Building a Systematic Review Service to Support Research

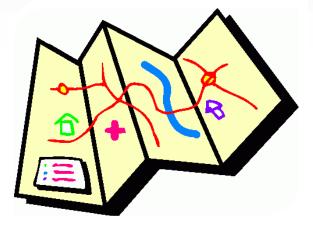
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> Medical Sciences Library Texas A&M University



Overview

- Systematic reviews
- Building the foundation
- Developing the service
- Facing the challenges
- Taking next steps





Systematic reviews: Definition



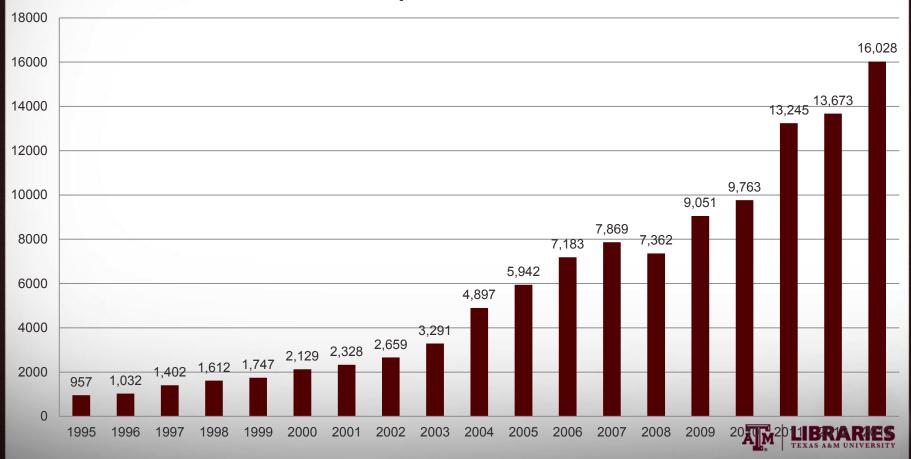
A systematic review

- "attempts to collate all empirical evidence that fits pre-specified eligibility criteria
- in order to answer a *specific* research question.
- It uses *explicit*, systematic methods that are selected with a view to *minimizing bias*,
- thus providing more *reliable findings* from which conclusions can be drawn and decisions made."

Higgins JPT, Green S (editors). Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0 [updated March 2011]. The Cochrane Collaboration, 2011. Available from www.cochrane-handbook.org., Section 1.2.2

Systematic reviews: Increase in publication

Number of systematic reviews/meta analysis in Scopus 1995-2013



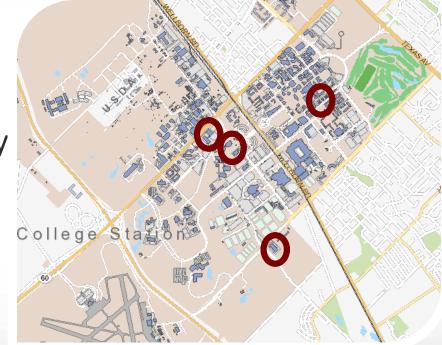
Systematic reviews: Increase in publication

- Increased call for evidence based research by policy makers and the public
- Increased publication of primary studies
- Increased software for management data/information
- Increased technical skills of most researchers
- Increased number of professional organizations promoting systematic reviews
- Increased funding for systematic reviews
- Increased standards



Building the foundation-Texas A&M University

- 7 libraries
 - Evans Library & Annex
 - Cushing Library
 - West Campus Library
 - Medical Sciences Library
 - Policy Sciences & Economics Library
 - Digital Library
 - Qatar Campus Library
- Fall 2014: 61,279





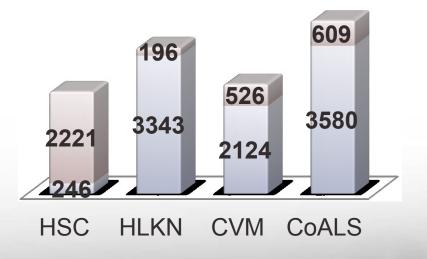
Building the foundation-MSL Clients

Departments/Colleges

- Heath Science Center (HSC)
- Health & Kinesiology (HLKN)
- College of Veterinary Medicine (CVM)
- College of Agriculture and Life Sciences (CoALS)

Number of MSL Clients (students)

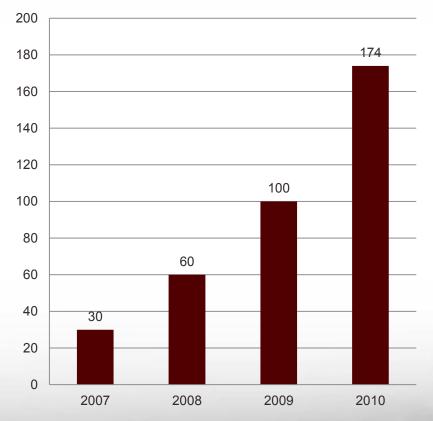
□ graduate/ professional□ undergraduate





Building the foundation-Early years

- Working out of main library
- Number of consultations grew quickly
- Publications were slow and few, rarely asked about authorship
- Some invitations to teach
- Asked to join a few grant applications





Developing the service-Scope of service

- Moved to MSL
- Provide consultations on all parts of review
- Open to all TAMU students, faculty, or staff
- Work with groups or individuals
- Offer in person and online consultations

Steps in Review process

- Determining feasibility and scope of question
- Search
- Selection
- Critical Appraisal
- Data abstraction
- Synthesis
- Writing and publishing



Developing the service Resources and training

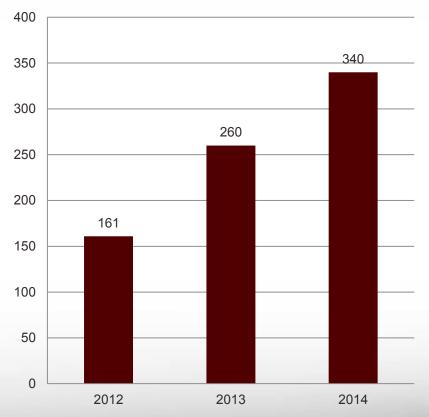
- Additional databases
 - EMBASE
 - Joanna Briggs Institute
 - Northern Lights (grey literature database)

- Training
 - Joanna Briggs Institute
 - Pittsburg training
 - Additional



Developing the service: Impact of service

- Over 300 consultations a year
- Multiple publications
 per year
- Multiple requests for presenting
- Good attendance at workshops and webinars



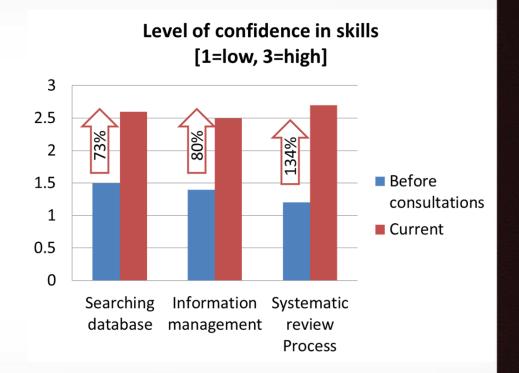




Developing the service Evaluating the service

After first year of service looked at:

- Researcher/review demographics
- State of review/ level of understanding of SRs before & after consultations
- Consultations
- Tools offered by services
- Future services
- Comments





Developing the service Examples

Publications with graduate students

- Nutrition: What are Asian-American youth consuming? A systematic literature review
- Health Education: A Systematic Review of Emotions, Attitudes, and Decisions Regarding Genetic Tests Associated With Autism Spectrum Disorders
- **Preventive medicine:** Factors Associated with Colorectal Cancer Screening among Young African American Men: A Systematic Review

Publications with Faculty

- Clinical medicine: Intrahepatic Persistent Right Umbilical Vein and Associated Outcomes: A Systematic Review of the Literature
- Education: Systematic Literature Reviews in Engineering Education and Other Developing Interdisciplinary Fields
- Veterinary: Scoping review to identify potential non-antimicrobial interventions to mitigate antimicrobial resistance in commensal enteric bacteria in North American cattle production systems



Facing the challenges Build capacity in skills

- Building capacity across all MSL client liaisons and then, UL
- Building confidence in recently trained/creating learning opportunities and materials
- Documentation of process to assist both users and newly trained

Training **Knowledge** useful abilities. backbone of co quired for a tr



Facing the challenges Time

- Time to keep up with new SR methods
- More group SRs requiring project management
- Other demands on time
- External invitations and commitments





Taking next steps: Additional personnel

- Administrative support personnel
 - Schedule
 - Workshop organization
 - Communication
- Expand those regularly conducting systematic reviews: MSL and Evans





Taking next steps: Additional tasks

- Assessment of service from both client perspective and sustainability
- Full description of the service for promotion and marketing
- Fit within a larger umbrella of research services





