

The Magic of the Space-Time Continuum: Length of Stay and Capacity for Quality Care

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Introduction

Length of stay (LOS) is increasingly recognized as a critical factor in shelter management, with implications for animal health, well-being, sheltering costs, and ultimately a shelter's capacity to save lives. Multiple studies have identified length of stay as the most significant risk factor for illness in U.S. shelter dogs and cats.[1-4]

With illness comes the need for treatment, reduced welfare and a yet more prolonged stay. The longer an animal is confined, the greater the demand for sufficient space, interaction and environmental enrichment to prevent confinement-related stress and behavioral disorders. However, longer stays also mean more crowded shelters, reducing the availability of space and care for each animal.

Ultimately, the longer the stay per animal, the higher the costs as well. Shelters are a resource-limited environment: higher costs per animal mean less available for each animal and perhaps even more importantly, less to invest in preventive programs that keep animals safe in their homes and out of the shelter to begin with. Conversely, for any given outcome, shortening the length of stay to that outcome will reduce costs, lower risks for behavioral and health problems for each animal, and provide better conditions for shelter animals and people alike.

The concern is often raised that shortening the length of stay means hastening to euthanize. This should never be the case. For an animal certainly destined for euthanasia (e.g. for behavioral or medical reasons), shortening the length of stay to that outcome will reduce stress for the animal as well as lowering the cost of care and leaving more space and time available for animals that have a chance at live release.

However, euthanasia should never be substituted for a live outcome as a means of reducing length of stay. Rather, systematic efforts should be made to minimize length of stay to an appropriate outcome for every animal, whether that is return to owner, rescue, transfer, adoption, return to location of origin, or in the case of managed intake, perhaps never entering the shelter at all.

Length of stay and capacity

Shelters are often defined and compared based on either annual intake or daily capacity. However, neither of these figures tells the whole story.

For instance, imagine two shelters, one with daily capacity to house 100 animals and the other with capacity to house 200 animals. Let's call them Shelter A and Shelter B respectively.

Which one will serve more animals over the course of a year? Clearly the answer depends on how long each animal stays. If each animal stays a year at Shelter B and six months at Shelter A, they will each serve the same number of animals in a year: 200.

If each animal stays a year at Shelter A and a month at Shelter B, Shelter A will serve 200 while shelter B will serve 1,200 (100/month x 12 months/year = 1,200 animals). Obviously a year-long LOS is uncommon, but you can see how the math will work with any length of stay. For a given daily capacity, doubling the LOS means cutting in half the number of animals cared over time.

We can look at this from the opposite perspective too. Imagine now that Shelter A and B each take in 1,200 animals per year, or about 100/month. Which one will have greater need for daily housing, staffing, and care? Again, this depends on LOS. If shelter A has a LOS of one month, they will need one month x 100 animals/month = daily capacity for 100 animals.

If Shelter B has a LOS of 2 weeks (half a month) they will need 0.5 months x 100 animals/month = daily capacity for 50 animals.

The basic calculation that relates LOS to intake and capacity is:

Daily capacity needed = Daily intake x average LOS

Or, through the magic of algebra, *Average LOS = Daily capacity/daily intake.*

Daily intake is obtained by dividing intake over time, by the number of days in the time period. To see a much more fun illustration of this, check out the animated Length of Stay Game (http://www.youtube.com/watch?v=S_JbWBntJ1M).

Breaking down length of stay

For the purposes of planning and analysis, it can be helpful to break down LOS into separate components and target programs at reducing each component: pre-intake (e.g. awaiting an appointment for admission); pre-adoption (e.g. stray hold); actively moving toward adoption or rescue; and "bonus length of stay."

Pre-intake length of stay

Strictly speaking, time an animal spends "pre-intake" does not count toward LOS in the shelter. And that's a good thing – allowing as much preparation and care as possible to take place outside of the shelter will generally benefit both the animal and the shelter.

Shelters have always informally managed "pre-intake LOS" in various ways, for instance by asking finders to hold off on turning in a litter of kittens until they're old enough for adoption, or asking an owner wishing to surrender an animal to wait a few days until there's room in the shelter. Recently the value of this practice has been recognized and formal programs implemented to more actively plan shelter admissions, most notably through "managed intake" programs.

Managed intake

Managed intake refers to a thoughtful process whereby admission to the shelter is scheduled based on the shelter's capacity to provide care and in some cases, assure a live outcome for each animal admitted.

While it might be expected that scheduling intake would lead animals to be abandoned or suffer worse harm in the community than would be incurred by admission to an overcrowded shelter, in practice these fears have not been borne out. On the contrary, scheduled admissions have been linked to decreased intake, decreased crowding and costs, and in some cases dramatic reductions in euthanasia.

Any animal that is not a hazard or subject to undue risk can be admitted as part of a managed intake program. Most commonly these programs target owner surrendered animals and un-owned cats. One shelter director's rationale for a managed intake program for cats can be found here (http://www.maddiesfund.org/Maddies_Institute/Articles/Cats_by_Appointment_Only.html).

A database can be created to manage appointments or a simple paper-based system can be used. Priority for admission should be given to juvenile animals (old enough for adoption, young enough to be maximally cute), as delaying intake of youngsters for more than a short time may allow them to grow to a "less-adoptable" stage.

An average wait time of 5-7 days may actually help community members resolve problems on their own, bypassing the shelter system entirely. In the meantime, resources should be provided to resolve common issues, including sources for low-cost spay/neuter and other medical services, behavioral information and help to resolve common issues, and information and web-based posting sites to help finders reunite lost pets with owners and help owners rehome pets safely on their own. An example of a shelter's resource page for owners awaiting appointments can be found here (<http://www.animalhumanesociety.org>); guidelines for establishing a managed intake program for cats can be found here (<http://www.maddiesfund.org/Documents/Institute/Cats%20by%20Appointment%20Only%20Waitlist%20Guide.pdf>).

Ready-set-go and finder/foster

A "ready-set-go" program prepares animals for adoption before they are ever admitted to the shelter. This can be used in conjunction with a managed intake program or simply as an option for owners who would like to enhance the animal's chances for speedy adoption.

This would include having the owner bring in the pet for a first set of vaccines, performing spay/neuter surgery if needed, treatment for internal and external parasites, and potentially behavioral evaluation. Typically these are procedures that would be performed prior to placement for adoption anyway, so no additional expenses are incurred as long as the animal is brought back for adoption.

Meanwhile, the animal can go home for a week or two, recovering from surgery and allowing plenty of time for vaccination to provide protection while the pet remains in a low risk environment. Upon return to the shelter the animal can be revaccinated if needed and placed immediately up for adoption.

Finder/foster is another pre-intake program that can help shelters with limited formal foster programs reduce euthanasia of underage kittens. In a finder/foster program, finders bringing under-age kittens to the shelter are offered material and informational support and asked to keep the kittens until they are old enough for adoption.

Surprisingly often, finders will be willing – especially if they are aware that the alternative could be euthanasia. Inexperienced caregivers can be paired with a more experienced "foster buddy" as well as

provided with web-based resources and of course, the option to contact the shelter at any time should they run into problems. Detailed web based resources for foster providers and mentors can be found here (<http://catadoptionteam.org/fostering4rockstars/mentor/nav>).

Pre-adoption length of stay

The next segment of length of stay to consider is "pre-adoption." This encompasses any required holding time between admission and when an animal becomes actively available for adoption – most commonly, stray holding periods or intake quarantine. Whether this takes place in a physically separate location from adoption areas is dependent on individual shelter layout and policy.

Every effort should be made to minimize LOS in pre-adoption except as needed to ensure that owners have a reasonable opportunity to be reunited with lost pets. Of course, mandated holding periods must be followed. However, voluntary holds beyond legal mandates should be carefully weighed.

When evaluating stray holding periods, check the median time to owner reclaim – at many shelters, the vast majority of dogs that are ever reclaimed, are reclaimed on the first or second day in the shelter. Extending holding periods beyond a few days for unidentified dogs may not result in increased reclaims and may jeopardize other options for live release, especially if this results in overcrowding of the shelter.

In California, for instance, extending the stray holding period from 72 hours to 4-6 days failed to correspond with a significantly higher rate of return to owner for cats or dogs, yet resulted in substantially greater demands for housing and care [5].

Remember that animals with ID and those who will be euthanized rather than made available for adoption or rescue can always be held longer. Because unidentified cats are rarely reclaimed, mandatory stray holds of any length tend to be detrimental. Ideally, all un-owned cats without ID will be moved through the shelter to live release (adoption, rescue, or return to location of origin) as quickly as possible.

Likewise, routine intake quarantines should be carefully evaluated. For shelters transferring in animals from very high risk locations/source shelters, intake quarantine may be justified to avoid animals breaking with severe illness on the adoption floor or after adoption. In that case, time to onset of disease should be carefully tracked and a quarantine period selected of the shortest length that permits the majority of cases to be caught.

Keep in mind that prolonged intake quarantines also carry risks that outweigh benefits much of the time. True quarantine requires an "all-in-all-out" system, whereby a group of animals is segregated from all other animals for the duration of quarantine.

For shelters, the added challenge exists of providing sufficient enrichment and interaction during this time to maintain behavioral as well as physical health. If an all-in-all-out system can't be maintained, quarantine will actually tend to increase risk, as animals with unknown health backgrounds are constantly added to the mix. It is rarely helpful, and often harmful, to hold animals in such a circumstance simply waiting for multiple vaccines to be given.

There may still be logistical reasons for holding newly admitted animals back from adoption, such as need to evaluate behavior or complete medical or surgical procedures. This length of time should be

minimized, for example by scheduling more frequent, shorter periods when these procedures are completed (four hours of surgery every other day versus six hours twice a week, for example), training additional staff to perform the procedure to the extent possible (e.g. training kennel attendants, field officers and/or front office staff to perform behavior evaluations), and/or making the animal available for adoption prior to completing the procedure (e.g. allowing animals to be selected for adoption prior to surgery, which is then completed before the animal is released).

Open selection: waiting for adoption while waiting for reclaim

Often, some amount of time in pre-adoption holding is inevitable. For many shelters, it makes sense to optimize this time by allowing animals to be viewed and selected for adoption or rescue during their holding period. If animals can be selected during their stray hold, for example, shelter staff will know to prioritize behavioral evaluation, surgery, or any other needed processing for that animal to move quickly through the system. In many cases, open selection allows animals to bypass spending time in adoption entirely, saving space and resources for those animals that truly need it.

To implement open selection, determine which areas of the shelter will be accessible to the public, allowing as much access as possible to animals in stray hold while protecting people from exposure to dangerous animals or those involved in legal proceedings. Develop a system to record interested parties and an order of priority.

Commonly, open selection adoptions are on a first come, first serve basis, with scheduled windows after the stray hold for adoption to take place. For instance, if the first person on the list does not show up for an adoption appointment on the first day the animal is available, the second person on the list is notified, etc.

Consider, too, whether some groups will have priority over others (members of the public, shelter staff, shelter volunteers, pro-active transfer/rescue partners, reactive transfer/rescue partners, etc.). Spell out the policy, put it in writing, and make sure front office and kennel staff communicate consistently to avoid confusion and disappointment.

Record contact information for any interested parties so they can be notified if the animal is reclaimed or for any other reason does not become available for adoption as planned.

Adoption length of stay

Adoption LOS refers to time spent actively available and awaiting adoption. For many shelters, this accounts for the largest chunk of an animal's stay in the shelter. Many activities are undertaken to reduce the amount of time animals spend waiting for adoption: special promotions, great photographs, pricing strategies and more.

All these are important, but the single most important factor in many cases in determining the average length of stay to adoption is simply the number of animals available for adoption at any given time.

To illustrate this point, think back to the example shelters in the beginning: Shelter A with 100 animals in its care, and Shelter B with 200. Let's say each shelter decided to manage intake to coincide with live release, such that no animal will be euthanized for space or time. Now let's say each shelter adopts 10

animals per day and consequently admits 10 animals per day, staying full but not overcrowded. What will the length of stay be for Shelter A?

This is easy to calculate: LOS = daily population/outcomes per day. So for Shelter A, the average LOS will be 100 animals on site per day/10 adoptions per day = 10 days.

What will it be for Shelter B? Again, simple enough: Daily population/outcomes per day = 200/10= 20 days. Even with the same intake, the same adoption rate, the same great policies and promotions, the LOS will be twice as long at Shelter B as at Shelter A, simply by dint of having more animals available.

Of course it's not always as simple as that. Sometimes having more animals available for adoption will lead to a greater number of adoptions. This can happen if potential adopters were put off by a lack of sufficient choices.

Other times, having fewer animals for adoption can increase adoptions, if presentation improves or adopters feel less overwhelmed. Determining the exact right number of animals to have for adoption, then, is a critical decision.

This number is determined by the expected number of adoptions over time and is therefore termed "adoption-driven capacity," or ADC. This can be thought of as the "sweet spot" for adoptions where the number of animals awaiting adoption is just right to maximize each animal's chance.

The basic calculation for ADC is:

$$ADC = \text{Average adoptions per day} \times \text{target LOS to adoption}$$

For more information and help calculating, visit the ADC calculator (http://www.sheltermedicine.com/documents/adoption_driven_capacity_calculator).

Fast track/slow track: speeding up the trip to adoption

Not every animal will need to spend the same amount of time in the shelter system. Some, such as injured animals and neonates, will require extended care to get to the point of adoption. Others will appeal to the tastes of a rare few adopters and may wait a long while for that right person to walk in the door.

Fortunately, there are also many animals that come in the door "ready to go," who appeal to a broad range of adopters and have no particular barriers to adoption. Allowing these "fast track" animals to move through the shelter system quickly is key to providing the conditions and care that the slower track animals require to thrive.

Developing a system to identify fast track versus slow track animals at, or soon after, intake can help ensure each animal moves along the appropriate pathway. Information on developing a fast track/slow track scoring system can be found here (<http://www.sheltermedicine.com/shelter-health-portal/information-sheets/developing-intake-and-adoption-decision-making-criteria>).

Especially when resources to move animals through to adoption are limited (e.g. space in adoption areas, staff time for evaluations, surgical slots for spay/neuter), fast track animals should "skip to the

head of the line" ahead of slow track animals. This frees up congestion in pre-adoption areas and lowers the daily population, freeing staff time to provide better care for slow and fast track alike and ultimately will tend to reduce LOS for both groups.

For more information about fast track/slow track planning, go here (<http://www.aspcapro.org/resource/shelter-health-animal-care-intake/fast-track-planning>).

Adoption promotion: Turning up the flow

No matter how quickly an animal reaches the adoption floor, we still have one more key step to go: we need to get an adopter to come in the door (of our shelter, off site adoption center, or wherever the animal may be), choose that animal, and take it home.

One way to do this is to critically evaluate and remove any possible barriers for adopters doing just that. "Open adoption" is based on the idea that adoptions should be a conversation between the adopter and the shelter staff to find the best match, rather than a screening tool to decide who will be "allowed" to get a pet. Open adoption acknowledges the reality that anyone can go online or look in the paper (or even look in the alley behind their house or talk to their next door neighbor) and acquire a pet. The best we can do is match every potential adopter with a spayed/neutered, identified, vaccinated, behaviorally sound pet that fits their lifestyle and desires.

Creative marketing is also important, not just in response to overcrowding or unusual situations such as hoarding-associated impoundments (though it's good there too), but on a routine basis to keep animals moving quickly *before* overcrowding occurs. For some handy tips on adoption campaigns, go here (<http://www.aspcapro.org/resource/saving-lives-adoption-marketing-transport/marketing-strategies-cat-adoptions>). Although these tips are directed toward cats, the same principle applies to dogs – for many shelters, any time is a good time to host a "Chihuahua-palooza."

Bonus length of stay

We tend to think of "bonus time" as a good thing, and often it is. However, bonus length of stay here refers to time spent by an animal not actively and productively moving towards a live outcome.

This includes both time spent being treated for shelter-acquired illness and time spent lost in the system, awaiting needed care and processing. These two factors tend to feed on each other – when care is delayed and LOS increases, the risk for illness rises commensurately. When more animals are ill, staff time for animal care and processing is reduced, and delays tend to occur.

It's easy for a vicious cycle to get started that leads to ever increasing crowding and disease. Fortunately, this can be reversed through a diligent effort to bring the population back within shelter capacity through extra attention to each step of animal movement through the system.

Ultimately the key to unwinding a cycle of bonus length of stay, or better yet preventing it in the first place, is a system of Daily Population Wellness Rounds. Unlike medical rounds, population wellness rounds take into account a holistic view of each animal in the shelter, within the context of the whole population, and ask of every individual, "What can we do for you today?"

Whether an elderly dog needs a rescue group specializing in senior mutts to be contacted, or a fearful cat needs a hiding box to help her cope, daily rounds ensure that each animal's needs are met and that every step is taken promptly to move the animal through the system.

In order to provide this holistic perspective, population rounds should include staff empowered to make decisions and take action from a shelter management, medical and behavioral perspective. More detailed information about daily rounds is available here (<http://www.aspcapro.org/resource/shelter-health-animal-care-intake/population-wellness-rounds>).

When beginning from an overcrowded ground zero, daily rounds can seem like an overwhelming task. Starting with an emphasis on moving fast track animals quickly through the system can help reduce the daily burden and allow focus on animals with more complex requirements.

Sometimes it is necessary to bring extra staff on board or invest in overtime for a short while to get caught up. Sometimes it is necessary to start small and work up – even weekly rounds are better than no rounds at all.

Each time an animal is moved safely through the system even one day sooner than before, breathing room is created to do a little more, and then still a little more. Pretty soon an "un-vicious cycle" is created where animals move through the shelter more quickly, illness and stress is reduced, volunteers and adopters are happier, costs decline, and resources are freed up to focus on the life saving preventive work that is at the heart of all we do. And that's the magic of length of stay!

Notes:

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