Is generating evidence on implementation the next step?

Toby Lasserson, Senior Editor
CEU

Trusted evidence.
Informed decisions.
Better health.

Is using evidence on implementation the next step?

Toby Lasserson, Senior Editor
CEU

Trusted evidence.
Informed decisions.
Better health.

Karl von Rokitanksy 1804-78

Cochrane

We need evidence to…

Understand impact of design/implementation decisions on reviews

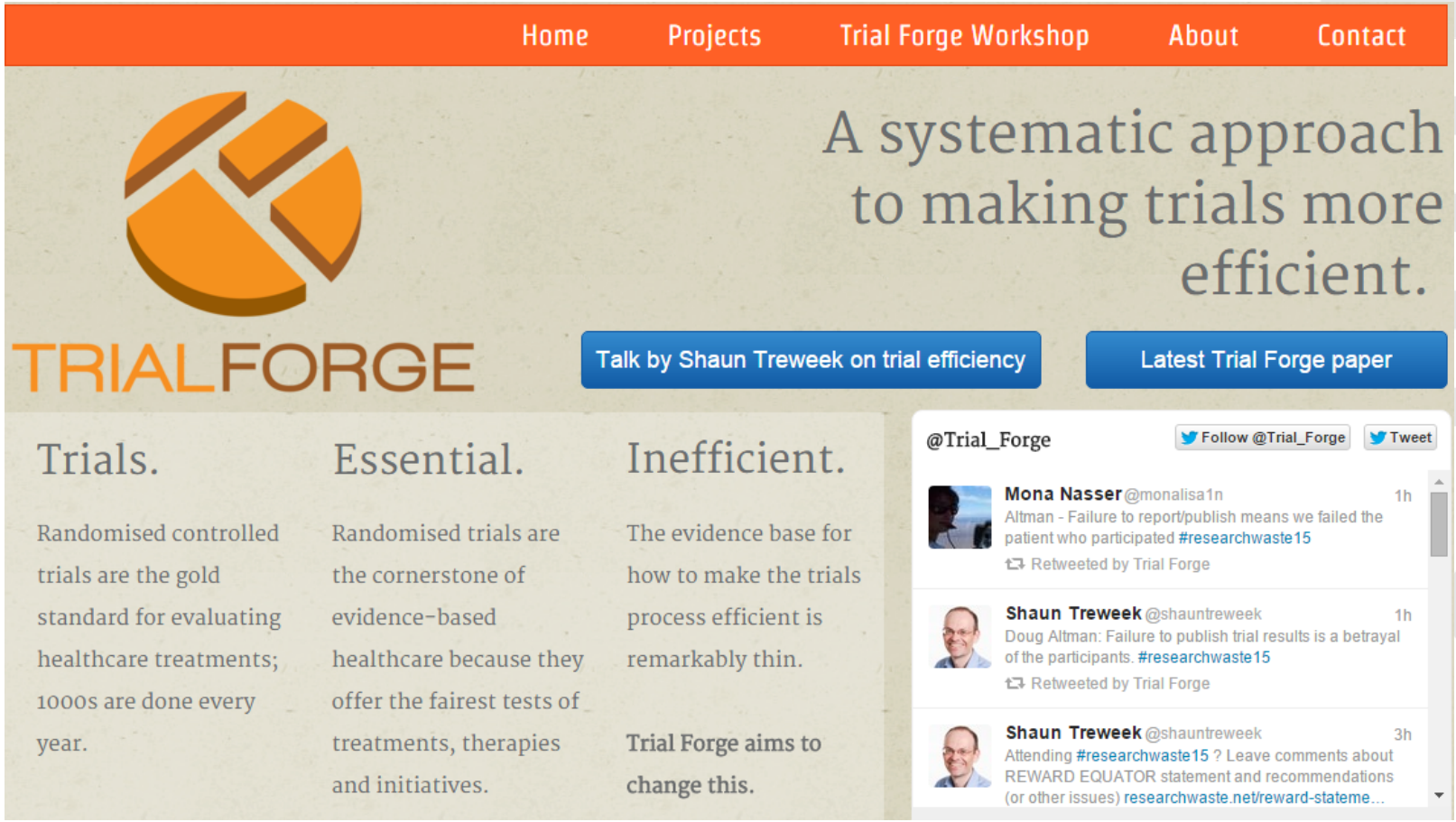
Address barriers & support drivers of good practice

Put evidence into production & improve efficiency

Reduce need for autopsies

Cochrane

Trial Forge



Cochrane Library

COCHRANE METHODS

Editors: Jackie Chandler, Joanne McKenzie, Isabelle Boutron and Vivian Welch

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  - Methods
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    - Search methods for identification of studies
    - Data collection and analysis
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Using text mining for study identification in systematic reviews: a systematic review of current approaches

O'Mara-Eves A, Thomas J, McNaught J, Miwa M, Ananiadou S. *Systematic Reviews* 2015;**4**:5

Background: Highly sensitive searches may have poor specificity, resulting in large numbers of irrelevant citations for screening, which may not be feasible within the time constraints of a review. Text mining may assist with the screening of titles and abstracts, and identification of articles for retrieval and manual screening.
Objective: To present the evidence on existing text mining methods related to the title and abstract screening stage in a systematic review.
Design and analysis: A systematic review of text mining applications for assisting the identification of potentially relevant studies

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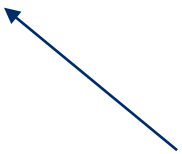

Enhancing the acceptance and implementation of Summary of findings tables in Cochrane Reviews–New alternative format for summary of findings tables: A randomized controlled trial

Alonso Carrasco-Labra[1,2,3], *Romina Brignardello-Petersen*[3,4], *Nancy Santesso*[1], *Ignacio Neumann*[5], *Reem Mustafa*[1,6], *Lawrence Mbuagbaw*[7], *Itziar Etxeandia Ikobaltzeta*[1], *Catherine De Stio*[8], *Lauren J. McCullagh*[8], *Pablo Alonso-Coello*[1,9], *Joerg J. Meerpohl*[10], *Per Olav Vandvik*[11,12], *Jan L. Brozek*[1,13], *Elie A. Akl*[1,14], *Patrick Bossuyt*[15], *Rachel Churchill*[16], *Claire Glenton*[17,18], *Sarah Rosenbaum*[17,18], *Peter Tugwell*[19], *Vivian Welch*[20], *Veena Manja*[1,21], *Wojtek Wiercioch*[1], *Paul Garner*[22], *Gordon Guyatt*[1,13], *Holger Schünemann (corresponding author)*[113,23,24] *See end of article for affiliations.*

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Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton, Ontario, Canada.

Date of study: From August 2012 to April 2014

Objective: To determine whether a 'Summary of findings' table (SoF) format is not inferior compared to the current standard format. Inferiority was assessed for the outcomes of understanding, perceived accessibility, satisfaction and preference by health care professionals, guideline developers, and researchers that either use or develop systematic reviews, or both.

Location: Study conducted by McMaster University, Department of Clinical Epidemiology and Biostatistics, Hamilton, Ontario, Canada with collaborators internationally.

Background: Cochrane has been implementing SoF tables in its reviews since 2004. While these tables are recognized as an effective knowledge translation strategy,[1] a limitation to the routine implementation of SoF tables by all review groups is the restricted options currently offered for displaying review results. The inclusion of empirically tested alternative presentations of risks and other items in SoF tables would allow

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Outcomes in Cochrane Systematic Reviews addressing four common eye conditions: an evaluation of completeness and comparability

Saldanha IJ, Dickersin K, Wang X, Li T. *PLOS ONE* 2014;**9**(10):e109400.

Background: Studies that address a review question often report different outcomes, both to each other and to those chosen by the systematic reviewer. Systematic reviewers must decide whether to choose outcomes they believe to be important (systematic review author judgment), or those outcomes reported in the clinical trials (clinical trialist judgment). It is unclear how systematic reviewers choose and pre-specify outcomes for systematic reviews.

Objective: To assess the completeness of pre-specification and comparability of outcomes in Cochrane Reviews addressing four common eye conditions.

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Audit of published Cochrane Reviews: methodological implications

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Background: This article summarizes the findings of an audit of two cohorts of published Cochrane Reviews. The full report is available from the Cochrane Editorial Unit (CEU) website. Goal 1 of Cochrane's *Strategy to 2020* reaffirms Cochrane's mission to produce high-quality systematic reviews, and specifically, to develop comprehensive quality assurance processes.[1] The target set for 2014 directly supports this aim by using a subset of the Methodological Expectations of Cochrane Intervention Reviews (MECIR) standards as the basis for an audit of Cochrane Reviews. Since September 2013, the CEU has been screening pre-publication drafts of new intervention reviews. Based on preparatory work in April 2013 we have been using a set of key standards to check review quality during the screening process.

The focus of the audit compared two cohorts of published reviews: the first cohort comprised new intervention reviews published in August 2013, and the second cohort comprised new intervention reviews published in August 2014.

Objective: To assess changes in the quality of new Cochrane Intervention Reviews following implementation of pre-publication review screening in the CEU.

Methods:

Standards

The subset of the MECIR standards that were used as the basis of the audit was based on the CEU review screening criteria at the time of the audit. The standards are subdivided according to three discrete components of the review: implementation of protocol methods, interpretation, and inconsistency (Table 1).

Table 1 MECIR audit standards[5].

Standard title	MECIR item	The Standard
Implementation of protocol methods		
Searching trials registers	C27	Search trials registers and repositories of results, where relevant to the topic through ClinicalTrials.gov, the WHO International Clinical Trials Registry Platform (ICTRP) portal

Relationship between trials register searches & e.g. effect size/risk of selective outcome reporting bias

Item No.	Item name	Standard	Met?	
	Implementation of protocol methods			
C27	***Searching trials registers***	Search trials registers and repositories of results, where relevant to the topic through ClinicalTrials.gov, the WHO International Clinical Trials Registry Platform (ICTRP) portal and other sources as appropriate.		
C37	***Rerunning searches***	Rerun or update searches for all relevant databases within 12 months before publication of the review or review update, and screen the results for potentially eligible studies.		
C40	***Excluding studies without useable data***	Include studies in the review irrespective of whether measured outcome data are reported in a 'usable' way.		
C68	***Comparing subgroups***	*If subgroup analyses are to be compared*, and there are judged to be sufficient studies to do this meaningfully, use a formal statistical test to compare them.		
R106	***Changes from the protocol***	Explain and justify any changes from the protocol (including any *post hoc* decisions about eligibility criteria or the addition of subgroup analyses).		

Currency of search & N included studies?

ORBIT 2?

Frequency & nature of unacknowledged or unjustified departures:
Data dependency
Changes in outcome status/definition

N subgroups;
Threshold decision-making;
Adherence to guidance;
Frequency/nature of post-protocol refinement

Summary

Monitor, communicate & use evidence on implementation of review methods

Inform lifecycle of review from title to update

Base development of guidance & technology changes on evidence

Identify uncertainties

Thank you

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