



Surgical Spectrum of Care Basics

What Do We Really Need?

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First Things First

Context

- Nothing is 0 or 100%
- Perfect is the enemy of good
- Uncertainty is unavoidable but manageable
- The only thing that two surgeons can agree upon is?

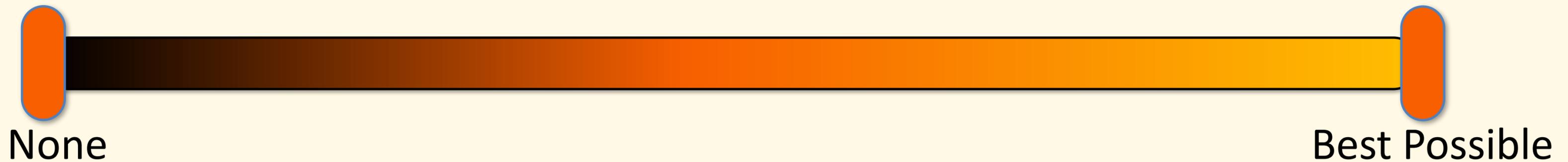
Access to Vet Care (AVC) Barriers - Veterinarians

- Increase in cost
- Increase in referrals
- Scope of practice

Continuum of Care

Zero Care

Best possible Care – Gold Standard?

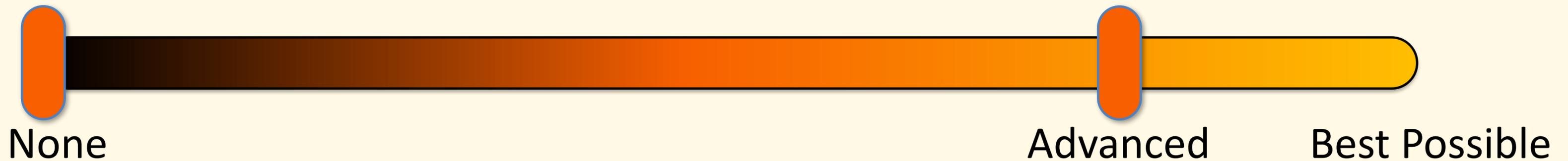


Continuum of Care

Zero Care

Best possible Care – Gold Standard?

Advanced Care – Specialists



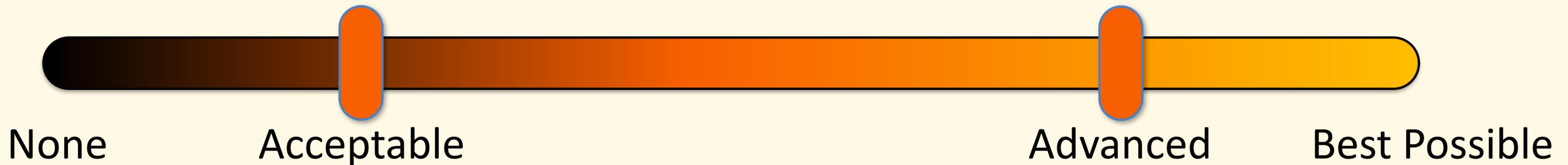
Continuum of Care

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Acceptable Care



Continuum of Care

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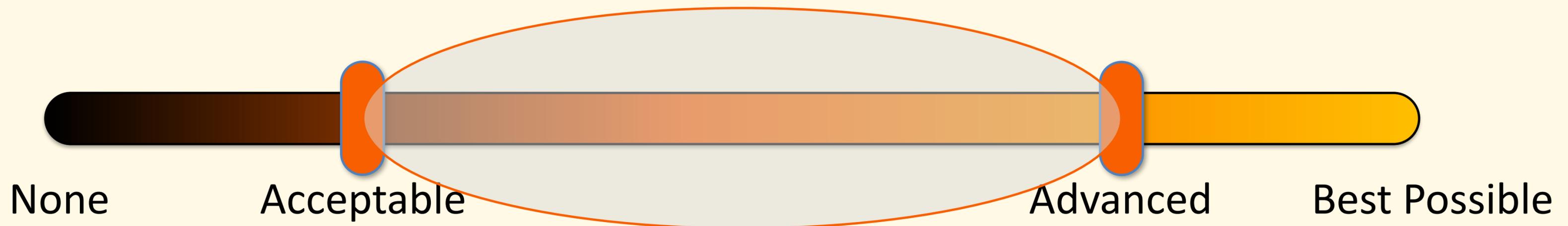
Best possible Care – Gold Standard?

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Acceptable Care

Standard of Care?

“The standard required of and practiced by the average, reasonably prudent and competent veterinarian.”



Continuum of Care

Zero Care

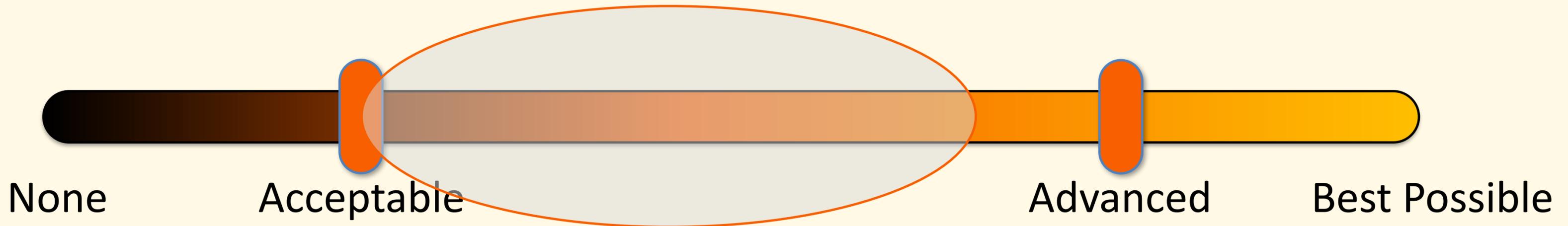
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Standard of Care

NOT = Best Possible Care

NOT = Advanced Care
Specialist standard of care is different

Acceptable Care Benchmark
Clear the low bar

Not Clearly Defined
Context matters

Standard of Care

Context Matters

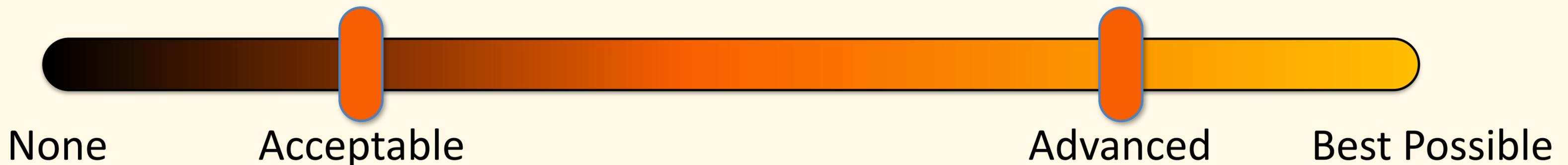
- Does availability of advanced care shift the standard in GP?
- Regional differences?

Outcome vs. Process

- Outcome is how we judge ourselves
- Process matters!

Acceptable vs. Advanced Care

- Effect of process differences on outcome?



SOC Decision Making

Ideal World

Provide best care possible

Reality Check

Barriers to access veterinary care

Client Factors

Many!

Financial

Provider Factors

Many!

Skills, tools & confidence

State of the profession – what's possible if resources are not an issue

Pressure

- Self imposed
- Peers
- Societal

SOC Decision Making

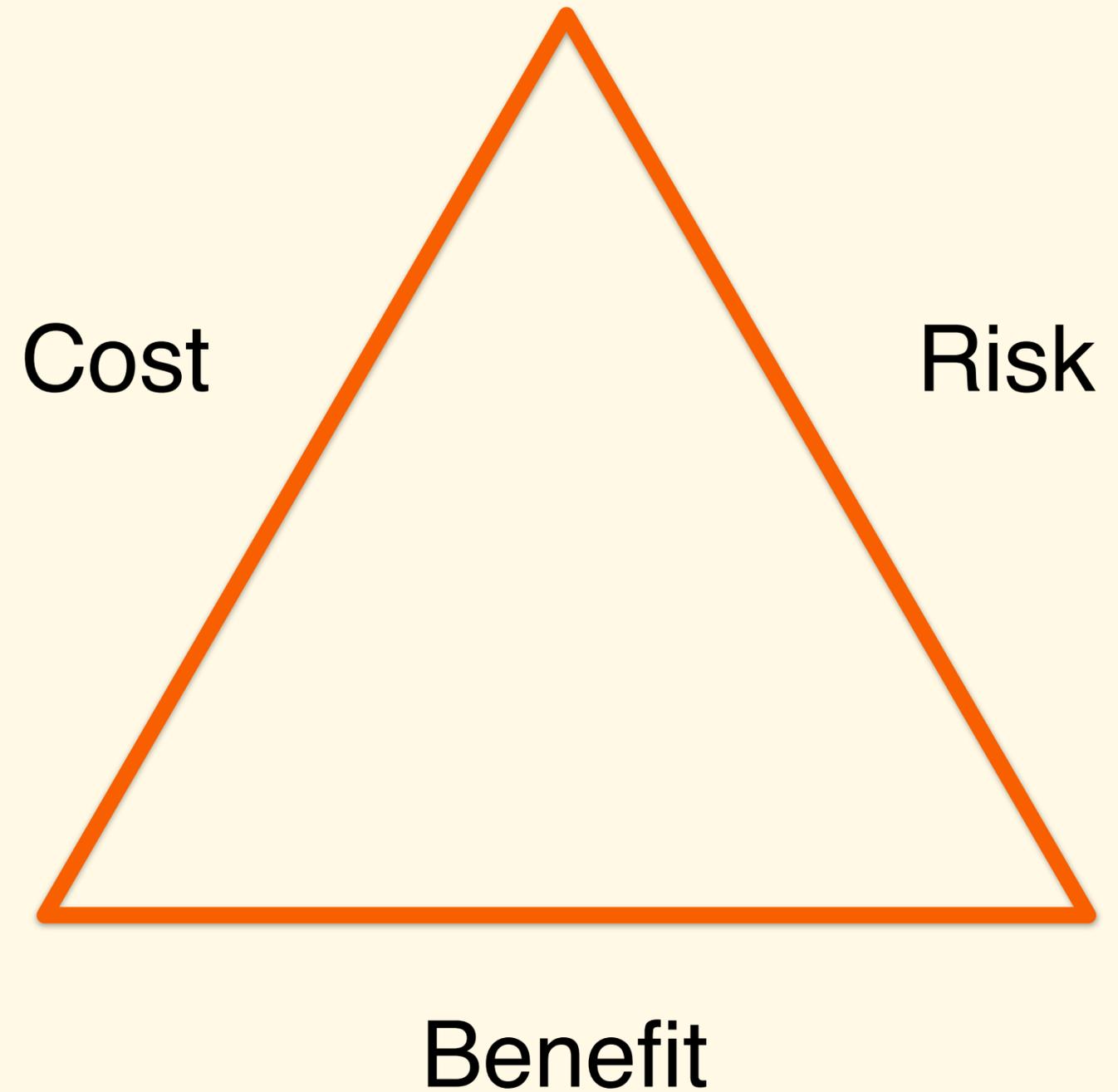
Reconciling Process & Outcome

Constant Analysis

Cost
Benefit
Risk

Cost Reduction

Altered clinical approach



SOC Decision Making

Reconciling Process & Outcome

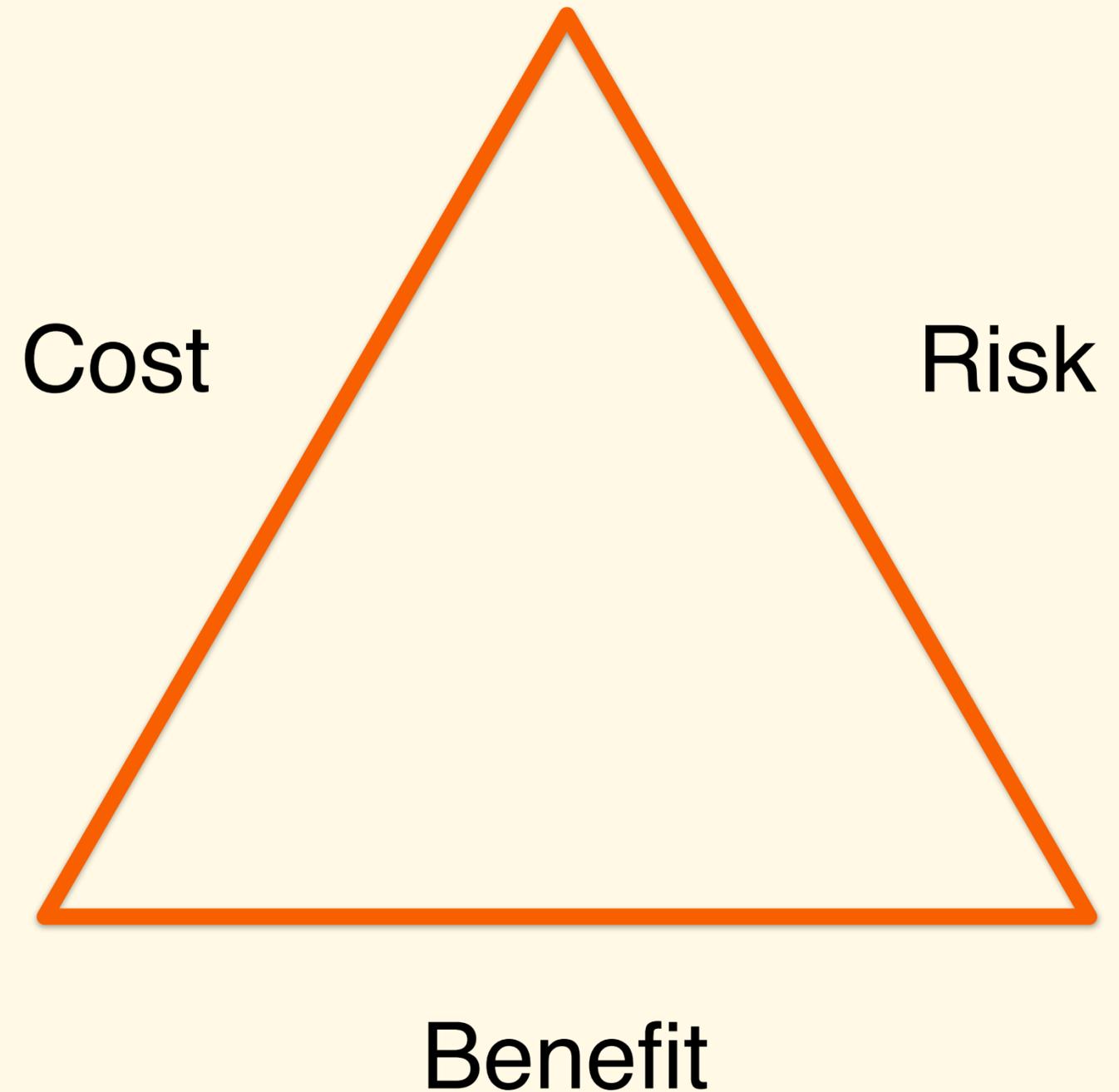
Constant Analysis

Cost
Benefit
Risk

Cost Reduction

Altered clinical approach

Can we reduce costs without increasing risk or decreasing benefits?



Benefit Analysis

Advanced Care & Best Possible Care

Do not always ensure increased benefit

Dysthanasia Concept

- Excessive treatment in relation to problem or expected outcome
- Futile treatment
- Caregiver burden

Why & How Did We Get There?

- Training bias
- Empathy & Pride – “I must fix this”
- Medical advances
- Median survival time trap

Quality Of Life!

57% and 22% of veterinarians sometimes and often manage cases they consider futile

Let's Sell Some Cars!

Toyota vs. Porsche

- How much are we gaining for the additional cost?
- Needs vs. wants
- Prestige?

What does that have to do with me?

- How far do we get with the basics?
- Cost for marginal gains?
- Reconciliation of expectations and reality

Focus on what moves the needle the most

Focus on what makes the most sense, not what's possible



Let's Sell Some Cars

Must Be Acceptable Quality

- Not advocating for substandard care
- Excellent care is achievable “below” advanced care

Must Accept Reality

- Calibration of expectations
- Client buy-in – It's not all on you

- Can't pay for a Toyota and expect a Porsche
- Need to focus on QOL
- Need to accept risks

Risk is often surprisingly small



But We Are Not Selling Cars!

Wallet X-Rays

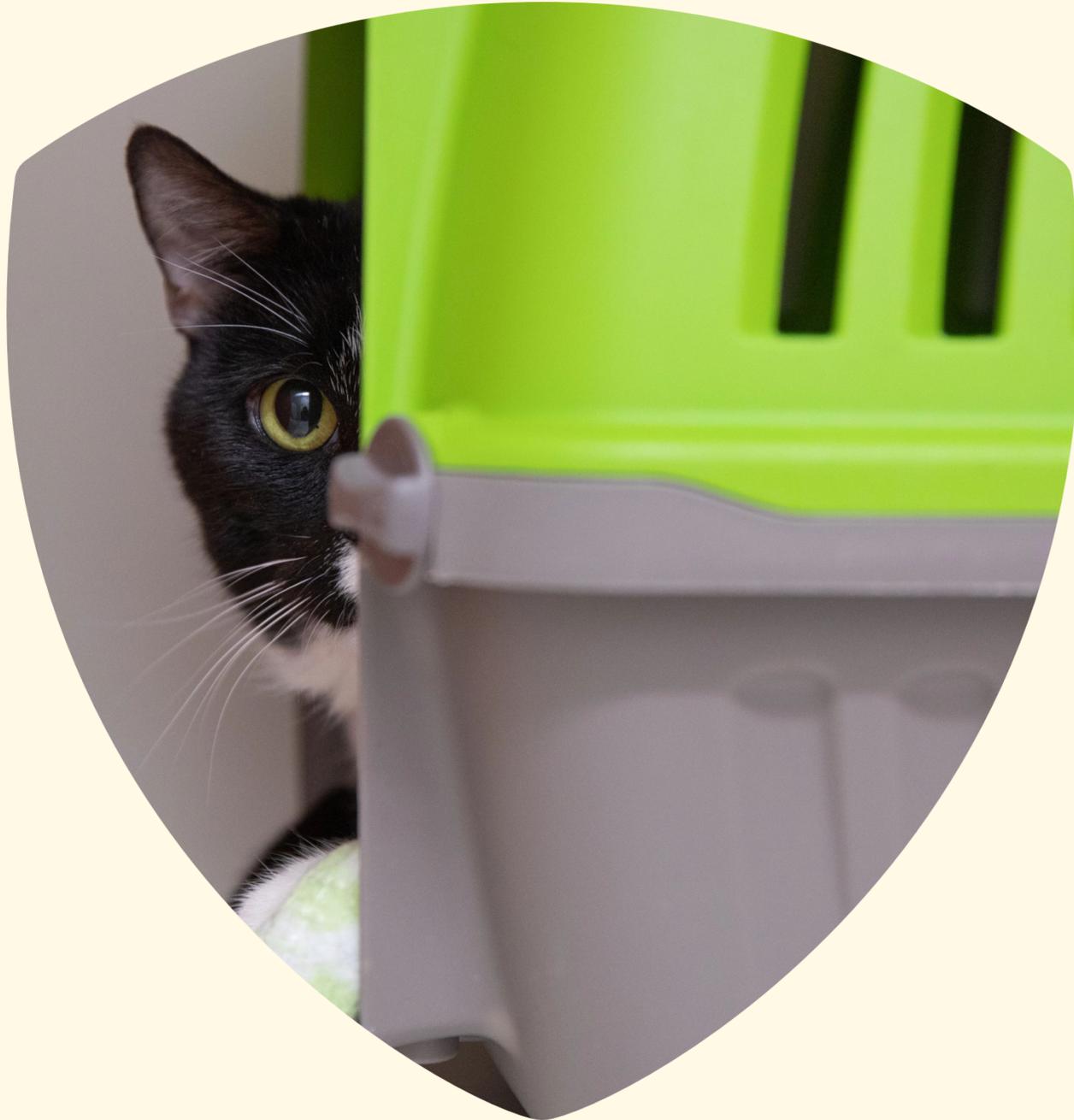
- Careful!
- Standard of care includes offering advanced care
 - Pathway to buy-in and expectation setting
 - CYA

Avoiding Guilt

- Clients → Concept of responsible pet ownership
- Provider → System limitations are not your fault

Communication Is Key





Decreasing Cost

Diagnostics

Treatments

Things

People

Go for the combo!

Aggregation of multiple small savings

Diagnostics

What does it change?

- Treatment
- Prognosis
- Discomfort Level

What's the scientific evidence

- What's the evidence for performing the test?
- How close are we to a definitive diagnosis without it?
- What are we at risk of missing?

This is the hard work that doctors have to do

- Baseline knowledge
- Literature knowledge
- Art of medicine

Risk Assessment & Communication are Key

Diagnostics

Goldilocks Principle

Risk of too little – Underdiagnose

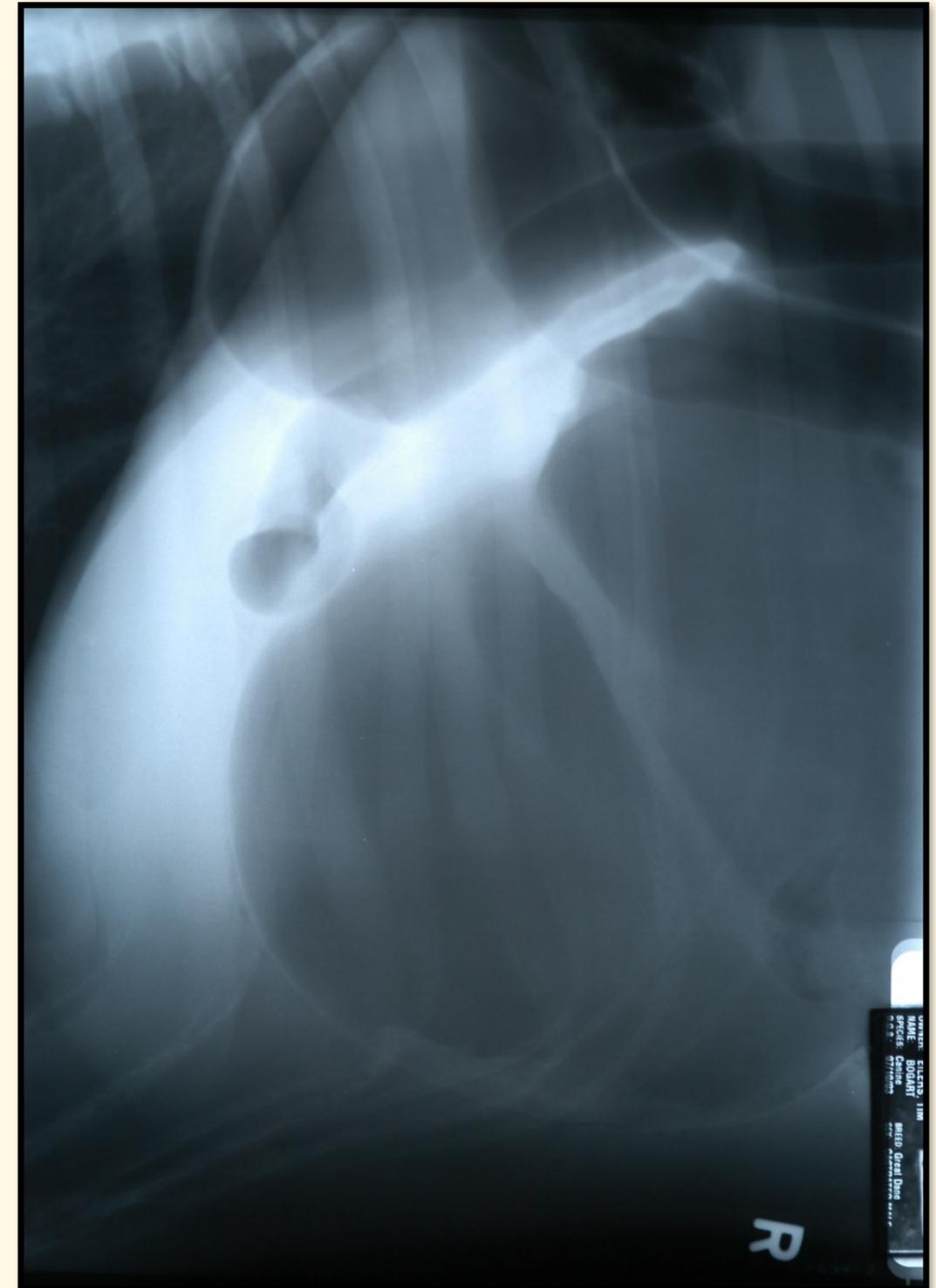
Risk of too much – Overdiagnose

What are the tests that move the needle?

- Physical examination and clinical assessment
- Sick patient → May need to know more
- Healthy patient → May not need to do more

Non-negotiables

- Don't kill your patient with diagnostics
- Don't exhaust finances with diagnostics over treatment



Diagnosics

Bloodwork

Life-Saving surgery can be done:

- Without a CBC
- Without a chemistry profile
- Without electrolytes
- Without coagulation profiles

What do you really need to know?

- Anemia?
- Thrombocytopenia?
- Liver values?
- Renal disease?
- Electrolytes?

What Does The Test Result Change?

Diagnostics

Wait, All These Tests Are Worthless?

- Nope
- Disease process matters
- Specificity & sensitivity are important
- Have a good reason for running a test

What Happened to the Minimum Database?

- Still there when you need it
- Cheaper alternatives
 - PCV/TS
 - Glucose
 - USG

Case Selection is Key



Diagnostics

Imaging

Basic & Advanced

What does it change?

Radiology

May be part of basic requirements for veterinary facilities per practice act

How many images?

- Diagnostic imaging, not perfect imaging
- What are you looking for?
- What is the index of suspicion?

Don't kill your patient with diagnostics



Diagnostics

Ultrasound

Cost of equipment is coming down

Highly user dependent

- What are you looking for?

Do you need it for decision-making?

- How close to 100% do you need to get

Use it instead of radiographs?



Diagnostics

Don't have to run all the tests

Communication

Risks of not doing all the diagnostics

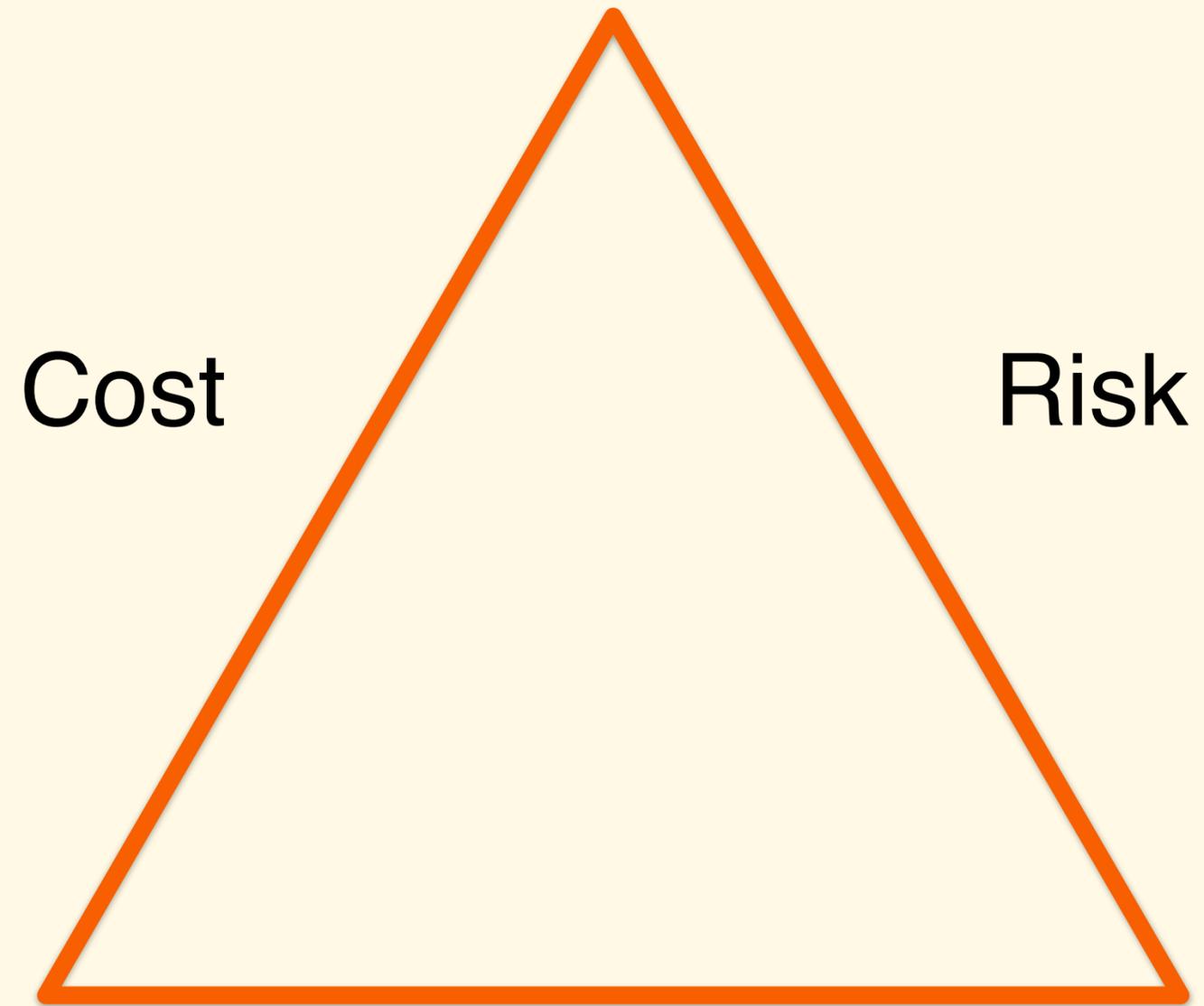
May miss something

May have a negative explore

May find something unexpected or complicating

Cost Savings?

\$100s to \$1,000s



Courage to NOT do everything – Rooted in knowledge

Benefit

Treatment

Is Surgery Needed?

Just because you found disease that CAN be treated surgically doesn't mean you HAVE to do surgery

Gastrointestinal foreign object:

- Medical treatment for discrete foreign material is reasonable → Emesis, monitoring
- Straight metallic objects may pass
- Unclear if GI FB? Medical treatment does not necessarily increase risk of negative outcome

Urinary bladder stones – Medical dissolution

Treatment

Supportive Care Cost

- Pre-operative
- Post-operative

Anesthesia & Surgical Cost

- Supplies & drugs
- Time!

Complication Cost

- Prevention!

Pre-Operative Treatment

Non-Negotiables

- High-Leverage components
 - Correct fluid deficits
 - Pain management
- Can still be cost-conscious

Courage to NOT do EVERYTHING

Post-Operative Treatment

Outpatient Surgery

- Human medicine
- Rising frequency in Veterinary Medicine → Mobile surgical practice

Evidence

- Outcomes are similar for many surgical procedures
 - GI foreign body surgery
 - Pyometra
 - Arytenoid lateralization
 - BOAS Sx

Need to read the fine print

Absence of Evidence

- Lack of studies comparing in vs. outpatient
- Where is the evidence that inpatient treatment is better?



J Am Vet Med Assoc. 2025 Apr 1:1-6.
Outpatient gastrointestinal foreign body surgeries performed in a nonspecialized setting have good outcomes for dogs and cats
[Arik Smith](#)¹, [Dylan Whitaker](#)¹, [Delaney McGrath](#)², [Sylvia M Lesnikowski](#)³, [Margaret R Slater](#)⁴

J Am Vet Med Assoc. 2022 May 21;260(S2):S36-S41.
Surgery in a veterinary outpatient community medicine setting has a good outcome for dogs with pyometra
[Emily McCobb](#)^{1 2 3}, [Seana Dowling-Guyer](#)^{2 3}, [Sharon Pailer](#)⁴, [Nida P Intarapanich](#)¹, [Elizabeth A Rozanski](#)³



Post-Operative Treatment

Hybrid Approach

- Intermittent inpatient Tx – Home today come back tomorrow for more fluids etc.
- Surgery here, transfer for ongoing care
- Discharge AMA if indicated

Surgical Treatment – Standard of Care

Facilities

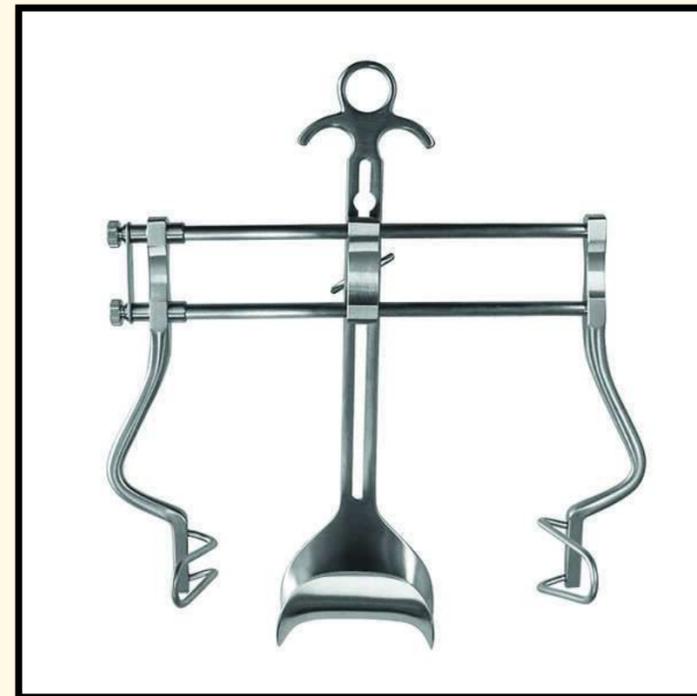
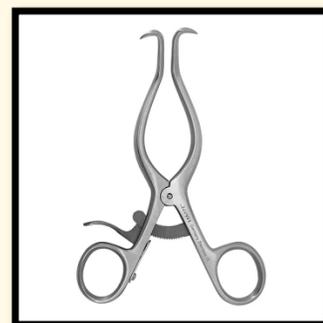
State Veterinary Medical Board Regulations

- Operating Room → Infection Risk
- Surgery Table
- Surgery Light
- Anesthesia Machine
- Sterilization Equipment

That's it

Instruments

- General Pack
- Self Retaining Retractors



Surgical Treatment

Advanced Care Supplies

- Perioperative Fluids & Antibiotics
- Sterile field (4-corner drapes, patient drape)
- Sterile gloves & gowns
- Suture
- Laparotomy sponges
- Saline irrigation
- Suction hose

\$ Cost 100-200

Surgical Competency & Efficiency

Your state license empowers you to perform surgery

Competency

Knowledge – Only YOU can prepare yourself

- Books & journal articles
- CE
- Peers & Mentorship

Experience & Repetition – Catch 22

- CE
- Mentorship
- Cadaver practice?
- Courage to try

Talent?



Surgical Competency & Efficiency

Efficiency

Planning & organization with the team

Minimize struggling

- Nail the basics
 - Surgical exposure
 - Adequate instrumentation & equipment
 - Efficient suturing
- Competency – surgeon and team
 - Theoretical knowledge
 - Practice
 - Focus – Do one thing, do it well, then move on



Surgical Competency & Efficiency

Minimizing Complications

- Sterile Technique
- Perioperative antibiotics for procedures > 1 hr
 - Needed for clean procedures?
- Minimize anesthesia time
- Do the procedure correctly

Dealing with Complications

- Part of expanding surgical portfolio

Comfort

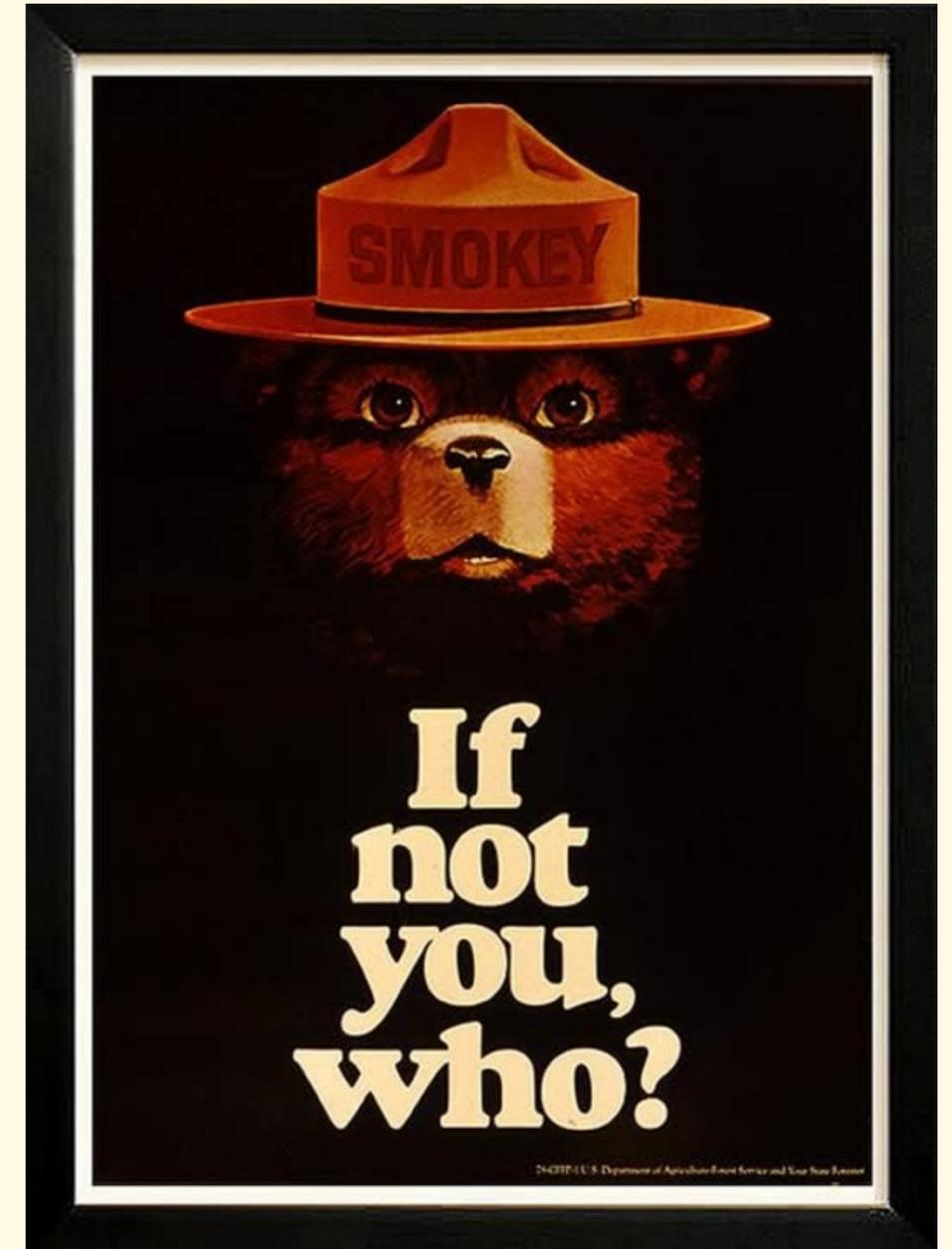
Competency & Efficiency → Increased Comfort

Worries

- I am not qualified to do this
- But: Complications!
- Litigation
- What else are you worried about?

Overcoming the Barriers

- Who else is going to do it?



Surgical AVC

Acceptable standard of care is not that difficult to achieve

What is keeping YOU from doing surgery?

How can we overcome these barriers?

AVC/GP Surgery is about courage to:

- Trust your ability to learn and DO
- Say “let’s try”
- Accept that nothing is ever 0 or 100%
- Focus on the things that move the needle the most and let go of marginal gains
- Analyze your failures and complications

Surgical AVC

What I have learned as a surgeon

- If death is a likely outcome without surgery, you might as well try. Any other outcome is a win
- Don't be nonchalant about surgery - giving it a try is not an excuse to be reckless or ill prepared
- Do the best you can - it's all you can do
- You will get stuck
 - I have never seen that
 - I have no clue what's going on
 - I have no idea what to do here
 1. Get out the book
 2. Phone a friend or an expert
 3. Peek and shriek is suboptimal, but it happens
- Tie square knots

Surgical AVC - Procedures

GI

- Gastropexy
- Gastrotomy - Enterotomy - R&A
- Rectal prolapse
- Anal sacculectomy

Urogenital

- S/N, including abdominal cryptorchid, vaginal prolapse, pyometra
- Cystotomy
- Urethrostomy

Head & Neck

- Feline VBO
- Sialadenectomy
- Aural hematoma
- Lateral ear canal resection
- Enucleation

General abdomen

- D-hernia
- Liver biopsies
- Splenectomy*

Ortho

- FHO
- Amputation
- Stifle stabilization
- Fracture repair

What else?