# **Clinical Audit**

Be All You Can Be!

#### What is Clinical Audit?

"Clinical audit is a process used by health professionals to assess, evaluate and improve patient care...Clinical audits can be used to compare current practice with the best available evidence. It provides a methodology to assess if the best evidence-based medicine is being applied within the practice."

Handbook of Evidence-based Veterinary Medicine

- How are we doing?
- How could we do better?

"an ongoing upwards spiral of appraisal and improvement" Viner, B (2009)

#### What is Clinical Audit?

- Evidence-based medicine (standards-based audit)
  - What's the "best" way to do it?
    - Guidelines, research evidence
  - What are we doing now?
  - What's the best way to do it HERE?
- What do we do when things go wrong? (critical incident audit)
  - What happened and why?
  - What can we do differently next time?

#### Why Use Clinical Audit?

- Improve Patient Care
- Improve Client Confidence
- Reduce Stress
- Improve Job Satisfaction
- Improve Practice Income
- Regulatory Compliance?
- Improve Evidence Base

#### **Does Clinical Audit Work?**

EBVM implementation means better care

Outcomes of evidence-based clinical practice guidelines: a systematic review. Bahtsevani C, Udén G, Willman A. Int J Technol Assess Health Care. 2004 Fall;20(4):427-33.

There is a tendency toward support for the idea that outcomes improve for patients, personnel, or organizations if clinical practice in health care is evidence-based, that is, if evidence-based clinical practice guidelines are used

**Does evidence-based practice improve patient outcomes? An analysis of a natural experiment in a Spanish hospital.** Jose I. Emparanza JI. Cabello JB. Burls AJE. Journal of Evaluation in Clinical Practice. 2015. epub before print.

EBP patients had a clinically and statistically significantly lower risk of death than contemporaneous standard practice patients...and a shorter length of stay...

#### **Does Clinical Audit Work?**

• Audit can improve practices & outcomes

## Audit and feedback: effects on professional practice and healthcare outcomes.

Ivers N, Jamtvedt G, Flottorp S, et al. Cochrane Database Syst Rev. 2012 Jun 13;6:CD000259

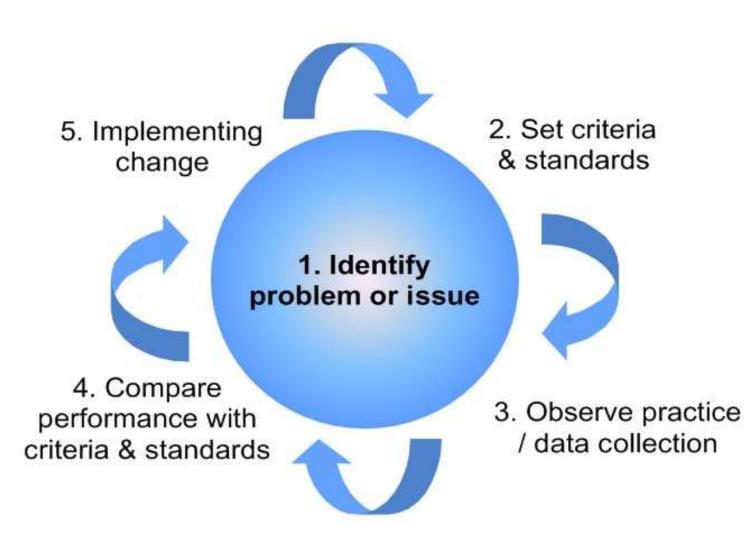
Audit and feedback generally leads to small but potentially important improvements in professional practice. The effectiveness of audit and feedback seems to depend on baseline performance and how the feedback is provided. Future studies of audit and feedback should directly compare different ways of providing feedback.

#### **Does Clinical Audit Work?**

• Audit can have benefits in veterinary practice

Introducing clinical audit into veterinary practice. Viner, B. PhD. dissertation, Middlesex University, London, England. 2006.

- clinical audit can be a very positive, team-building exercise
- clinical audit can be a very effective management tool for increasing practice income.
- the process can improve practice profitability by improving client confidence and bonding clinical
- Audit can be a very useful management tool to achieve and maintain a high standard of veterinary general practice.
- Using clinical audit...to improve owner concordance with our recommendations for treatment can bring not only major cost benefits, but also (and importantly from an ethical viewpoint), corresponding welfare benefits to our patients by managing their disease problems more effectively.



- Good topics for audit
  - Important
  - Common
  - Easy to measure or evaluate
  - Some appropriate standard available
  - Room for improvement
  - Changes to current practice feasible

- Good topics for audit
  - Post-operative complications
    - Seroma after OVH/OVE
    - Dehiscence after MCT excision
  - Adherence to published guidelines
    - IRIS Dx and Tx guidelines
    - RECOVER CPR guidelines
  - Effective treatment choices
    - AB for UTI appropriate by culture
  - Client compliance
    - Follow-up visits
    - Medications given





- Topic- Standardization of CPR procedures
- EBVM Standard- RECOVER guidelines
- Goals
  - All doctors and staff trained to standard
  - All necessary materials in place
  - Review of consent and charging procedures
  - Set up ongoing monitoring processes
  - Patient outcomes
  - Personnel outcomes





#### Initial Training Cost

Expense	Number	Hourly Cost	Hours Needed	Total
Tech (CPR)	40-50	\$20	3	\$2400-3000
Tech (Lead)	10-15	\$22	2	\$440-660
Vet (CPR)	27	\$50	2	\$2700
Vet (Lost Revenue)	27	\$88	2	\$4752
				\$10-11k



- Goals
  - All doctors and staff trained to standard
    - Initial training for docs, lead techs, other techs
    - Didactic and mock codes
    - Annual re-training for all personnel
  - All necessary materials in place
    - Crash carts, RECOVER flowcharts meds, defibrillator?

RECOVER Initiative

- Goals
  - Review of consent and charging procedures
    - Consent form and doctor consult for all hospital admissions, high-risk procedures
    - Standardized charges
  - Set up ongoing monitoring processes
    - Forms to record relevant data
    - Immediate debriefing after all codes
    - Organized follow-up on outcomes
  - Patient outcomes
  - Personnel outcomes

- Fewer codes
  - 37 in 6 months before
  - 17 in 6 months after
- Charges higher and more consistent
- Decreased stress, wasted resources
- Patient outcomes?



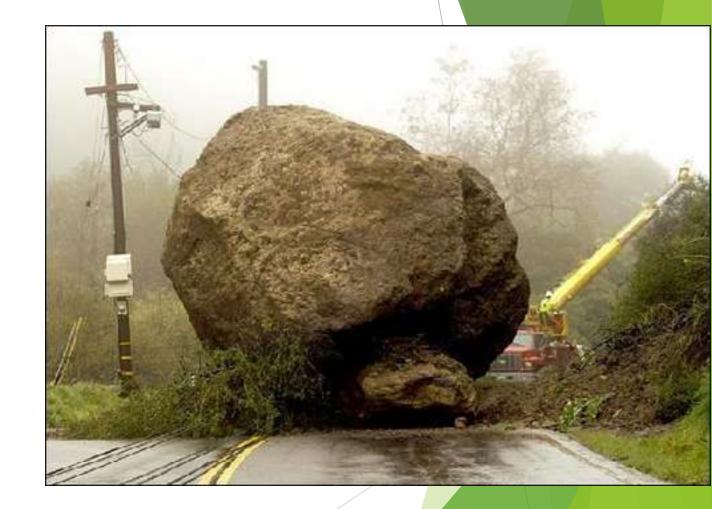
- Published Outcomes
  - ROSC 35-45%
  - STD 6-7%
    - 42-47% GA
    - 0-2% non-GA

	Number	Average Age	Average Length	ROSC	Discharged
2012-2013	54	8.90yr	11min (±8.3)	13 (24.1%)	2 (3.7%)
2013-2014	28	7.46yr	12.7min (±11.2)	12 (42.9%)	2 (7.1%)



#### Barriers to Clinical Audit

- Awareness
- Time
- Money
- Skills
- Evidence-based standards
- Technology
- Resistance to change
- Sensitivity to criticism
- Lack of motivation



### **Common Mistakes in Clinical Audit**

- Trying to carry out in-practice scientific research
- Trying to achieve too much
- Picking an area for audit that does not occur commonly enough
- Poor communications within the practice
- Not allowing enough 'protected time' to carry out the process
- Insufficient planning at the outset
- Not communicating or acting on the results
- No follow-up



#### **Bottom Line**

- Always room for improvement
- Improvement requires knowledge
- Clinical audit is a useful improvement tool for
  - Patient outcomes
  - Personnel outcomes
  - Practice income
  - Client confidence



#### knowledge.rcvs.org.uk

#### **Clinical Audit Toolkit**

The Clinical Audit Toolkit is designed as a step-by-step guide to starting clinical audit in practice:

Clinical Audit Toolkit 1 – Clinical audit: What is it and what can practices and individuals do right now?

Clinical Audit Toolkit 2 - Clinical governance: a policy template for your practice

Clinical Audit Toolkit 3 – What is a significant event audit?

Clinical Audit Toolkit 4 – Significant event report example

Clinical Audit Toolkit 5 – Significant event report template







#### www.ebvmlearning.org

# **EBVM** LEARNING



# Clinical audit in the veterinary world

#### **Bottom Line**

• Literature Resources

Cockroft P, Holmes M. *Handbook of evidence-based veterinary medicine*. Oxford, England: Blackwell Publishing, 2003

Dunn, J. Clinical audit: A tool in defense of clinical standards. In Practice. 2012;34:167-169.

Viner, B. Using audit to improve clinical effectiveness. In Practice. 2009;31:240-243.

Waine K, Brennan M. Clinical audit in veterinary practice: theory v reality. In Practice. 2015;37:545-549.