

# Medical Management Techniques to Save your Sanity and Streamline Your System

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The onslaught of animals can be unnerving, especially when kitten season hits and every cardboard box is a potential landmine of precious poop producers. Learn how to evaluate your shelter's programs with a focus on defining bottlenecks and reaching and maintaining capacity for care. This discussion will highlight strategies to maximize efficiency, decrease length of stay and increase life-saving capacity using an active case-based example.

## 5-Steps to Optimizing Shelter Capacity

1. Identify the Bottleneck(s)
2. Make the Most of the Bottleneck
3. Reset other Departments to match the Bottleneck
4. Improve Bottleneck Capacity
5. Reassess

### Step 1: Identify your Shelter's Bottleneck

Let's think of each sheltering organization as a manufacturing plant of darling perfect healthy pets and each step from intake to outcome are departments within your manufacturing plant. If this is the case, let's evaluate each department for capacity.

**Capacity** is defined as the number of animals that can be produced or managed within a department. Examples of big picture departments may include Intake, Surgery, Behavior and Positive Outcome (Adoption, Transfer, etc). When selecting a department to evaluate, it must be a **dependent department**, meaning the animal **MUST** pass through that department prior to outcome. So you wouldn't add something like grooming unless you require all pets to be groomed prior to outcome. A **bottleneck** is the department with the least capacity. In this example, we will use numbers of dogs and cats per day per department.

The first step is to assess the capacity of each dependent department; Intake, Surgery, Behavior and Positive Outcome for this example.

#### Shelter Example: Average number of pets per day

#/day	Intake	Surgery	Behavior	Positive Outcome
Dogs	2.8	0.7	1.8	2.6
Cats	2.8	2.1	-	3

In this example, the bottleneck is the Surgery department. This shelter is only able to

provide surgical procedures for less than 1 dog and 2 cats per day even though all other departments are operating at a higher capacity. This is an apparent bottleneck. It's the dependent department with the lowest capacity in the shelter.

## Step 2: Make the Most of the Bottleneck

After you've identified the dependent department with the least capacity, how do we make the most of it? Realize that by definition, a dependent department requires the animal to pass through it to reach outcome. So by definition, the greatest capacity of the ENTIRE organization is that of the lowest capacity department, the bottleneck.

### Shelter Example: Making the most with the least

With Surgery identified as a bottleneck, we had to figure out a way to *immediately* affect department capacity and make a plan for what we could do to improve capacity *long term*.

IMMEDIATE CHANGES:

**Volunteers/Externs:** Cost \$0

**Prioritizing Surgeries:** Cost \$0

**Open Selection:** Cost \$0

**Outsource Surgeries:** Cost minimal compared to cost for extended care in shelter.

LONG TERM CHANGES:

**Surgical Set-up:** 2<sup>nd</sup> anesthesia machine, surgical table, monitor. Cost \$5,000.

**Staffing:** Hire additional surgical staff. Cost \$30,000.

## Step 3: Reset other Dependent Departments to match the Bottleneck

Yep, that's right! Slow your departments with greater capacity to that of your bottleneck. If increasing your life saving capacity is truly the goal, you must slow your ENTIRE organization's capacity to the department with the least capacity. Don't fret!!! This is temporary and a necessary reset to get your dependent departments in sync.

### Shelter Example: Reset the System

Give other departments the ability to help the bottleneck. We all have a common goal, increase life-saving capacity! Yet, we often operate in our own department with little understanding of what's happening functionally in another.

#### Intake

- **Managed Intake:** 52-60% of the *scheduled* owner surrenders don't show or cancel their pre-surrender appointment. They find an alternate option.  
Cost \$0.
- **Intake Diversion:** An additional 22% of scheduled intakes can be diverted with education on provisional resources.  
Cost Negligible. Staff time to manage a resource list, counsel, etc.

## Step 4: Improve the Capacity of the Bottleneck Department

You are NOT stuck at bottleneck capacity forever. The bottleneck limits the ability to increase life-saving capacity. We have a choice; ignore the Surgery bottleneck and allow pets to stack up in the shelter, increase the density at which we stuff them together in kennels, increase the frequency at which we treat and quarantine kennel cough, URI, diarrhea, etc., etc., Or... figure out how to improve the bottleneck department. While we've effectively reset our system by completing Step 3, now we want to keep moving forward and get back to our goal of increasing life-saving capacity.

## Shelter Example: Improve Bottleneck Capacity

For our shelter, we knew that an additional trained staff member to help with surgical flow would be a huge! In 2016, we expanded our surgical suite by adding a second surgical table, anesthesia machine, and monitor. We also increased our Veterinary Assistant from part-time to full-time and hired a part-time LVT.

### MEASURED EFFECT:

Length of Stay (Days)	Step 1 Initial	Step 2 Increase Volunteers Prioritize Surgery Outsource Surgery	Step 3 Managed Intake Intake Diversion	Step 4 Surgical Equipment Staffing
<b>Cats</b>	32.5	19.1	18.4	8.2
<b>Dogs</b>	12.8	10.5	9.0	3.9
<b>Total Cost</b>		\$0	\$0	\$35,000

## Step 5: Reassess

Why? Because your bottleneck can change! If you get really good at making the most of your bottleneck department, you may actually improve that department's capacity so it is no longer the bottleneck. So, periodically... go back to Step 1 and start over. Reassess.

## Shelter Example: Reassess

### 2016 - New Capacity Assessment

#/day	Intake	Surgery	Behavior	Positive Outcome
<b>Dogs</b>	2.2	3.5	0.8	2.1
<b>Cats</b>	2.6	5	-	2.5

### New Capacity Assessment:

In the new assessment we can see with the addition of surgical staff members, volunteers and equipment, surgical capacity has more than tripled. Surgery can more than handle the current intake capacity and is ready for increased intake demand that often comes with spring and summer.

### There was a larger change in Behavior Assessments...

**What happened?** Near the end of 2015 our Behavior Coordinator stepped down and volunteers were left completing assessments. The capacity to complete assessments dropped.

**What did we do?** We started the 5-Step Process again. Only this time, instead of resetting

all other departments to the capacity of Behavior, we actually made Behavior a non-dependent department. It no longer factors into our overall capacity. In other words, we do not require behavior assessments in order for a pet to reach Positive Outcome. Consider what would have happened if we continued operating with a new bottleneck in the Behavior Department.

## Shelter Example: What about the numbers?

The capacity numbers in our current example are from a small shelter with an annual intake around 2200. The difference in capacity measurement is sometimes only a few decimals, but this is significant. Let's consider what capacity looks like for a similar shelter but 10 times as big.

#/day	Intake	Veterinary Services	Behavior	Positive Outcome
<b>Dogs</b>	28	7	18	26
<b>Cats</b>	28	21	-	30

For every day in the example of a larger shelter, they fall behind 21 dog surgeries, and 7 cat surgeries. EVERY day they are behind a total of 28 procedures and that becomes additive to the next day. At the end of a 5-day workweek, that translates to 140 procedures!!!

## Summary

Did we accomplish our goal of increasing life-saving capacity? Yes! By making these changes we reduced our length of stay by 3.5 times. This means we now have the ability to take in 3.5 times more animals while maintaining the same daily average number of animals in the building as long as we can maintain our capacity for care in all departments. This also means our shelter does not "feel" anymore full but has the potential to help many more animals annually without sacrificing their quality of care or risking staff fatigue...increased life-saving capacity.

We now have animals that are happy and healthy. We are better able to serve the community through quality adoptions but also supporting owners that must surrender their pet. Pet owners who fall on tough times and feel like they have no other option but to surrender their pet may feel judgment and suspicion from shelter staff. In reality, most pet owners who reach this decision do not do it lightly. We've gone from overworked, over stressed, pet-loving personnel to a more welcoming, compassionate environment focused on customer service rather than customer suspicion.

For shelters that are experiencing overcrowding, assessing bottlenecks can result in taking in just as many animals, or even more, while housing and caring for less animals at any one time. These changes are fantastic for animal care, but also play a huge role in staff morale. Removing or reducing the strain of overcrowding relieves stress for animals but also staff! The morale and contentment of your team soars as they shed the feeling of helplessness and realize managing bottlenecks and resulting length of stay directly makes and impact on animal welfare. It increases your life-saving capacity.