

PICO annotation

Webinars (February/March 2107)

Deirdre Beecher – Senior Metadata Specialist
Carol Friesen – Metadata Specialist

Trusted evidence.
Informed decisions.
Better health.



Overview

- **Background**
 - who is involved
 - work to date (2016 to 2017)
 - specifying core outcomes
 - lessons learned so far & proposal
- **Tools**
- **Demo/questions (for webinars)**
- **Events 2017**
- **Project contacts**

Who is involved (first phase of project)

Groups

- Pregnancy and Childbirth
- Neonatal
- Childhealth field

Staff

- 2 full time & 3 part time annotators
- 9 QA* (mainly clinicians or those with domain expertise)
- 2 CIS (Neonatal and Pregnancy & Childbirth)
- 4 – 5 annotators/QA for the Childhealth Field (including information specialists)

* Quality assurance

PICO annotation 2016 to March 2017

- Funding from Gates to focus on reviews within childhealth
- Reviews from:
 - Pregnancy & childbirth
 - Neonatal
 - Childhealth field (range of reviews from Cochrane content)
- Annotations
 - Review level (methods section)
 - Included studies
- Guidance developed (stored in Confluence)
- Tools developed





Specifying a set of “Core” annotation components*

Original aims

- Annotate full PICOs from every review at 3 levels:
- Review (N = 6812)
- Every included study (N = 88502)
- Every analysis (N = 133471 - 69082 of the outcomes are distinct)

* Information provided by Lorne Becker February/March 2017



Lessons learned so far

- It is a very big job
- Not all annotations are equally important for the use cases we are developing
- **Review methods** often include long lists of Outcomes - many of which are not addressed in their included studies or analyses
- **Analysis section** of a Review
 - ▶ doesn't actually list a full P
 - ▶ assumes the P from the Review methods



Proposal

- try to optimize the time of our annotators by focusing on annotation of a “core” subset of PICO components.
- from the Review Methods – P, I & C – human annotation
- from the Included Studies – full PICO - most done by robot
- human annotation of selected studies (based on priorities)
 - ▶ Review group decides what is high priority and wants to annotate it
 - ▶ Gates or other funder thinks it’s high priority



Annotation tools

1. **Annotator** – used to complete the annotation task
2. **QA dashboard** – logs all annotations and notes
3. Vocabulary Browser – populated by our annotations
4. PICO finder – tool used to search Cochrane content by end user
5. Editor – permits editing of vocabulary (limited access)

Communication & documentation

1. Slack – messaging app for teams
2. Confluence – team collaboration software (wiki structure)
 - Annotation Knowledge Base space
<https://documentation.cochrane.org/display/AKB/Annotation+Knowledge+Base>



Ontologies used to develop our Cochrane browser

SNOMED

MEDdra

Rxnorm

WHO - atc_ddd_index

Abbreviations finder (e.g. <http://www.medilexicon.com/abbreviations>)



PICO events

February/March 2017

- Webinars
- UK/IE symposium Oxford – PICOthon

September 2017

- Global Evidence Summit – workshop (?) (tbc)



Who to contact

If you have any questions or just want to know more please do not hesitate to contact us.

Deirdre Beecher, Senior Meta-data Specialist

 dbeecher@cochrane.org

Chris Mavergames, Head IKMD/Chief Information Officer

 cmavergames@cochrane.org