PICO annotation

Webinars (February/March 2107)

Deirdre Beecher – Senior Metadata Specialist
Carol Friesen – Metadata Specialist
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 child health
- Reviews from:
  - Pregnancy & childbirth
  - Neonatal
  - Child health 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