

Development of a Value-Added Database of Evaluated Systematic Reviews in Veterinary Medicine: DVM Evidence

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Objectives

- Describe DVM Evidence
- Detail its development and challenges
- Describe future goals
- Invite collaboration

Background



- **DVM Evidence** is a value added database which provides evaluations of systematic reviews relevant to veterinary medicine
- Records include links to primary studies included in the reviews

Methods

Data

- Identification
- Selection
- Data abstraction & appraisal

Database

- Internal- build tables, forms, adding users
- External-build search interface, record screens

Methods- Identification

Identification

- Bibliographic databases:

- MEDLINE
- CAB Abstracts
- VetsRev

Selection

- Grey literature:

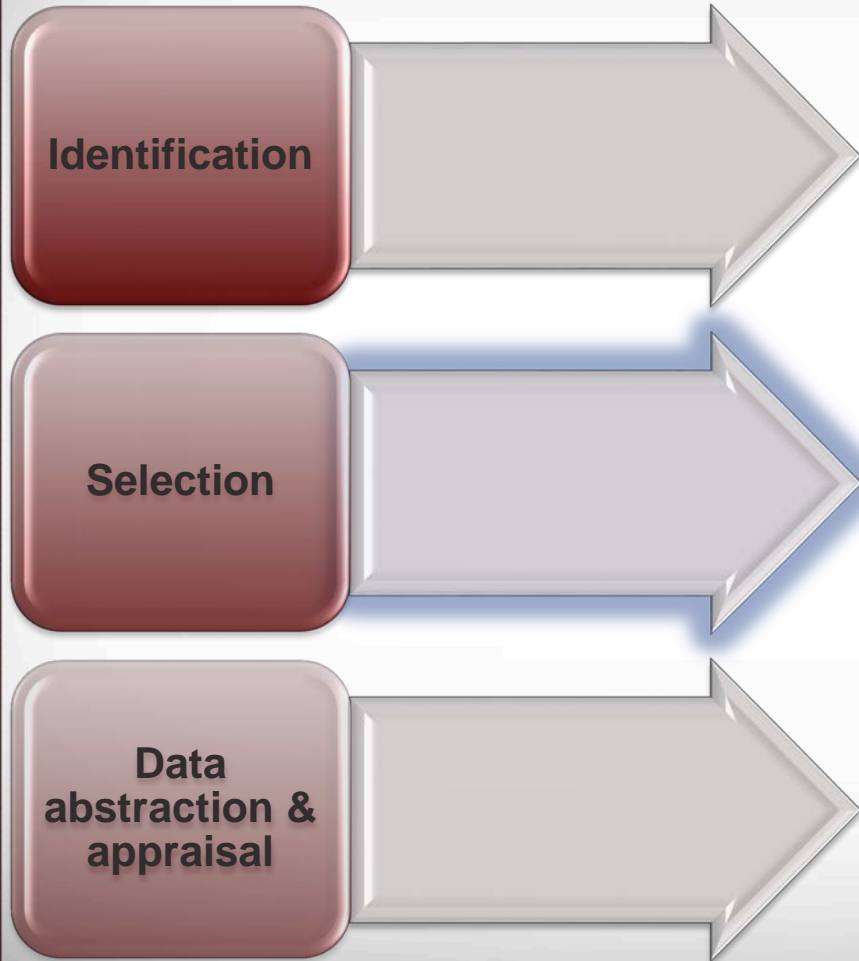
- S-PAC

Data
abstraction &
appraisal

- Handsearch:

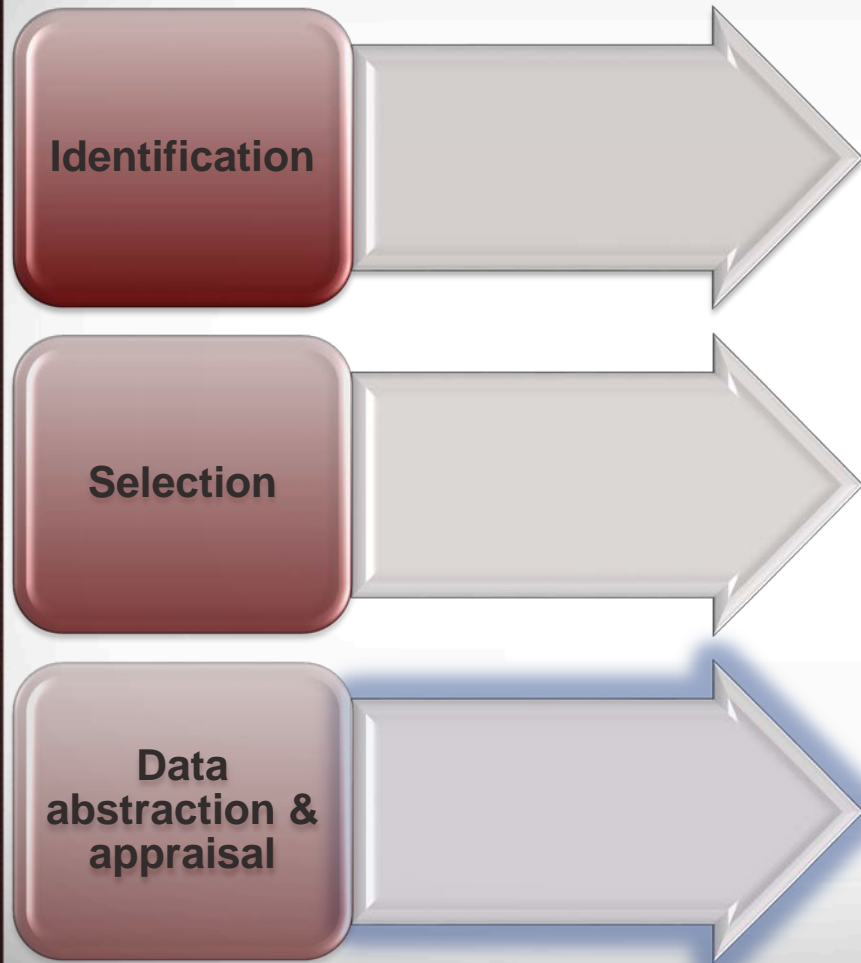
- journal titles
- conference proceedings

Methods-Selection



- independently by 2 team members by title/abstract, then by fulltext
- disagreements settled by consensus

Methods-Data abstraction & appraisal



- **Data abstraction form:**

- review question
- eligibility criteria
- topic/species
- resources searched
- included primary studies

- **Appraisal**

- PRESS¹
- AMSTAR²
- PRISMA³

Methods-Database

- **Browse by**

- Species
- Specialty
- Type of study

- **Search by**

- Authors
- Keywords in title
- Journal title
- Publication year

Record types

- **Review articles** with summaries of data abstraction/appraisal
- **Primary studies** categorized by
 - study type
 - specialty areas
 - species
 - related systematic reviews

Results

- A pilot group of studies were selected
- Coding form was developed in Qualtrics
- Team built a custom form that provides
 - more flexibility
 - more control
- Selected:
 - MySQL for the database management system
 - PHP as the scripting language

Search screen

DVM Evidence

Enter Your Search Terms Or Phrases

Keyword

Author

Journal Title

Year Range

Type of Study

- Primary Study
- Secondary Study
- Systematic Review

Specialties

- Anesthesiology
- Behavior
- Cardiology
- Dentistry
- Dermatology
- Emergency / Critical Care
- Epidemiology
- Internal Medicine
- Preventive Medicine
- Rehabilitation / Sports Medicine

Species

- Feline
- Canine
- Equine
- Bovine

Search

Admin dashboard

▼ Manage User Profiles

For Removing users, please select the checkbox against that user and click remove button. For Adding new users

Select	UserName	FirstName	LastName	AdministratorValue	EmailID
<input type="checkbox"/>	admin	vikas	null	1	vikasmalhotra08@tamu.edu

▶ Manage Primary Studies

▶ Manage Secondary Studies

▶ Manage Species, Specialities & Type of Studies

Test

Discussion: Strengths

- Team includes
 - SR methods expert
 - Vet info specialist
 - Tech liaison
- Administrative support
 - Money for grad students
 - Encouragement
 - time

Discussion: Challenges

- Time consuming
- High learning curve
- Needs clinicians' input
- Current checklists not validated for vet med SRs
- sustainability

Discussion: Future ideas

- Provide opportunity for clinicians to comment
- Expand to include guidelines, scoping reviews, critically appraised topics (CATs), and more
- Forum of veterinary medicine SR protocols
- Provide a matching service for SR authors with librarians
- Host a monthly webinar with invited SR authors to further disseminate results
- Webinars on different aspects of SR methods

Conclusion

Developing a value-added database takes:

- a team with a variety of skills
- strategic planning
- frequent checkpoints along the way

Next steps

- Test usability of search interface by releasing Beta version of database
- Invite external evaluators to use data abstraction/appraisal form

Thank you



References

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2. Shea BJ, Grimshaw JM, Wells GA, et al (2007) Development of AMSTAR: A measurement tool to assess the methodological quality of systematic reviews. *BMC Medical Research Methodology* 7.
3. Knobloch K, Yoon U, Vogt PM (2011) Preferred reporting items for systematic reviews and meta-analyses (PRISMA) statement and publication bias. *Journal of Cranio-Maxillofacial Surgery* 39: 91-92.