Medical responsibility falls to the managing veterinarian since he/she is registered as the responsible party with the Department of Consumer Affairs. However, the managing veterinarian does not have to be the one who works the clinic. This leaves room for a friend/donor of the clinic to be the ongoing managing veterinarian who provides continuity while other veterinarians actually work the shifts.

Everyone involved with the project, from the Board of Directors to the membership, will be totally focused on the results and will have plenty to say along the way – often whether or not you want the input. Personal agendas and beliefs keep are bound to crop up.

Unless the owner is an individual veterinarian, all other arrangements are going to be combinations of individuals or groups forming partnerships and working relationships that somehow always depend upon a veterinarian in the equation.

Examples of **working arrangements** currently in place:

1. Individual veterinarian investor/owner/manager/mission director - the least complicated arrangement, as all are the same person; two veterinarians in partnership; a group of veterinarians as a partnership (not a very common situation).

2. Humane Society sponsorship contracts a veterinarian to provide the medical part of the operation of a freestanding clinic. I entered a year-to-year partnership like this in 1980 and it is still very much alive. We simply share in the gross revenue generated.

3. Daytime lease of space in an emergency hospital that would otherwise sit unused during the day. At the emergency clinic from which I operate one day per week, I pay $300 rent for each day’s use.

4. Shelter with on-site clinic hires a local veterinarian to come in to do the casework. Flexibility here is enormous – look at relief veterinarians in the area or hospitals with multiple veterinarians who may have personnel available to take outside hours.

5. Private shelter with on-site clinic hires full-time shelter veterinarian employee who does spay and neuter in conjunction with health care of the entire shelter. For further information on this arrangement, contact Association of Animal Shelter Veterinarians (AASV.) Bonnie Yoffe-Sharp, D.V.M., P.O. Box 10250, Palo Alto, CA 94303.

6. Government shelter (usually Dept. of Animal Control,) that has an on-site veterinarian and clinic. I am not a fan of this type of arrangement. Bureaucracy thwarts efficiency and cost-containment thus causing huge overhead. Power struggles and public demands are a constant headache. Artificially low fees and poor numbers production make for a huge shortfall which
must be covered from other government sources --- which always means either our taxes or fees in some way.

(7) Full service veterinary clinics that designate specific days as reduced fee days for neutering, or full service clinic that embraces low cost structure for all neutering with time set aside in which to do the work. Full service clinic trying to shift from full service to spay/neuter. Both of these situations are rare.

GETTING STARTED

In any community, from rural America with its mosaic patchwork of medium towns, hub cities and satellites, to large and ultimately mega-cities, a variety of needs and challenges are presented to those recognizing and committed to doing something about unchecked, unplanned litters. I will assume each of you here today has determined a need for a low cost neuter clinic in your area. Given that premise, here are a few guidelines you may find helpful in determining an appropriate facility size and the required number of weekly operating days needed to service your locale.

The first benchmark: A full day’s clinic minimum patient load is 30. Less than that is part-time. A superior operation is 45 – 60 per day. To have an effect on reducing excessive birthing, we are addressing the supply side by sterilizing, but we need to do significant numbers to (a) impact the surplus birthing, and (b) be remotely economically viable.

| 15 patients per day | ineffective |
| 20 – 30 patients per day | marking time |
| 30 – 50 patients per day | making an impact. |

A population base of 250,000 in a twenty-five-mile radius with the lion’s share within 15 miles will probably support a clinic two days per week. As the population base increases, so will the number of days the clinic can be open.

A population of one million will support a superior operation five days per week.

RESOURCES:

Money – no matter how altruistic and noble our cause, money drives the creation of the clinic and its ongoing operations.

What is your financial strength right now?
Did someone bequeath a substantial sum of money to be used for POP?
Has your group built up a healthy reserve of funds, i.e. $50,000 in an account?
Do you need to raise funds?
Do you have the financial strength and assets to secure a loan?

People – no project can be accomplished without coordinating the small contributions of a lot of people, and the huge contributions of a small core of people. Size up your human resources. Emphasize to all that your dream project must be run as a business.

Mission Statement – this is a real must. From time to time, through the course of building a clinic and the realities of the day-to-day operation (protocols, fees, dividing profits or covering losses), management’s resolve is tested. The more specific the focus on the objective, the easier it is for rational people to come together as one voice and to reach the group’s mission objective. Caution: Avoid the temptation to crossover and become a full service provider.
**Marshal support** within your own group. The more diversity you have available in work backgrounds of your group, the better. Ideally, have at your summons a complement of individuals with expertise in all facets of building a business. Get commitments and look to others outside your group who have made a positive impact in their work world; i.e., accountants, financial advisors, business administrators, attorneys, personnel managers, marketers, realtors, etc. Many of these may be found as the “significant others” within your active group.

Your **Customer Base** must be that segment of the population who can and will spay or neuter at a reduced fee from the going rate currently quoted in your area. I call these customers *the willing and able (but not at that price) middle-income families*. These people may not have in mind what a fee for a spay should be; but if quoted $100 for a cat spay, they just won’t do it. They don’t want to spend that much just to have an animal spayed. If, on the other hand, the quote is $35, the response will more likely be to schedule an appointment on the spot. Remember, every call is initially a pet owner willing to sterilize a pet.

The fact is that although sterilization is a common elective surgery, what many are willing to pay is around 60% less than the current across-the-country full-service hospital quotes. This mental dollar barrier creates a backlog of potential clients willing to do the right thing when they perceive the price is right for them. At many low cost clinic openings, the surgeon and staff are overwhelmed with requests because the financial impediment has been lowered!

In your planning and development, consider these additional customer bases, all of who need affordable sterilization services:

Animal shelters that fully understand and want to be able to move toward a neuter-before adoption (NBA) policy but are priced out at current fees. Shelters with an NBA policy in place are often desperate to find affordable services.

Foster caregivers who work to rear and find homes for their charges and adhere to the NBA policy.

Breed rescue groups (often the same people as foster caregivers) who dedicate themselves to saving their breed and understand the need to sterilize so a new owner doesn’t decide to breed a litter of purebreds “just one time.”

Caregivers who manage feral colonies or caregivers for just a few loosely owned neighborhood cats wishing to control reproduction but are averse to trapping and killing their charges. These people will often go to great lengths to “hide” their colonies should a “trap and destroy” solution be mitigated in their area. This group *must* be included in the POP solution!

Each of these groups can and will become a significant part of your customer base as the service becomes available.

**FACILITY CONSIDERATIONS:**

**Location** zoning: Zoning restrictions can limit where you can build or lease if you don’t already have a site. Locations for a volume business must have client appeal, i.e., not in a seedy area or the industrial/commercial part of town. Ideally, your facility should be easy to find with adequate off-street parking with easy in and easy out. Put your clinic near those who are most likely to use your services.

Local shelter: Humane/non-profit may have a space that could be utilized. This creates a built-in animal base. The public usually already knows location. Be careful here and objectively evaluate your facility’s current reputation and curb appeal. The public is sensitive to perceived disease
problems, over-crowding, noise, and euthanasia in a public shelter. Is there true compatibility here?

Strip mall/shopping center: This is rental space and avoids up front money for property and building construction. Leasehold improvements will be required to modify to clinic’s use.

Freestanding facility: This may be left in a will and is just waiting; otherwise, this is a pretty risky investment.

Mobile Clinic: A real specialty with another set of rules completely (in the addendum is a partial list of current operational mobile clinics and instructions as to how to order a complete listing.)

Size: Identify by name your needed areas: lobby, reception, wards, prep, surgery, laundry room, restroom, water heater, etc. and estimate the size needed for each. Keep in mind the American Disability Act (ADA) requirements.

You can figure your patient load will be 2/3 cats and 1/3 dogs with gender ratio of cats: 60/40 female/male and dogs: 66/34 female/male. The more rural your area, the more dogs you will see and the larger they will be. The more urban (apartment laden), the more cats you will schedule.

Three variables:

(1) Are outside runs available for large dogs; large dog housing takes lots of space? Does weather permit year-round use? Be sure the check the zoning! If you can use outside space, your inside square footage can be reduced and clinic noise controlled by moving the barkers outside.

(2) Do you expect to provide vaccines on a walk-in basis during open hours? It is a natural expectation. Offer well animal services only! Remember your mission!

(3) Are you providing for a mega city population base; i.e., 1M+ thus open daily 4 – 6 days/week capable of 40 –60 surgeries per day, or a small community and open as needed but still expecting a day case load at 15 – 20. Consider a range of square footage: minimal 1200 sq. ft. (30 ft. x 40 ft.) — you can do a lot with 2400 sq. ft. (60 ft. x 40 ft. space.)

- Lobby: You are going to need more space than you expect.

- Reception (work area of receiving staff) needs to be large enough – lots of counter top for clients to write on and space for 3 to 4 staff people to move around. Storage of records takes a lot of file cabinets. Don’t forget a copy machine, fax and credit card equipment. The lobby and reception combined can be 1/3 of your space if your total is 1200 sq. ft. If total space is more like 2400 sq. ft., the lobby is closer to 1/4.

- Prep area – this will require a central patient preparation station and cabinets on both sides for record writing, supply holding, with double basin sink for pack prep and layout. This area will possibly provide an autoclave location and post surgical observation of reviving patient. It should be minimally 12 ft. wide X 12 ft. long.

- Surgery: biggest decision is one table or two-patient capability. You will need a place for patient recovery and observation for 5 to 10 minutes post removal from surgery table. You need a counter to hold items used by DVM (not counting the instrument tray,) such as gloves, packs, suture materials and bottles of sterilants. Minimum for one table: 10 ft. x 10 ft. Minimum for two: 10 ft. x 13 ft. Both those numbers, 10 ft. x 10 ft. and 10 ft. x 13 ft., refer to the clear area inside where base cabinets sit, which themselves need two feet per wall used.

•
• Observation window between prep and surgery area very helpful.

• Consider an observation window for clients to watch surgery. This adds incalculable credibility to the standard of the work performed at the clinic.

What will the cost for rental space most likely be? Very variable, but as a guide: Rent and CAM (common area maintenance) under $1.00 per sq. ft. is pretty good. One dollar to $1.30 is the middle range. If it is over $1.50, there better be some big plus factors to justify the added cost, not the least of which could be that it is the only space available.

**ECONOMICS:**

*Start up costs:*

**Facility development:** It is unusual for someone to purchase property and build a freestanding clinic. Most often there is a rental space that needs adaptive reconfiguration to work for your purposes. To do that will take capital outlay, known as Leasehold Improvements; i.e., improvements to make the space work for you. This expense is hugely variable. Fifty to one hundred thousand dollars will cover most at today’s figures. In this figure, I include base cabinets, cupboards, shelving, etc.
**Equipment:** Equipping your clinic with its medical equipment; i.e., the one-time purchases of your day in and day out non-consumable equipment, is the fun part.

The following equipment list will give an idea of what it will take financially to equip a spay and neuter facility. The prices listed are current and approximate as of August 1998. Keep in mind when purchasing large pieces of equipment, there is always room for discounts and deals when buying a number of items from one distributor. Many of these items can be purchased reconditioned (used) and that will reduce the initial price considerably in most cases.

<table>
<thead>
<tr>
<th>Equipment Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery Table-Flat top (60&quot; hydraulic Lift) *</td>
<td>$1,600.00</td>
</tr>
<tr>
<td>Surgery Light (Single/Ceiling/Reflector) *</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Clipper with #40 Blade (chord)</td>
<td>$140.00</td>
</tr>
<tr>
<td>Clipper with #40 Blade (cordless)</td>
<td>$200.00</td>
</tr>
<tr>
<td>Thoracic Positioners (small plastic) 2 @ $25.00</td>
<td>$50.00</td>
</tr>
<tr>
<td>Thoracic Positioners (metal) 2 @ $87.00</td>
<td>$174.00</td>
</tr>
<tr>
<td>Scavenging System for Gas Anesth.</td>
<td>$750.00</td>
</tr>
<tr>
<td>Instrument Stand *</td>
<td>$100.00</td>
</tr>
<tr>
<td>Wet Table (with or without legs)</td>
<td>$1,295.00</td>
</tr>
<tr>
<td>Utility Cart</td>
<td>$180.00</td>
</tr>
<tr>
<td>Examination Table (Pedestal) *</td>
<td>$500.00</td>
</tr>
<tr>
<td>Stool (revolving – no back)</td>
<td>$110.00</td>
</tr>
<tr>
<td>Walk-on Scale</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Pediatric Scale</td>
<td>$75.00</td>
</tr>
<tr>
<td>Stethoscope</td>
<td>$25.00</td>
</tr>
<tr>
<td>Instrument Tray (cold sterilization solution)</td>
<td>$35.00</td>
</tr>
<tr>
<td>Anesthesia Stand - minimum of 2 @ $1780.00*</td>
<td>$3,540.00</td>
</tr>
<tr>
<td>Anesthesia Vaporizer – minimum of 2 @ $2200.00*</td>
<td>$4,400.00</td>
</tr>
<tr>
<td>Oxygen Connectors, hoses</td>
<td>$250.00</td>
</tr>
<tr>
<td>T-tube set</td>
<td>$136.00</td>
</tr>
<tr>
<td>Anesthesia Mask (w/diaph) 4 @ $35.00</td>
<td>$140.00</td>
</tr>
<tr>
<td>Ap-Alert resp. Monitor *</td>
<td>$325.00</td>
</tr>
<tr>
<td>Autoclave</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Cages (5 unit assembly-Shoreline Steel)</td>
<td>$1,875.00</td>
</tr>
<tr>
<td>Cages (9 unit assembly-Shoreline Steel)</td>
<td>$3,695.00</td>
</tr>
<tr>
<td>Cages (12 unit assembly-Shoreline Steel)</td>
<td>$4,627.00</td>
</tr>
<tr>
<td>Omni Cage (Squeeze cage)</td>
<td>$90.00</td>
</tr>
<tr>
<td>Double Locking Cabinet (for control drugs)</td>
<td>$250.00</td>
</tr>
<tr>
<td>Washing Machine</td>
<td>$423.00</td>
</tr>
<tr>
<td>Dryer</td>
<td>$356.00</td>
</tr>
<tr>
<td>Refrigerators (2) (foods must be separate from drugs)</td>
<td>$1600.00</td>
</tr>
</tbody>
</table>

*One additional needed if you have a two-table surgery

$32,141.00
The perfect surgical pack as used by Animal Birth Control contains only the essentials yet can be used for a 2-pound kitten as well as a 100-pound Rottweiller. Compared to many who compile a complete spay pack with 15 instruments, our packs contain only the 8 essential instruments.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Most suppliers</th>
<th>Universal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Snook spay hook 8”</td>
<td>$25.00</td>
<td>$15.00</td>
</tr>
<tr>
<td>1 Rochester Carmalt 6 ¾” straight</td>
<td>42.00</td>
<td>19.00</td>
</tr>
<tr>
<td>3 Crile Forceps 5 ¼” straight</td>
<td>72.00</td>
<td>39.00</td>
</tr>
<tr>
<td>1 Adson Brown thumb forceps 4 ¾” 1X21 (teeth)</td>
<td>29.00</td>
<td>16.00</td>
</tr>
<tr>
<td>1 #3 Scalpel handle</td>
<td>7.50</td>
<td>6.00</td>
</tr>
<tr>
<td>1 Olsen Hager Needle holder 6 ½” high-grade</td>
<td>100.00</td>
<td>55.00</td>
</tr>
<tr>
<td>1 Huck Towel 18 x 33 x (3x ¾”)</td>
<td>2.35</td>
<td>2.35</td>
</tr>
<tr>
<td>1 Drape 24 x 30 x (5x ¾”)</td>
<td>8.60</td>
<td>8.60</td>
</tr>
<tr>
<td>Suture needles of choice &amp; scalpel blade</td>
<td>2.00</td>
<td>2.00</td>
</tr>
</tbody>
</table>

$288.45                                        $162.95

Note: Universal Surgical prices as of 08/05. This company supplies excellent instruments, offers excellent pricing and is very supportive of spay/neuter. They can be reached at sales@universalsurgical.com and 1-877-587-6278.

Many good German-quality instruments are available but never consider using cheap instruments. They just don’t hold up. I have good instruments that have been in daily use for 22 years and are still reliable.

Universal Surgical Instruments in Glen Cove, New York, 877-587-6278, is a reliable source of small surgical hand tools in all price ranges. Their pricing is competitive to the market and they are worth a call for sure.

We run 15 packs in our rotation. Of course we need quite a few extra drapes to accommodate rotation and washing; i.e., 45 small drapes (18” x 33” with 3” fenestration) and 20 large drapes (30” x 30”) with 5” fenestration for large dogs, pregnant cats, etc. We keep a large supply of huck towels to wrap the individual packs.

This is a very simple pack. The tendency is to have far too many instruments in a pack than are truly required. When asked why, the answer invariably is "I want to be prepared." For those times, just open another pack and double your instruments. Scissors are unnecessary in a routine spay. Your suture cutting is done with Olsen Hagar Needle holders, which have their own built-in scissors.

Some resourceful clinics have obtained equipment at a reduced cost or free from hospitals or veterinarians buying new equipment. Consider putting a person or committee of three in charge of finding the needed equipment. Visit a variety of existing neutering clinics, even if you have to fly/drive out of state to do so.

Note: Gifts from human hospitals are often dinosaurs and are, in the end, no favor. Examples: lights, anesthetic machines, incubators, monitors of any kind. Big human stuff is just not compatible with small animal clinic needs.

Drugs & Consumable Supplies: These are of relatively minor cost to stock. The three areas concerned are: medical, cleaning, and office. For budgeting purposes, estimate $3,000. That will buy a lot of supplies. Don’t be talked into buying bulk. To start, buy the bare minimum. Product can be ordered one day and received the next.
**Daily Expenses:**

**Daily Overhead (fixed costs):** These include the rent, insurance, interest, taxes, telephone, and to some extent, utilities. Divide the monthly dollar amount by the number of days you are open to determine what it costs to open your door. You are in line @ 10 to 15% of revenue.

**Consumables:** This is what you use in the course of the day’s operation. There is considerable difference depending on: (1) buying right, (2) using products that do the job at the least cost, (3) judiciously and conservatively using all consumables, and (4) reusing wherever possible.

*Animal Birth Control* actual cost of materials and supplies for surgery as of 1/05:

<table>
<thead>
<tr>
<th>Item</th>
<th>Dogs (male or female)</th>
<th>Queens</th>
<th>Toms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical card</td>
<td>$0.01</td>
<td>$0.01</td>
<td>$0.01</td>
</tr>
<tr>
<td>Pre-op in (ace/atropine)</td>
<td>0.10</td>
<td>0.24</td>
<td>0.24</td>
</tr>
<tr>
<td>Telazol (anesthetic soln.) 30# dog 0.3cc x 50¢/0.1cc</td>
<td>1.50</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Isoflurane 3¢/min.</td>
<td>0.60</td>
<td>0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>Prep, scrub &amp; disinfectant</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
</tr>
<tr>
<td>Surgical Gloves 40¢/pr ÷ 5 = (reuse)</td>
<td>0.08</td>
<td>0.11</td>
<td>NA</td>
</tr>
<tr>
<td>Surgical blade 21¢/ea. ÷ 5 = (reuse)</td>
<td>0.04</td>
<td>0.04</td>
<td>NA</td>
</tr>
<tr>
<td>Sterile 3 x 3 sponges @ 2¢ ea.</td>
<td>0.08</td>
<td>0.04</td>
<td>NA</td>
</tr>
<tr>
<td>Suture Material (stainless steel &amp; nylon)</td>
<td>0.02</td>
<td>0.02</td>
<td>NA</td>
</tr>
<tr>
<td>Needles (syringe &amp; suture)</td>
<td>0.30</td>
<td>0.20</td>
<td>NA</td>
</tr>
<tr>
<td>Drape $7.00 (150 uses) =</td>
<td>0.05</td>
<td>0.05</td>
<td>NA</td>
</tr>
<tr>
<td>Receipting/Certificates, etc.</td>
<td>0.10</td>
<td>0.10</td>
<td>0.10</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td><strong>$2.92</strong></td>
<td><strong>$1.00</strong></td>
<td><strong>$0.58</strong></td>
</tr>
</tbody>
</table>

Average numbers at other clinics: $6.50 $4.00 $1.00

Now you have your daily overhead and consumable costs to do a procedure.

**Labor:** This cost is the big one. It will be 1/2 again all your other expenses combined, and perhaps more. Now you become a personnel manager dealing with some very different personalities whose value will vary greatly. Currently the veterinarians are ranging from $30—$50 per hour; para professionals from $8—$14 per hour.

A benchmark day: A reasonable, do-able day by “Dr. Skillful” with the ratio of pets shown being typical for most spay clinics:

10 dogs: (I don’t differentiate between male/female and large/small.) Dr. Skillful can do four per hour average thus 2 ½ hours for the 10 dogs.

15 Queens: Average at 6/hour; therefore, 2 ½ hours for 15 queens.

5 Toms: Allow ½ hour total.

30 spays and/or castrations for this day took 5 ½ hours of surgery.
What are you going to expect to pay for that kind of day? Again, as a benchmark with a veterinarian plus staff of three:

The Veterinarian $270.00
3 Technicians (8 hrs) = 24 hrs x $10.00 (average) $240.00
$510.00
Plus Labor burden ≅ 12% ($510 x 1.12) = $570.00
(FICA /W.C./U.I./Medicare)

THE VETERINARIAN FACTOR

**Finding the right veterinarian** (DVM) may well be your biggest challenge, but if you don’t have one committed and working, the clinic is non-functional! Only a DVM can do the surgery. State law requires licensure of DVMs practicing within the state. This is necessary to protect the public from having just anyone hanging up a sign and “practicing”.

Herein lies one of the problems. Veterinarians cannot come to your location if they are not licensed in your state, even if both of you are in total agreement of the work details. Your search then becomes principally within your state. Place a classified ad in your State Veterinary Medical Assn. publications. Serious responses are confidential!

One of the best sources of spay/neuter veterinarians is often the relief or retired veterinarian. They are obviously without long-term commitments and are willing to respond to an opportunity when it presents itself. Veterinarians do not typically peruse the local newspaper classifieds. Other possibilities include contacting the AVMA at (800) 248-2862 and place an ad in JAVMA. The AVMA also offers a placement service and would advise you of available veterinarians at the time. When you are ready to go public, put the word out to drug representatives. They have daily contact with the profession and often know if someone is unhappy and looking to move on. Get a list of the veterinarians in your area and contact them through direct mail. The AVMA directory lists all licensed veterinarians by state and city.

The whole concept of a surgical specialty doing high volume spays and castrations is foreign to practitioners. The traditional concept of full service practice is simply assumed from the first day of veterinary school; therefore you have a pool of potentials that are multi-disciplined but only average surgeons. Most have never felt the need to push their skill level to complete a simple spay or castration procedure in a more timely manner.

And, unfortunately, we are a profession that has many individuals who look with disbelief at someone who would be content just doing spay/castration. Couple that type of professional rejection with the near collective hysteria of a spay/neuter clinic in their backyard and you can see that it takes a special person to come out and embrace a career move of this magnitude. A spay clinic is often viewed as an economic threat to the established clinics.

Who are your most likely candidates? First of all, who is not: New or recent graduates! They have spent, on average, eight years of college preparing themselves for all disciplines of veterinary medicine. They want to experience it all...as well they should. If they don’t go into general practice, they will be unable to secure firmly in their minds the knowledge gained at veterinary school. They need that experience, usually in multi-veterinary practices. It’s their internship! The fact is that they don’t remotely have the skill to do the work needed. Many have only done one or two spays ever! An hour per dog and 45 minutes per queen is probable. And because of their insecurity that number won’t improve very much without excellent guidance.
Your candidates most probably are practitioners who are out of school 15+ years. The bright light of full service may now have become more of a low-level glow. Life style changes, geographic changes or career changes will cause the DVM to look at new opportunities. To some of them, an all-surgical practice, addressing the altruistic need to reduce the pain and suffering of being born to die, has an appeal. Just not having to talk to clients is a plus for some. Also attractive are shorter hours and/or flex days and NO night calls. Volume permitting, the flexibility would be four or five days per week starting surgery at 8:00 a.m. and finishing by 1:00 or 2:00 p.m.

**Developing the Specialist** veterinarian is an on-going effort. Surgery has a mystique about it and few can do it well. It can never be done well without an incredible amount of practice. There are no short cuts to practice except some serious tutoring by someone already skilled. There is a lot of hand/eye coordination required. Proper technique demands coordinated positioning and placement of hands and instruments. If unsupervised, the emerging surgeon can develop terrible bad habits without even being aware of them. The most common impediment to gaining speed by most surgeons is timidity. They perform surgery scared: always fearful that something bad will happen. In full service hospitals, spays and castrations are, at best, but a few a day, therefore the need to streamline the procedure is of minimal importance to them. A few veterinary surgeons will make it a point of pride and will develop their skills very well. What this all means to you is that there will be a huge variance in productive capacity of willing applicants.

So whom do you choose? Hopefully, you will have several applicants. Look at attitude, aptitude and then the apparent willingness and desire to become very good at this new work. Talk at length about each other’s expectations. If you identify a candidate with good surgical skills, offer training to perfect their spay/neuter techniques. I distribute a DVD on my Quick Spay Technique for an overview of high volume spay/neuter and also conduct hands-on training for veterinarians wishing to improve their skills.

**Equitable and production-based payment** is the objective. Whether your search is through word of mouth or classified ads, make it clear you can and will pay well for a veterinarian capable of doing the job. Excellent surgery results with expected production will be rewarded! Let’s say surgical cut time is 8:00 to 1:00 or 2:00. That means a 5 or 6-hour day with a $270 per day base. From 8:00 to 1:00 is 5 hrs or $54.00 per hour. From 8:00 to 2:00 is 6 hours, or $45.00 per hour. My clinics run with the expectation of the veterinarian to work straight through the shift until all surgeries are completed.

Your expectation is at least 30 surgical patients per day. At first your veterinarian may have to work 8:00 to 4:00. To do this, the example of 30 patients (see example under Economics) is now taking eight hours and thus drops the hourly rate to $38.60. But the veterinarian realizes this and is in a learning curve improve the skills so as to finish in 5, not 8 hours and getting paid for production commensurate with the skill level developed.

Now let’s go to the next step where the 30 get done by 1:00 routinely. Suppose your waiting list for surgeries is out there a week or more. Why not schedule bump your scheduled appointments to 40? The veterinarian muses, “but why should I?” Your answer: you are going to pay extra for each surgical unit after the 30. The figure of $10.00 per unit is attractive and worthwhile and everyone involved wins.

**SUPPORT STAFF**

**Determining the number needed** is dependent on the expected number of days your clinic will be open. Assess your customer base and the size of the facility. Have a best case/worst case scenario. When you hire, be clear that a new business adhering to sound economic principals could require a change in clinic hours and days to make the economic picture work. The staff is a
major influence on the development of the clinic mission. The client must leave delighted with the whole experience.

Examples that are currently working:

1. Small shelter clinic within shelter itself. This clinic sterilizes its own adopted animals and accepts some public appointments every morning. Because their available veterinarian will come in at 6:00 and work until 8:30, or may come in and work from 8:00 to noon, he/she can then go to on another job.

Support staff

- shelter personnel make appointments (already in place.)
- Reception also assists in surgery
- Two surgical assistants – part timers.

Shelter clinic scheduling surgery for 1 or 2 days per week with a team covering a 9 to 10 hour day with surgeon cutting 6 to 7 hours. They complete thirty to sixty cases per day.

Support staff

- Shelter personnel again do the scheduling
- Shelter person collecting, receipting during the 1-hour window for drop-off.
- Entire surgical team of 3 technicians receives and houses the patients.
- Same three support the veterinarian and clean, sterilize, discharge the patients through the day.

This level of support is very do-able but the days are long and require maximum effort. This schedule can work for 1 to 3 days but longer periods of time may cause burnout. Note: four 10-hour days is another very do-able and a common enough approach but you will need 4 to 5 support members.

2. Large clinic with projected usage of 5 or 6 days per week. Protect yourself: 75% of staff will need to be cross-trained to do each other’s job. Unfortunately, absenteeism for any number of reasons is a fact of life.

Support staff requirements: 5 to 6

- Reception 2
- Surgical team 2
- Float (helps where needed) 1
- Manager (trainer who is also totally cross-trained) 1

3. Another guideline:

<table>
<thead>
<tr>
<th>Caseload:</th>
<th>Staff:</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>DVM+2</td>
</tr>
<tr>
<td>15-25</td>
<td>DVM+3</td>
</tr>
<tr>
<td>25-35</td>
<td>DVM+3</td>
</tr>
<tr>
<td>35-45</td>
<td>DVM+4 or 5</td>
</tr>
<tr>
<td>45-60</td>
<td>DVM+5 or 6</td>
</tr>
</tbody>
</table>
Depending on the veterinarian, he/she is the key teacher and overseer of staff up to the 25 per day level. For 30 and up you will need 2 well-trained and experienced technicians to support you and to train new staff. Some states have RVTs (registered veterinary technicians). Clearly they are ideal and come in as professionals. If an RVT is not available, you simply and frankly headhunt someone with excellent veterinary experience. Make someone you know to be excellent a better offer than they currently have.

**Salaries and benefits** along with a pleasant, well-equipped place to work is a must to hire and keep good employees. Benefits: some degree of flextime will sometimes make a difference. A definite plus for most is the standing, working lunch which means working straight through the shift thus getting off earlier in the day. This is legal in California but make sure you’re your labor laws and the requirements to put this schedule in place. Provide four smocks per year for cover up. Offer free vaccines for their personal pets. Offer products that might be over the counter to public (flea, tick, deworming, etc.) at cost. The biggest benefit of all is health policy availability for the employee. Share premium costs at 50:50 or 60:40, or whatever your state requires. Be creative with ideas. Ask what would help the prospective employee. Improvise.

**FEES (AND OTHER DETAILS):**

You and your consortium have created a benevolent, mission-driven business. The place to work, all the equipment in place, all the supplies and your surgical team are in place and ready to go. We still have one small detail to take care of: How do you determine your fees for services, fees that will power the engine of this business?

Your objective and what drives you is getting as many dogs and cats neutered as fast and as safely as possible. You want your fees at a level that will encourage the average person to be moved to action. However, you must accept that you can never get the fee low enough to ensure that everyone will use your service. We now know that there are those who will not make the effort to put the dog in the car or make the trip to the clinic even if the services are free!

There are three business realities: The clinic operates either *At a Loss, at Break Even or For Profit.*

- **At Loss** is easy and is described as when your expenses are greater than the income collected. Under these conditions, to keep your doors open you must depend upon an outside source to cover the shortfall and to pay your obligations. Should you lose that resource, the consequences are immediate.

- **Break even** is difficult to target; i.e., income exactly equals expenses. Seasonal volume variations, the high employee expenses and production ability of your surgeon all have a major affect on the bottom line. Break evens may occur by taking the business profit to fund or subsidize (co-payment programs) for the truly needy or be used for education and advertising! You still end up non-profit but you are in control! How break even as a corporation and/or “non profit status” (503c) is treated by the tax codes is an entirely different subject!

- **For Profit** makes sense because it provides for meeting your obligations with the profits redistributed based on who is in charge as mentioned above; i.e., individual, veterinarian, non-veterinarian, philanthropists, partnership or any combination of individuals or corporation and/or groups pooling resources and energies.

No matter how the business was put together and who is in charge, be true to the economic realities. Come to the establishment of the fees for services based on what your clinic can
generate each daily shift it is open. And be open as much or as little as the demand calls for in the area supporting the clinic. It makes no sense to be open four days per week to do 60 patients when the same work can be done in two days.

Under the discussion of veterinary factor and support staff, I gave quite a number of check points to use when determining your labor needs (DVM + ___ staff) for various patient loads (see page 13). You will need to fill in the numbers for your own situation. Under Economics and Consumables & Labor, I provided a benchmark day do-able by “Dr. Skillful” and a staff of 3 (see page 10.) Let’s take those numbers of patients and apply some fees (charged to the general public:)

**Example 1:**

**Fees:**
Dogs $30 average ($20 - $40 for small to 60# large)
Queens $20 – no additional for heat or 1st 3 weeks of pregnancy.
Toms $15

**Surgical Revenue:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogs</td>
<td>10</td>
<td>$30</td>
</tr>
<tr>
<td>Queens</td>
<td>15</td>
<td>$20</td>
</tr>
<tr>
<td>Toms</td>
<td>5</td>
<td>$15</td>
</tr>
</tbody>
</table>

Total: 30 patients $675

**Expenses:**
Earlier labor example to do this caseload (page 10) $570
Average cost of materials & supplies (page 10): $130
Daily overhead: (Estimated fixed costs) $200
Miscellaneous (there is always something) $100

Profit or <loss> for day $<325>

**Vaccine Revenue:**
(50% will need $15 worth of vaccines) 15 x $15 = $225

Profit or <loss> for day $<100>

**Example 2:**

**Fees:** (The only variable to change)
Dogs $40 average ($30 - $50)
Queens $30
Toms $20

**Surgical Revenue:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogs</td>
<td>10</td>
<td>$40</td>
</tr>
<tr>
<td>Queens</td>
<td>15</td>
<td>$30</td>
</tr>
<tr>
<td>Toms</td>
<td>5</td>
<td>$20</td>
</tr>
</tbody>
</table>

Total: 30 patients $800

**Expenses:** same as example #1 $1000
Profit or <loss> for day $<200>
**Vaccine Revenue:**
(same as example 1) $225

Profit or <loss> $25

This example is close to your break-even point and does not include advertising of any sort; e.g., yellow pages, newspaper, radio or T.V.

**Example #3:**

**Fees:** (same as #1)

**Surgical Revenue:**

The variable here is the team has done an **above** average day:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogs</td>
<td>15 x $30</td>
</tr>
<tr>
<td>Queens</td>
<td>20 x $20</td>
</tr>
<tr>
<td>Toms</td>
<td>12 x $15</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td>47 patients</td>
</tr>
</tbody>
</table>

**Expenses:**
Same as Example 1 plus = $1000
*consumables now $57 more (17 more patients)* $57
*Premium paid DVM for “Dr. Super-skilled” (17 x $5)* $85

$1142

Profit or <loss> <112>

**Vaccine Revenue:**
*(50% will need $15 worth of vaccines)*

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>23 x $15</td>
<td>$345</td>
</tr>
</tbody>
</table>

Profit or <loss> $233

With this pattern, you can plug in your own numbers and churn out results for as many variables as you wish. This exercise will be very helpful in creating your business plan.

Ponder the forthright approach, if you choose to charge less than the cost of the surgery. Two northern California clinics have signs in their lobby that make it clear the cost is greater than the fee and that (my words) this is made possible through the (a) generous gifts of our membership, (b) generous $50,000 anonymous gift, (c) generous corporate donation by XYZ Inc.

A client may be shopping for a dog spay, and ask “what will it cost for my 40 lb. Golden Labrador female to be spayed?” The cost to the client may be only $20, but the client should be informed e.g. “the cost is $45.00 but through the generous... etc., .............. our minimum fee would be just $20.00. Of course, if you can afford a bit more, it would help conserve our benefactor’s donation to help more who really need the assistance.”


**The paperwork:** Considerable paperwork is required to satisfy everyone’s need to know and to avoid foul ups. This paperwork includes:

- Appointment systems
- Receipting & Financial reconciliation
- Billing
- Medical record of patient – be complete
- Cage, and animal & record correlation
- Surgical Log
- Controlled substance log
- Drugs & supplies order list
- Financial records
- Banking

Set your mind to the fact that paperwork is a fact of life and you either spend time completing it, or hire someone to do it for you. Again, it’s all economics.

Your work to establish a low-cost high-volume spay/neuter clinic will be exhausting, frustrating and sometimes overwhelming. But the satisfaction from accomplishing your task and the help you know you are bringing to your community makes every bit of it worthwhile.

Good luck!