Running a systematic review service from home

Bob Green
Solution Specialist at Clarivate

Julie Glanville
Independent Consultant

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Librarians are well positioned to improve the quality of systematic reviews

At least 2,500 new systematic reviews are published each year.\(^1\)

Poor review quality is “the norm rather than the exception.”\(^2\)

Involving librarians correlates with better methodological rigor.\(^3-5\)

Librarians often refine research plans in addition to providing search expertise.\(^6\)

\(^1\)https://doi.org/10.1007/s00134-017-5039-y
\(^2\)https://doi.org/10.11124/jbisrir-2017-003552
\(^3\)https://doi.org/10.1016/j.jclinepi.2014.11.025
\(^4\)https://doi.org/10.5195/jmla.2016.139
\(^5\)https://doi.org/10.1371/journal.pone.0125931
\(^6\)https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5624428/
Systematic review tips every librarian should know

Read our systematic review tips for librarians. Learn what they are and discover best-practice search tips and guides for researchers at your institution. You can also register for our webinar to learn more.

Librarians bring unique value to the systematic review process. Your knowledge of databases and search strategies can help researchers at your institution create a robust, well-documented protocol, supported by best-practice tools and resources.

That is, of course, if you’ve helped with systematic reviews many times over.

If you’re new to the field or want to brush up on your knowledge about systematic reviews, this blog is designed to help.
Our guest speaker

We have the pleasure of co-presenting with Julie Glanville in this session today.

Julie Glanville, Independent Consultant

Julie is a qualified librarian who has been working in the field of systematic reviews for more than 25 years. She is an independent consultant focusing on information retrieval for systematic reviews. Julie provides advice, research and training.

From 2008 to June 2020, Julie was Associate Director of York Health Economics Consortium (YHEC), where she coordinated YHEC's information and review services to customers who required literature searches and reviews of all types. Julie managed reviews ranging from rapid reviews to systematic reviews, to inform submissions to reimbursement agencies such as NICE. She was also an Associate Editor for the journal Research Synthesis Methods until June 2020.

Julie is a co-convenor of the Cochrane Information Retrieval Methods Group and co-author of the Cochrane Handbook chapter on searching for evidence.
Agenda

- Remote working
- Journal Abbreviations - Custom Term List
- Custom Fields - tagging
- Importing non-journal publications
- Find Reference Updates - enrich records
- Saved Searches
- Groups - first pass on metadata
- Export to Covidence and updating EndNote with results
- Questions
Systematic reviews can be complex projects to manage
  - likely to involve a team of people
The challenges of managing reviews are likely to be amplified by current increased remote working
EndNote is a valuable tool that is used by many reviewers producing reviews
EndNote has a range of features that can help to streamline review production for teams working remotely
This presentation will highlight features that can help with
  - Organizing the review library
  - Record screening/selection
Where can EndNote help in the SR process?

**Protocol development**
- Word plus EndNote for references in protocol

**Searches and Record Management**
- Database searching
- Search results into EndNote and deduplicated

**Screening**
- EndNote (preliminary or full screening)
- Record selection software (e.g. Rayyan, Covidence...)

**Data extraction/Risk of Bias assessment**
- Excel
- Other software (e.g. RevMan, Covidence, DistillerSR...)

**Synthesis**
- RevMan, R or other statistical packages, WinBUGs

**Report writing/Publication drafts**
- EndNote can help with referencing the report, building PRISMA, creating inclusion and exclusion lists

Julie Glanville

August 20
Journal abbreviations

- EndNote helps to manage references for all the documents associated with a review.
- The **Journals Term List** option can help to streamline reference/bibliography production.
- There are Term lists for a range of disciplines:
  - contains the full journal name plus one or more abbreviations for each journal.
  - journal names and abbreviations can be added to the list.
  - can be saved and used in successive reviews to save time standardizing references.
- Load Journals Term List when you create a new library.
Custom fields - tagging

- EndNote offers 8 Custom fields (and other additional fields could be repurposed if needed)
- These can be used to hold any information you wish and can also be renamed
  - Date of the search
  - Database from which the records were identified
  - Date and source from which full texts were ordered
  - Keywords to show final decision on the record e.g. included, excluded title and abstract, excluded at full text, duplicate
  - Your own keywords to capture themes within the document e.g. specific outcomes or subpopulations
- Remember to
  - Check that a Custom field is not already in use by a Reference Type (see File, Preferences)
  - Agree purpose of each Custom field within the team and agree conventions e.g. format for dates, control the vocabulary options to ensure consistent wording
  - Can use Term Lists to build controlled lists of terms for decisions or study designs to ensure consistency
Custom fields - examples

Custom fields with user added data

Custom 3
20/08/2020

Custom 4
Pubmed

Custom 5
excluded title and abstract

Using a term list to specify controlled vocabulary for a Custom field

Hint: Hold the Cmd key (⌘) to select multiple terms.
Importing non-journal publications

- Increasingly reviews may involve non-journal publications
  - Trial register records
  - Pre-prints
  - Reports
- Adding one or two manually may be easy to do, but if there are dozens then you may want to look at ways to develop specific import filters
- Ideally you need structure to develop import filters
  - Record delimiters
  - Field tags
  - Comma or tab delimited
  - XML
  - Other regular formats
Find Reference Updates - enrich records

- Before beginning record selection ideally we want as much information in the records as possible
- After you have loaded a batch of records you could use the Reference Updates option to enrich some of them
  - select records, then right click and select ‘Find Reference Updates’
  - This will add information to records that are also in PubMed for example, even if the record came from another source
  - helps with standardizing journal names and authors, and so may improve deduplication
- It may overwrite some fields so probably best to do it before beginning lots of coding
- If you are loading Embase or Web of Science or PsycInfo records it will update with PubMed information where available - so check whether that is an issue
The available updates are shown on the left and highlighted in blue. "Update All Fields" copies every updated field from the Available Updates to My Reference, replacing anything already existing in the field(s) in My Reference. "Update Empty Fields" copies available updates only when the corresponding field in My Reference is blank. Text can also be manually copied and pasted into fields.

Available Updates

- Anguiano, M.
- Castilla, C.
- Maska, M.
- Ederra, C.
- Pelayo, R.
- Morales, X.
- Munoz-Arrieta, G.
- Mujika, M.
- Kozubek, M.
- Munoz-Barrutia, A.
- Rouzaut, A.
- Arana, S.
- Garcia-Aznar, J. M.
- Ortiz-de-Solorzano, C.

My Reference

- Anguiano, Maria
- Castilla, Carlos
- Maska, Martin
- Ederra, Cristina
- Pelayo, Rafael
- Morales, Xabier
- Munoz-Arrieta, Gorka
- Mujika, Maite
- Kozubek, Michal
- Munoz-Barrutia, Arrate
- Rouzaut, Ana
- Arana, Sergio
- Garcia-Aznar, Jose Manuel
- Ortiz-de-Solorzano, Carlos

- Year
  2017

- Title
  Characterization of three-dimensional cancer cell migration in mixed collagen-Matrigel scaffolds using microfluidics and image analysis

- Journal
  PLoS One
Saved Searches

- These are predefined searches that you can create to help find records with specific features
  - Animal studies
  - Studies about population groups of interest to the review
  - Specific study designs
- **Saved searches** mean you can quickly find groups of records by theme/topic/issue and review them quickly
- Potentially time saving and can help with consistent approaches
- Can be used with **Smart Groups**
<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
<th>Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical and Economic Evaluation of FOREseal Bioabsorbable Reinforcement Sleeves</td>
<td>Allaf,...</td>
<td>2017</td>
<td>Do the benefits of shorter hospital stay associated with the use of fleece-bound sealing sleeve material justify the additional cost?</td>
</tr>
<tr>
<td>Do the benefits of shorter hospital stay associated with the use of fleece-bound sealing sleeve material justify the additional cost?</td>
<td>Anegg, U,...</td>
<td>2008</td>
<td>How does the cost of using a new surgical technique compare to traditional methods?</td>
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<tr>
<td>Cost analysis of pulmonary lobectomy procedure: comparison of stapler versus precut</td>
<td>Anonym,...</td>
<td>2018</td>
<td>What is the cost analysis of different surgical techniques for lung lobectomy?</td>
</tr>
<tr>
<td>Cost analysis of pulmonary lobectomy procedure: comparison of stapler versus precut</td>
<td>Drogheiti,...</td>
<td>2017</td>
<td>How do cost analysis and procedure time compare for different surgical techniques?</td>
</tr>
<tr>
<td>Use of tissue glue and its effect on hospital cost in patients undergoing pulmonary lobectomy</td>
<td>Gundogd,...</td>
<td>2006</td>
<td>Investigating the impact of tissue glue on hospital costs.</td>
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<tr>
<td>Low cost locally prepared fibrin glue for clinical applications: reported of 145 cases.</td>
<td>Isarangk,...</td>
<td>1999</td>
<td>Evaluating the cost-effectiveness of locally prepared fibrin glue.</td>
</tr>
<tr>
<td>Length of stay and hospitalization costs for patients undergoing lung surgery with Preve...</td>
<td>Mortman,...</td>
<td>2018</td>
<td>Assessing the cost of different surgical approaches for lung surgery.</td>
</tr>
<tr>
<td>Intraoperative costs of video-assisted thoracoscopic lobectomy can be dramatically reduced</td>
<td>Richards,...</td>
<td>2018</td>
<td>How do intraoperative costs compare for different surgical techniques?</td>
</tr>
<tr>
<td>Hemostats, sealants, and adhesives III: a new update as well as cost and regulatory considerations</td>
<td>Spotnitz,...</td>
<td>2012</td>
<td>Reviewing the latest updates on hemostats, sealants, and adhesives.</td>
</tr>
</tbody>
</table>
Groups - first pass on metadata

- **Groups** help with record selection within EndNote
- You can create **Groups** or **Smart Groups** - Bob will talk about Smart Groups
- You can use **Groups** when removing initial ineligible records e.g. animal studies or studies about ineligible diseases
- When you have grouped records you can then decide if you want to code the individual records by adding group information to one of the Custom fields
  - For safety - since it is easy to delete groups or parts of groups
  - For ease of checking - since it is possible to have one record in more than one group
- Can use **Groups** or **Smart groups** for double independent reviewing if you have two groups with the same subgroups
Export to other software/updating EndNote with results

- If you decide to do title/abstract and full text record selection in EndNote, you will need to export the EndNote records being assessed to other software e.g. Covidence, DistillerSR, Rayyan
- Explore how to get as much data as you need out of EndNote to the other software
- Consider how to ‘link’ your EndNote record to the new software e.g. by exporting the EndNote Record Number somewhere in the record
- Consider how, after record selection is complete, you can update the EndNote library to reflect final decisions reached in the other package
  - Knowing the original EndNote Record Number is key to this
Questions
EndNote Tips for Systematic Reviews
Flexible workflows

Use EndNote on its own to complete your review, or in combination with other commonly used systematic review tools.

Easily transfer files between EndNote and other systems via import and export.

There is no one solution but EndNote can adapt.
Custom filters for difficult sources

Some sources do not have an export option for reference management applications like EndNote.

You can create new Filters to import most export formats into EndNote, and our support team is ready to help, if needed.
De-duplication tips

• **By default**, EndNote compares **Author, Year, Title,** and **Reference Type** when looking for duplicates.

• **Reconfigure** EndNote's Find Duplicates search by choosing up to 15 comparison fields.

• Consider performing **multiple rounds** of duplicate searching, using different criteria to efficiently and accurately remove duplicates.

• **Do not Trash** your duplicates. Either put them into a **group**, or a **separate library**, so they can form part of your audit trail.

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EndNote 20, we will be adding options for DOI and PMCID.

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Save time with custom styles

Speed up the process of each round of consideration in your review by creating unique output styles to control how information displays.

A few seconds saved on each record soon adds up when you’re dealing with thousands!
Assist workflow with custom styles

Using a customised **Tab Delimited** output style when exporting references to Excel minimizes the time and effort you need to spend manipulating the data in your worksheet.

Include an ID to reliably match records back to EndNote.

```
"Reference-Type" -> "Author" -> "Year" -> "Title" -> "Secondary-Title" -> "Volume" -> "Number" -> "Pages"
-> "Publisher" -> "Place-Published" -> "URL" "DOI" "Keywords" "Abstract"
```

<table>
<thead>
<tr>
<th>Book</th>
<th>A. J.</th>
<th>2003 Reading</th>
<th>Wiley</th>
<th>Chichester</th>
<th>Reading Color</th>
<th>attributes</th>
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</thead>
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<td>Book</td>
<td>P. G.</td>
<td>2014 A Comparison</td>
<td>CRC Press</td>
<td>Boca Raton</td>
<td>Arthur Raatzick was a</td>
<td></td>
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<tr>
<td>Book</td>
<td>J. E. A.</td>
<td>2005 Arthur</td>
<td>History</td>
<td>Bath</td>
<td>10.1144/gsl.5p</td>
<td></td>
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<tr>
<td>Book</td>
<td>P.</td>
<td>2011 Design and</td>
<td>229-252</td>
<td>Springer- Berlin</td>
<td>Virtual reality</td>
<td></td>
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<tr>
<td>Journal</td>
<td>R. F. Azar</td>
<td>1969 THE</td>
<td>Journal</td>
<td>121</td>
<td>3-81-86</td>
<td></td>
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<tr>
<td>Journal</td>
<td>R. B.</td>
<td>1993 Visual</td>
<td>Eye</td>
<td>7 (Pt 6)</td>
<td>10.1088/eye.1</td>
<td></td>
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<tr>
<td>Journal</td>
<td>D. J.</td>
<td>2006 A stereo</td>
<td>Percept</td>
<td>68</td>
<td>10.1682-93</td>
<td></td>
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<tr>
<td>Journal</td>
<td>E. Avram;</td>
<td>2013 Functional</td>
<td>Ophthalmol</td>
<td>57</td>
<td>4-03-Aug</td>
<td></td>
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<tr>
<td>Journal</td>
<td>E. Avram;</td>
<td>2013 Treating</td>
<td>Ophthalmol</td>
<td>57</td>
<td>3-12-7</td>
<td></td>
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<td>Journal</td>
<td>B. T.</td>
<td>2013 Binocular</td>
<td>Plos One</td>
<td>8</td>
<td>10.1776/171</td>
<td></td>
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<td>Journal</td>
<td>Y. Hara;</td>
<td>2016 An Internat</td>
<td>48</td>
<td>81-88</td>
<td></td>
<td></td>
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<tr>
<td>Journal</td>
<td>P. Bindra;</td>
<td>2018 Response to</td>
<td>eLife</td>
<td>7</td>
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<td>T. Bocci;</td>
<td>2018 Unilateral</td>
<td>Frontiers</td>
<td>12</td>
<td>10.3390/beh</td>
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<td>Z. I.</td>
<td>2018 Microbiologica</td>
<td>Toxicolog</td>
<td>5</td>
<td>871-877</td>
<td></td>
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<tr>
<td>Journal</td>
<td>R. Brown;</td>
<td>2019 Clinical</td>
<td>Trials</td>
<td>20</td>
<td>1</td>
<td>10.1186/s1306</td>
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<tr>
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<td>E. A.</td>
<td>2020 Comparative</td>
<td>Journal</td>
<td>175</td>
<td>105965</td>
<td></td>
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<td>Thesis</td>
<td>C. Sziklai</td>
<td>1961 The Effect of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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![Clarivate Logo](Clarivate_Logo_TM.png)
Assist workflow with custom styles

When exporting to speciality software such as Covidence or DistillerSR, use a custom style to generate a special tagged text file of your references to ensure all the required information is transferred.

Talk to the provider to fully understand how it works and ensure data does not go missing.
Save time with PDF customisation

When exporting to speciality software such as Covidence or Distiller SR, you can set the naming conventions for PDFs in EndNote before attaching them to references.

If you have already attached PDFs, EndNote can rename them all for you.

Distiller: rename the pdfs according to the RefID in order to bulk upload

Covidence: rename the PDFs using Author-Year, or Author-Title-Year
Stay organized with groups

Use the three types of group in EndNote:

- Custom
- Smart
- Combination

to organise references, so that the information you need is easily accessible and to reduce the number of manual tasks the reviewer has to undertake.
Save time with template libraries

Save time by setting up a template library, with pre-defined groups and term lists to start a new review project with less legwork.

This can also help to provide a consistent approach to reviews.
Sharing libraries

A review will usually involve more than one person, in these situations sharing information is key.

There are several ways to share EndNote libraries:

- Shared via a network drive
- Share Library (desktop)
- Share Groups (online)
Additional Resources

Videos that relate to features covered in this presentation:

Sharing a Library:
https://videos.webofsciencegroup.com/watch/MFKXkz8R85ErpVq8f9wd23

Journal Term Lists:
https://share.vidyard.com/watch/hmNTd6Rz6n9EJ2rBY398cV

Find Reference Updates:
https://share.vidyard.com/watch/NNuY6UHY6eTFJQCnWpb4Zj

EndNote features you might not know about:
https://share.vidyard.com/watch/Af5WPmtJWtjTbRcggZc9Bn5

Free online training sessions, like our Q&A sessions.
Additional Resources

Web of Science Group Learning
Get all the support and training you need to make the most of your Web of Science Group products

Videos
Self-Guided Learning
Live Training
LibGuides
Thank you

Please email subsequent questions to:

Bob Green

bob.green@clarivate.com

clarivate.com