



**Cochrane PICO:
Using linked data
technologies to
semantically
annotate *outcomes*
in Cochrane
evidence**

Trusted evidence.
Informed decisions.
Better health.

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Acknowledgements

Many thanks to Lorne Becker, Alex Garcia Castro, James Thomas, Anna Noel-Storr, and the whole linked data project team at Cochrane.



Outline

- Cochrane Linked Data Project
 - PICO Annotator
 - Annotating O in PICO
 - PICOfinder
 - Moving towards semi-automation
- Questions
- Ideas for collaboration?

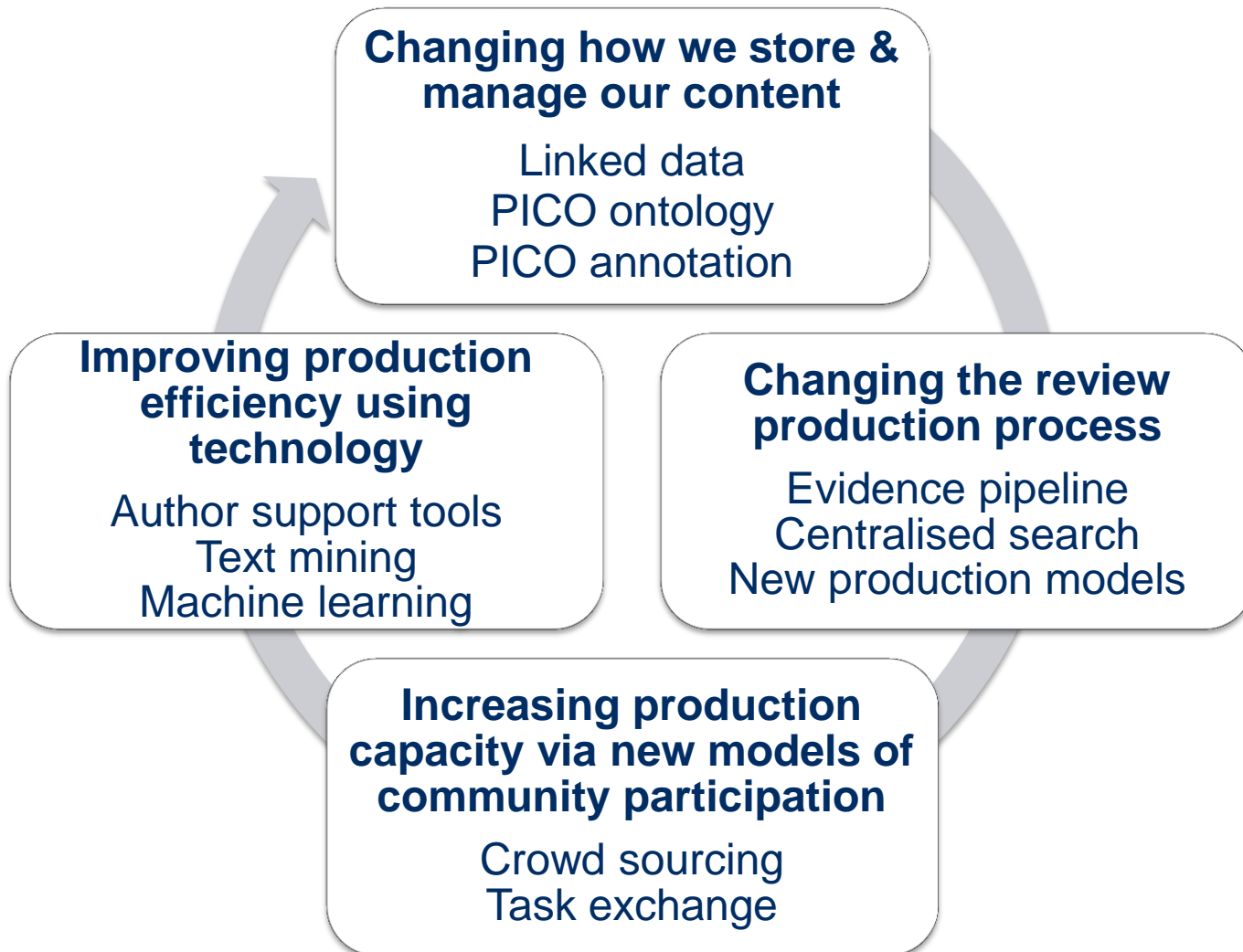


Linked Data Project

Making Cochrane evidence more
accessible









Cochrane operational projects

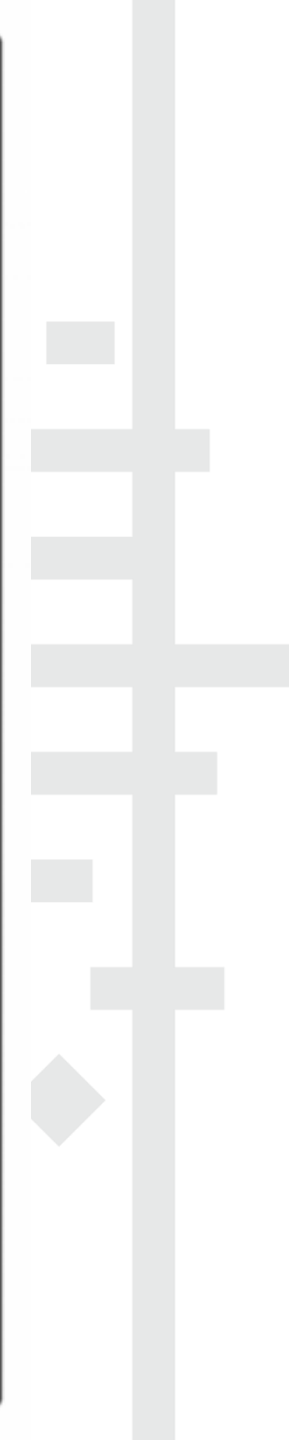
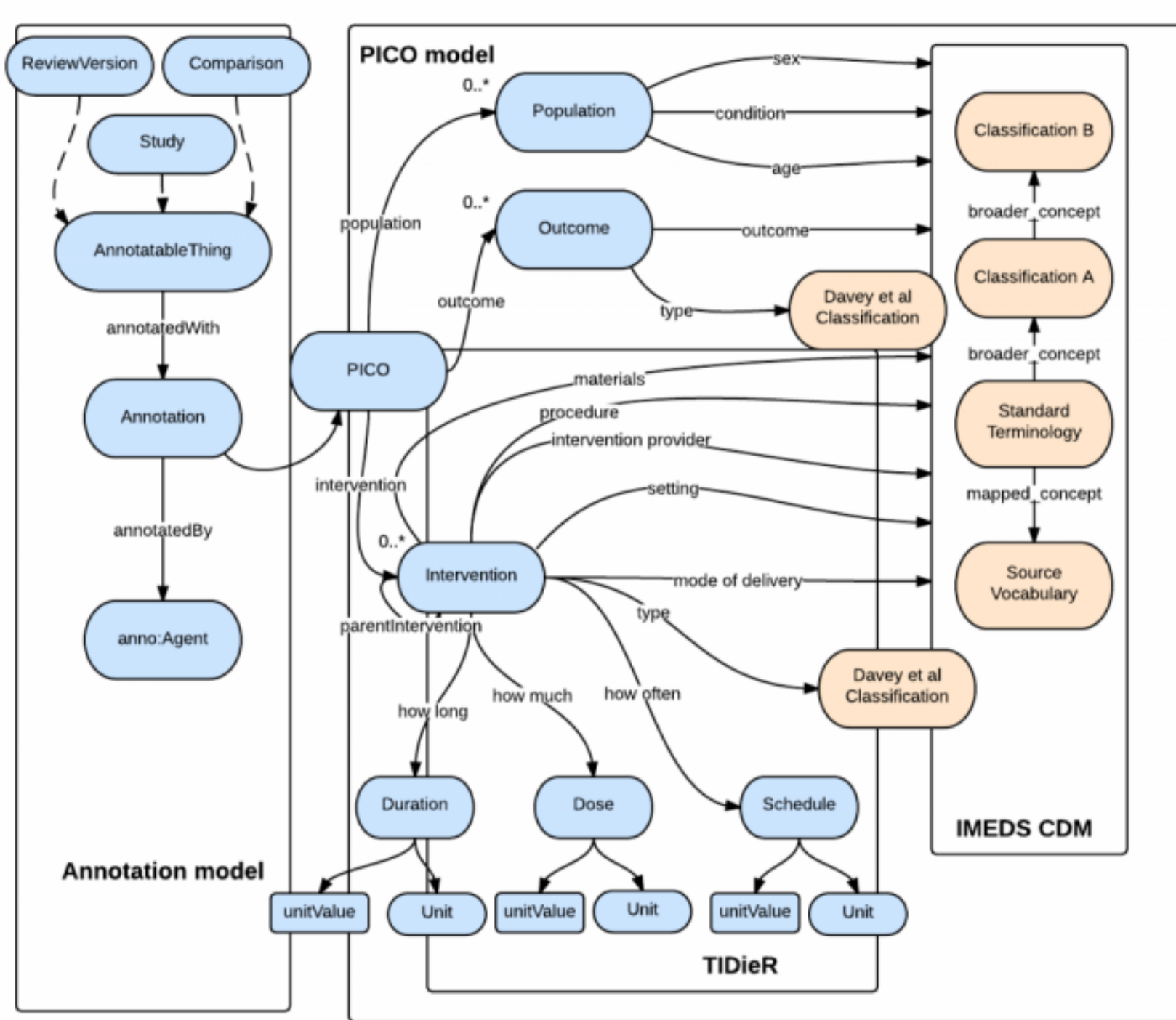


Linked Data: Overarching goals

- Enrich our content and data with metadata using controlled vocabularies (SNOMED CT, etc.)
- Construct knowledge models and structures (ontologies) that will allow re-use of this metadata (annotations) for both downstream (dissemination) and upstream (production) use
- Become more interoperable with other projects, products, datasets, and systems
- Improve production (“smarter data”) and dissemination of evidence (“unlocking the evidence”)
- <http://linkeddata.cochrane.org>

“Enabling” technology

- New interfaces and products for Cochrane evidence such as:
 - Dynamically-generated topic portals and interfaces 
 - Improved discoverability 
 - Comparator tools 
 - APIs for third-party systems and data feeds
- Facilitating:
 - Data re-use and repurposing 
 - Review production efficiency and intelligence 
 - Living sys reviews into living guidelines 
 - Creation of standards (PICO) for interoperability



Controlled terminology sets (vocabularies)



ihtsdo Leading healthcare terminology worldwide

Home IHTSI

SNOMED CT

The Global Language of Healthcare

SNOMED CT is the most comprehensive and precise clinical health terminology product in the world. It is the result of the work of the International Health Terminology Standards Development Organisation (IHTSDO).

SNOMED CT has been widely adopted and is now accepted as the standard terminology for clinical practice.

Patients and health professionals can benefit from the use of SNOMED CT in many ways.



Home Publications Countries Programmes Governance About WHO

Classifications

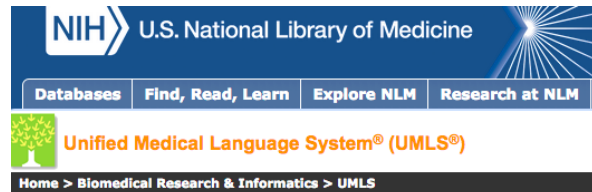
The Anatomical Therapeutic Chemical Classification System with Defined Daily Doses (ATC/DDD)

Purpose/Definition

The ATC/DDD system classifies therapeutic drugs. The purpose of the ATC/DDD system is to serve as a tool for drug utilization research in order to improve quality of drug use.

Classification structure

In the ATC classification system, the drugs are divided into different groups according to the organ or system on which they act and their chemical, pharmacological and therapeutic properties. Drugs are classified into five different levels. Drug consumption statistics (international and other levels) can be presented for each of these five levels.



NIH U.S. National Library of Medicine

Databases Find, Read, Learn Explore NLM Research at NLM

Unified Medical Language System® (UMLS®)

Home > Biomedical Research & Informatics > UMLS

RxNorm

RxNorm provides normalized names for clinical drugs and links its names to many other vocabularies, including those of First Databank, Micromedex, MediSpan, Gold Standard Drug, and others. It provides a mechanism for linking between systems not using the same software and vocabulary.

RxNorm now includes the National Drug File - Reference Terminology (NDF-RT), which includes information on the mechanism of action, physiologic effect, and therapeutic category.



MedDRA Medical Dictionary for Regulatory Activities

Home About MedDRA How to Use Training Subscription

Welcome to MedDRA

In the late 1990s, the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH) developed MedDRA, a rich and highly specific standardised medical terminology for medical products used by humans... (more)

Multilingual Access 中文 Čeština Nederlands English Français Deutsch Magyar

Discover MedDRA

plan

search

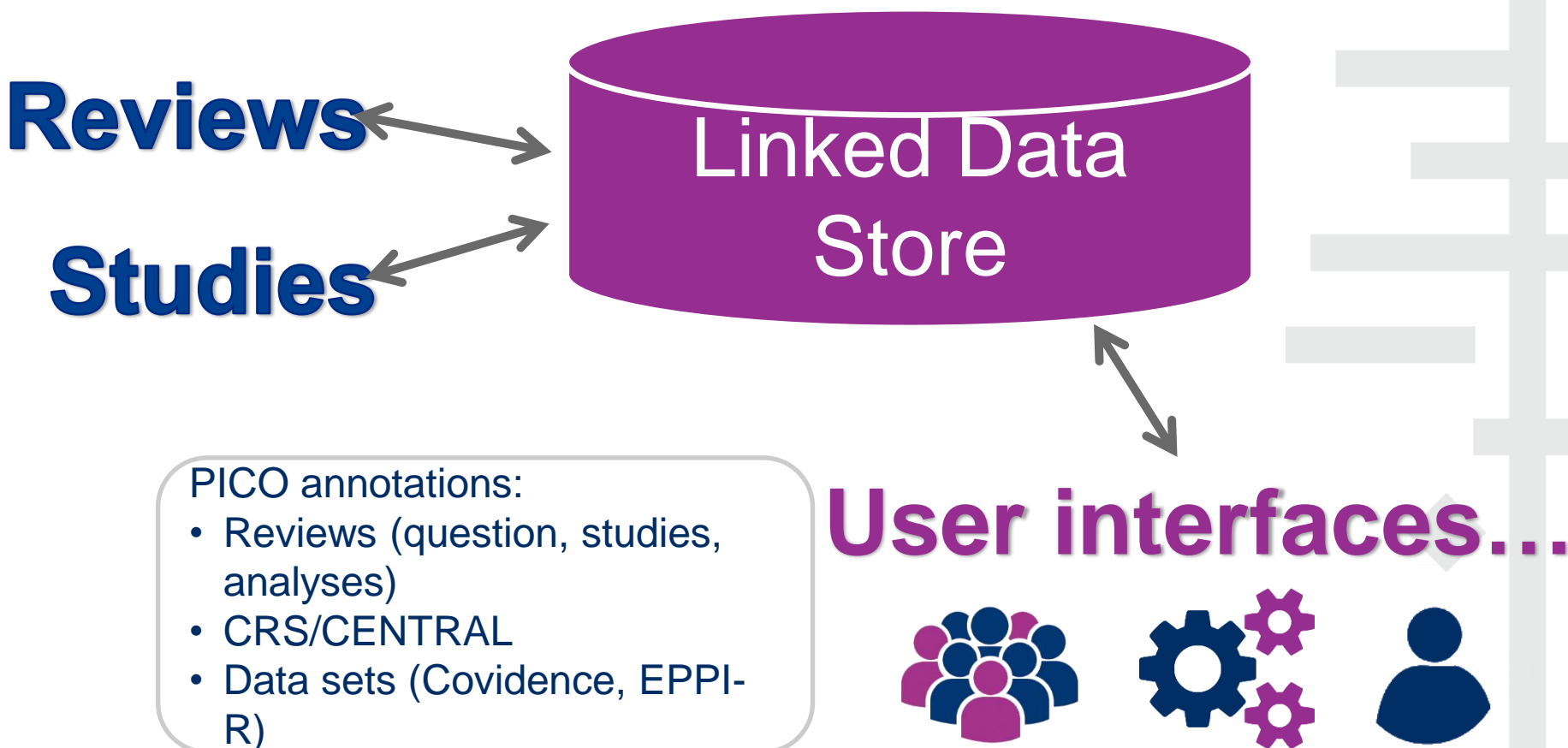
write

analyze





A new Cochrane *PICO* database



PICO Annotator

Annotating Cochrane Review content



Methods

Criteria for considering studies for this review

Types of studies

Randomised controlled trials (RCTs) evaluating and comparing antibiotics to a placebo, or different classes of antibiotics for acute sinusitis, and reported in full-text.

We included trials having a sample size of at least 30 participants with acute maxillary sinusitis. This is to guarantee that data in individual studies are as unbiased as possible. Also in very small samples many estimators are known to be sensitive to variation.

We excluded studies reported only as abstracts because there is evidence that there are discrepancies between data reported in the abstract and the final published full report and that information on trial quality indicators is often lacking (Chokkalingam 1998; Hopewell 2006). Thus we required full-text reports to ensure reliable data extraction and assessment of risk of bias. To diminish the risk of publication bias, we attempted to contact authors of potential abstracts to obtain information as to whether a full-text report of the study (unpublished or published) was available.

Types of participants

We included trials with adults or trials that separately reported data on subgroups of adults. We accepted adolescents (at least 12 years old) if less than 20% of participants were under 18 years of age.

Acute maxillary sinusitis was defined by:

1. a history of URTI lasting seven to 30 days, with at least two clinical signs or symptoms (sinus pain at palpation, postnasal drip, purulent nasal discharge, nasal obstruction, unilateral facial pain, maxillary toothache, impaired sense of smell); or
2. radiography, ultrasound or other imaging; or
3. bacterial culture from a sinus secretion obtained by puncture or endoscopy and irrigation or aspiration.

In studies where the clinical diagnosis was not clearly described, diagnosis of acute maxillary sinusitis should be confirmed in at least of 80% of participants by imaging or culture.

We included trials with a mixed population of acute (symptoms less than 30 days) and non-acute sinusitis or acute exacerbations of chronic sinusitis if they separately reported data on the subgroup with acute sinusitis, or if at least 80% of participants had acute sinusitis.

We excluded trials that focused on patients with complicated sinusitis such as pansinusitis or frontal sinusitis (or solely ethmoidal or sphenoidal sinusitis), or infections

PICO Annotator

P I C O

Step 1: Participants

sex

age range...

asthma and

+ OR

- Asthmatic**
parent term: **Asthma**
[source: MedDRA; ID: 10003565]
- Asthma**
parent terms: **Lesion Of Bronchus ...**
[source: SNOMED; ID: 195967001]
- Asthma**
parent terms: **Allergic Conditions Nec ...**
[source: MedDRA; ID: 10003553]
- Asthma Without Status Asthmaticus**
parent terms: **Asthma ...**
[source: SNOMED; ID: 55570000]
- Asthma With Status Asthmaticus**
parent terms: **Acute Asthma ...**

PICO Annotator

P I C O

Step 1: Participants

sex

age range...

- Child
- Child, Preschool 2-5 years
- Adolescent 13-18 years
- Child 6-12 years
- Adult
- Aged
- Infant

asthma

- + OR **Asthmatic**
parent term: *Asthma*
[source: MedDRA; ID: 10003565]
- Asthma**
parent terms: *Allergic Conditions Nec*
...
[source: MedDRA; ID: 10003553]
- Asthma**
parent terms: *Lesion Of Bronchus ...*
[source: SNOMED; ID: 195967001]
- Asthma Without Status**

P I C O

Step 2: Interventions

classification and

corticosteroids

dose

duration

- Corticosteroids**
parent term: *Ophthalmological And Otolological Preparations*
[source: WHO; ID: S03B]
- + OR **Corticosteroids**
parent term: *Otologicals*
[source: WHO; ID: S02B]
- Corticosteroids**
parent term: *Corticosteroids*
[source: WHO; ID: S02BA]
- Corticosteroids**
parent term: *Decongestants And Other Nasal Preparations For Topical Use*
[source: WHO; ID: R01AD]
- Corticosteroids**
parent term: *Agents For Treatment Of Hemorrhoids And Anal Fissures For Topical Use*
[source: WHO; ID: C05AA]
- Corticosteroids**
parent term: *Corticosteroids*
[source: WHO; ID: S03BA]
- Corticosteroid Derivatives**
parent term: *Antimigraine Preparations*
[source: WHO; ID: N02CB]

PICO Annotator

P I C O

Step 2: Interventions

classification and

materials/procedure

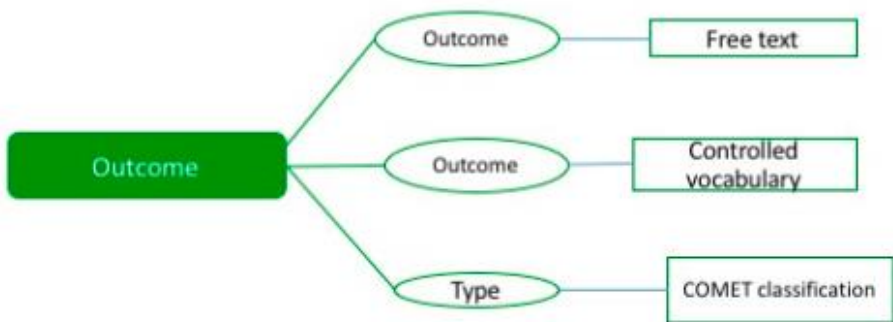
dose (units) sched (units)

duration (units)

+ OR

New Group/Arm





What outcomes are there
For this comparison?

PICO Annotator

P I C O

Step 4: Outcomes

- classification
- Pain
- Quality of Life
- Resource use
- Device/intervention failure
- Psychosocial
- Mental health
- Infection
- Satisfaction with care
- Compliance with treatment
- Function
- Adverse events
- Withdrawals or dropouts from study
- Physiological or clinical**
- Mortality

Core domain	Smith	Williamson/Clarke	Williamson/Clarke
Adverse events	1: AEs	1: AEs	1: AEs
Death	2: Mortality/survival	2: Mortality/survival	2: Mortality/survival
Physiological or clinical	3: Physiological/ clinical	3: Physiological/ clinical	3-24: Physiological
	4: Infection	4: Infection	
	5: Pain	5: Pain	
Life impact	6: ADLs	6: ADLs	Functioning 25. Physical 26. Social 27. Role 28. Psychological/wellbeing 29. Cognitive
	7: Psychosocial	7: Psychosocial	
		8: Mental Health	
	8: QoL	9: HRQL	
	9: Compliance	10: Compliance	31: Delivery of care (includes satisfaction, patient preference, adherence, withdrawal, tolerability, etc.)
	10: Withdrawal		
	11: Satisfaction		
Resource Use	12: Medication	12: Resource Use	Resource Use 32: Economic 33: Medication 34: Hospital 35: Operative 36: Specialist/consultant
	13: Economic		
	14: Hospital		

Annotating 'O'

Some examples and challenges



Types of outcome measures

Primary Outcomes

1. Death or serious neonatal morbidity (significant trauma, encephalopathy, authors).

Secondary Outcomes

1. Duration of second stage of labour.
2. Difficulty with delivery.
3. Five-minute Apgar score less than seven or death.
4. Umbilical artery pH less than 7.2 or death.
5. Neonatal trauma or death.
6. Neonatal encephalopathy or death.
7. Neonatal intracranial haemorrhage or death.
8. ICU admission > 24 hours or death.
9. Childhood disability or death.
10. Perinatal death.
11. Maternal trauma.
12. Maternal satisfaction.

The screenshot shows the PICO Annotator interface. At the top, there is a title bar 'PICO Annotator' with icons for file operations, search, and window management. Below the title bar is a navigation bar with buttons for P, I, G, O, and arrows for navigation. The main content area is titled 'Step 4.3 Outcomes'. It features a search bar with a magnifying glass icon and a dropdown menu. The search results are displayed in a list format. The first result is 'Physiological or clini' with a dropdown arrow and an 'and' button. The second result is 'outcome condition' with a magnifying glass icon. The third result is 'difficulty with delivery' with a magnifying glass icon. Below the search results are buttons for '+ OR' and '- NOT'. At the bottom, there are buttons for 'Reset', 'New Group', and 'New Group'.

PICO Annotator

Step 4.3 Outcomes

Physiological or clini and

outcome condition

difficulty with delivery

+ OR - NOT

Reset New Group

Types of outcome measures

Primary Outcomes

1. Death or serious neonatal morbidity (significant trauma, encephalopathy, authors).

Secondary Outcomes

1. Duration of second stage of labour.
2. Difficulty with delivery.
3. Five-minute Apgar score less than seven or death.
4. Umbilical artery pH less than 7.2 or death.
5. Neonatal trauma or death.
6. Neonatal encephalopathy or death.
7. Neonatal intracranial haemorrhage or death.
8. ICU admission > 24 hours or death.
9. Childhood disability or death.
10. Perinatal death.
11. Maternal trauma.
12. Maternal satisfaction.

PICO Annotator

P I C O

Step 4.4 Outcomes

Physiological or clinical and

Apgar Score

five-minutes Apgar score less than :

OR

Mortality and

Death

death

+ OR - NOT

Reset New Group



'cd007579' ✕

Outcomes

1. Maternal adverse effects: e.g. sedation, restlessness, extra-pyramidal effects, surgical bleeding, hypotension, atonic uterus.
2. Neonatal morbidity: e.g. Apgar scores less than seven at five minutes.
3. Initiation of breastfeeding.
4. Duration of exclusive breastfeeding.
5. Maternal satisfaction (using a validated questionnaire).

In this review, when authors reported retching and vomiting separately, we combined

- 1.) Physiological or clinical - Nausea intraoperatively;
- 2.) Vomiting (and/or retching) intraoperatively;
- 3.) Physiological or clinical - Nausea postoperatively;
- 4.) Physiological or clinical - Vomiting (and/or retching) postoperatively;
- 5.) Adverse events - Maternal adverse effects;
- 6.) Physiological or clinical - Neonatal morbidity;
- 7.) Physiological or clinical - Initiation of breastfeeding;
- 8.) Physiological or clinical - Duration of exclusive breastfeeding;
- 9.) Satisfaction with care - Maternal satisfaction (using a validated questionnaire);

♥ Nausea intraoperatively

⚡ Nausea

⚡ Vomiting

♥ Nausea postoperatively

⚡ Nausea

♥ Vomiting (and/or retching) postoperatively

⚡ Nausea

♥ Maternal adverse effects

⚡ Adverse Event

♥ Neonatal morbidity

♥ Initiation of breastfeeding

⚡ Breastfeeding Started

♥ Duration of exclusive breastfeeding

♥ Maternal satisfaction (using a validated q...



'CD009444' ✕

Outcomes

3. UHDRS symbol digit modalities;
4. Stroop black and white test;
5. Stroop interference tests;
6. Wechsler Adult Intelligence Survey III symbol searching raw score;
7. Quality of life using a modified Sickness Impact Profile scale.

Physiological or clinical - Cognition: ADAS-Cog; Quality of Life - Quality of life using a modified sickness impact profile scale; Physiological or clinical - Cognition: Wechsler adult intelligence survey III symbol searching raw score; Physiological or clinical - Cognition: Stroop interference tests; Physiological or clinical - Cognition: UHDRS-symbol digit modalities; Physiological or clinical - Cognition: UHDRS-verbal fluency;

♥ Cognition: ADAS-Cog

♥ Quality of life using a modified sickness i...

♥ Cognition: Wechsler adult intelligence su...

♥ Cognition: Stroop interference tests

♥ Cognition: UHDRS-symbol digit modalities

♥ Cognition: UHDRS-verbal fluency

Methods

Criteria for considering studies for this review

Types of studies

We included randomised controlled trials (RCTs) with a parallel-group design, of at least 12 weeks' duration. We did not exclude studies on the basis of blinding. We excluded cross-over trials, as we were looking at long-term effects including adverse events.

Types of participants

We included RCTs that recruited participants with a clinical diagnosis of COPD based on the following (GOLD 2013).

1. Forced expiratory volume after one second (FEV₁)/forced vital capacity (FVC) ratio < 0.7, which confirms the presence of persistent airflow limitation;
2. Several of the following key indicators:
 1. Progressive and/or persistent dyspnoea (breathlessness);
 2. Chronic cough;
 3. Chronic sputum production; and
 4. History of exposure to risk factors (tobacco smoke, smoke from home cooking and heating fuels, occupational dusts and chemicals).

We excluded RCTs in which participants had to have asthma as well as COPD to be included.

Types of interventions

We included studies in which participants were randomly assigned to receive the following.

1. Salmeterol 50 µg or placebo twice daily.
2. Formoterol 12 µg or placebo twice daily.
3. Formoterol 24 µg or placebo twice daily.

We included studies that allowed concomitant short-acting bronchodilators, provided they were not part of the trial treatment under study. We did not include studies in which most participants were receiving other COPD treatments.

Types of outcome measures

Primary Outcomes



PICO Annotator



Population:

Male and Female, Young Adult 19-24 years and Adult 19-44 years and Middle Aged 45-64 years: Chronic Obstruct Airways Disease;

Interventions:

- 1.) [Pharmacological] Salmeterol ;
- 2.) [Pharmacological] Formoterol ;

Comparators:

[No active treatment] Placebos ;

Outcomes:

- 1.) Quality of Life - Quality of life;
- 2.) Physiological or clinical - Severe COPD exacerbations;
- 3.) Physiological or clinical - Moderate COPD exacerbations;
- 4.) Mortality - Mortality; all-cause;
- 5.) Adverse events - Non-fatal serious adverse events; all-cause;
- 6.) Physiological or clinical - lung function;
- 7.) Withdrawals or dropouts from study - Withdrawals from study treatment;

PICOfinder demo interface

Exploring, filtering, and visualizing
Cochrane evidence using PICO



Population

- ⚡ condition
- 🕒 age
- 👤 sex

Intervention / Comparator

- ⚙️ classification
- 💧 materials / procedures

Outcome

- ♥️ classification

Search.. ➔

Reviews (272) | Studies (209) | Analyses (60) Show Comparators

- Prev Next (10-272)
- > **CD008800** (v3) Acetaminophen (paracetamol) for the common cold in adults
 - > **CD008827** (v2) Huperzine A for mild cognitive impairment
 ⚡ Mild Cognitive Impairment | 👤 Male and Female | 💧 Huperzia Serrata Extract
 - > **CD008900** (v2) Cerebrolysin for vascular dementia
 ⚡ Vascular Dementia | 🕒 Ages 19 to 80 years and over | 👤 Male and Female | 💧 Other Psychostimulants And Nootropics
 - > **CD002955** (v7) Naftidrofuryl for dementia
 ⚡ Dementia | 👤 Male and Female | 💧 Naftidrofuryl
 - > **CD007546** (v3) Interventions for preventing and reducing the use of physical restraints in long-term geriatric care
 🕒 Ages 65 to 80 years and over | 👤 Male and Female | 💧 Physical
 - > **CD007769** (v2) Ginseng for cognition
 ⚡ Dementia | 👤 Male and Female | 💧 Ginseng Preparation
 - > **CD005380** (v9) Metal protein attenuating compounds for the treatment of Alzheimer's dementia
 ⚡ Dementia Due To Alzheimer's Disease | 👤 Male and Female | 💧 Pharmacological
 - > **CD006929** (v4) Functional analysis-based interventions for challenging behaviour in dementia
 ⚡ Dementia | ⚡ Behavioural And Psychiatric Symptoms Of... | 👤 Male and Female | 💧 Complex
 - > **CD002854** (v6) Vitamin E for Alzheimer's dementia and mild cognitive impairment
 ⚡ Dementia Due To Alzheimer's Disease | ⚡ Mild Cognitive Impairment | 👤 Male and Female | 💧 Pharmacological | ♥️ "outcome measures had to derive from va..."
 - > **CD000012** (v10) Alternative versus conventional institutional settings for birth
 🕒 Infants, birth to 23 months | 👤 Male and Female | 💧 Testosterone | ♥️ test



Outcome

♥ classification ✓

Physiological or clinical 819

Resource use 491

Mortality 420

Adverse events 307

Quality of Life 130

Infection 102

Satisfaction with care 92

Mental health 85

Device/intervention failure 73

Function 66

⚡ condition ➔

➤ **CD002309** (v8) Phosphodiesterase 4 inhibitors for chronic obstructive pulmonary disease

⚡ Chronic Obstructive Pulmonary Disease

🕒 Ages 19 to 80 years and over

👤 Male and Female

💊 Pharmacological

➤ **CD004393** (v8) Vitamin B6 for cognition

⚡ Elderly

🕒 Ages 45 to 80 years and over

👤 Male and Female

💊 Vitamin B6

♥ Preventing cognitive impairment

♥ Slowing the progression of cognitive impai...

➤ **CD008827** (v2) Huperzine A for mild cognitive impairment

⚡ Mild Cognitive Impairment

👤 Male and Female

💊 Huperzia Serrata Extract

➤ **CD006221** (v4) Dehydroepiandrosterone (DHEA) supplementation for cognitive function in healthy elderly people

⚡ Elderly

🕒 Ages 45 to 80 years and over

👤 Male and Female

➡ Dehydroepiandrosterone Output Measure...

♥ Cognitive function

♥ Quality of life

➤ **CD007220** (v3) Carbohydrates for improving the cognitive performance of independent-living older adults with normal cognition or mild cognitive impairment

⚡ Mild Cognitive Impairment

🕒 Ages 45 to 80 years and over

👤 Male and Female

💊 Carbohydrates

Outcome

♥ classification >

⚡ condition >

Death 165

MedDRA 10011908

Caesarean Section 61

MedDRA 10008924

Death Neonatal 49

MedDRA 10011912

Intensive Care 41

MedDRA 10022519

Neurodevelopmental Delay 37

SNOMED 751391000000108

Stillbirth 31

SNOMED 237364002

MedDRA 10042062

Chronic Lung Disease 31

SNOMED 413839001

Adverse Event 31

MedDRA 10080933

Mechanical Ventilation 30

MedDRA 10087221

Apgar Score 28

MedDRA 10082552

Chronic Obstructive Pulmonary Disease Ages 13 to 80 years and over Male and Female

Pharmacological

> **CD004393** (v8) Vitamin B6 for cognition

⚡ Elderly Ages 45 to 80 years and over Male and Female Vitamin B6

♥ Preventing cognitive impairment ♥ Slowing the progression of cognitive im...

> **CD008827** (v2) Huperzine A for mild cognitive impairment

⚡ Mild Cognitive Impairment Male and Female Huperzia Serrata Extract

> **CD006221** (v4) Dehydroepiandrosterone (DHEA) supplementation for cognitive function in healthy elderly people

⚡ Elderly Ages 45 to 80 years and over Male and Female

⚡ Dehydroepiandrosterone Output Measure... ♥ Cognitive function ♥ Quality of life

> **CD007220** (v3) Carbohydrates for improving the cognitive performance of independent-living older adults with normal cognition or mild cognitive impairment

⚡ Mild Cognitive Impairment Ages 45 to 80 years and over Male and Female

⚡ Carbohydrates

> **CD005381** (v5) Aerobic exercise to improve cognitive function in older people without known cognitive impairment

Ages 45 to 80 years and over Male and Female Physical ♥ Cognition

♥ Drop-out, as a measure of acceptability ♥ Adverse events

low|

Mcv - Low	SNOMED 165455001	Condition
Haemoglobin Low	MedDRA 10018889	Condition
Low Income	MedDRA 10024916	Condition
Birthweight Low	MedDRA 10004961	Condition
Low Weight	MedDRA 10048733	Condition
Lower Respiratory Tract Finding	SNOMED 301226008	Condition
Low Risk Pregnancy	SNOMED 237239003	Condition
Lower Gastrointestinal Procedure	SNOMED 174035000	Procedure
Injury Of Lower Extremity	SNOMED 127279002	Condition
Low Pressure Headache	SNOMED 230478000	Condition
Low Blood Pressure	SNOMED 45007003 MedDRA 10024895	Condition
Low Maternal Weight Gain	SNOMED 28701003	Condition
Birth Weight Low	MedDRA 10004958	Condition
Apgar Score Low	MedDRA 10002944	Condition
Blood Pressure Reading Low	MedDRA 10067050	Condition

udies (778) Ar

6) Zinc supplement

Infants, 1 to 23 months

of development in children
ment index

Vitamin B6 for children
5 to 80 years and over

impairment

High protein supplement
es 13 to 64 years

infant outcomes

Transitivity example

lifestyle

Lifestyle Issues MedDRA 10024450 ConditionLifestyle Education SNOMED 313204009 ProcedureQuality Of Life Decreased MedDRA 10067620 ConditionQuality of Life OutcomeClassificationScreening At Times Of Life SNOMED 312852003 ProcedureLidocaine RxNorm 6387 DrugLigation SNOMED 70751009 ProcedureLipase MedDRA 10050659 ConditionLivebirth SNOMED 281050002 ConditionLidocaine ATC N01BB02 DrugLincosamides ATC J01FF Drug

8)

Studies (893)

Analyses (76)

[Show Comparators](#)[Next \(11-20\)](#)

075 (v13) Fetal pulse oximetry for fetal assessment in labour

Female

356 (v7) Giving women their own case notes to carry during

64 yearsFemaleOther

546 (v3) Interventions for preventing and reducing the use of physical

long-term geriatric care



⚡ Lifestyle Issues ✕

Population

⚡ condition >

🕒 age >

👤 sex >

Intervention / Comparator

⚙️ classification >

📌 procedure >

💧 materials >

Reviews (15)

Studies (5)

Analyses (0)

Show Comparators

Prev

Next

> **CD007208** (v6) High feedback versus low feedback of prenatal ultrasound for reducing maternal anxiety and improving maternal health behaviour in pregnancy

⚡ Ultrasonography

⚡ Pregnancy

🕒 Ages 13 to 64 years

👤 Female

Screening

♥️ Maternal anxiety measured by State Trait ...

⚡ Anxiety

♥️ Cessation of alcohol

♥️ Psychosocial

⚡ Cessation Of Smoking

♥️ Women's views of level of feedback

> **CD011135** (v1.1) Unconditional cash transfers for reducing poverty and vulnerabilities: effect on use of health services and health outcomes in low- and middle-income countries

🕒 Ages 2 to 80 years and over

🕒 Infants, birth to 23 months

👤 Male and Female

Resources and Infrastructure

♥️ use of health facilities or services, such a...

⚡ Finding Related To Ability To Interact With ...

♥️ mortality

⚡ Death

♥️ morbidity

⚡ Morbidity Index - Finding

♥️ nutritional outcomes

⚡ Finding Of Nutritional Status

♥️ anthropometric measures

♥️ alcohol use

⚡ Alcohol Use

♥️ tobacco use

⚡ Tobacco Use

♥️ consumption of unhealthy foods

Moving towards semi-automation

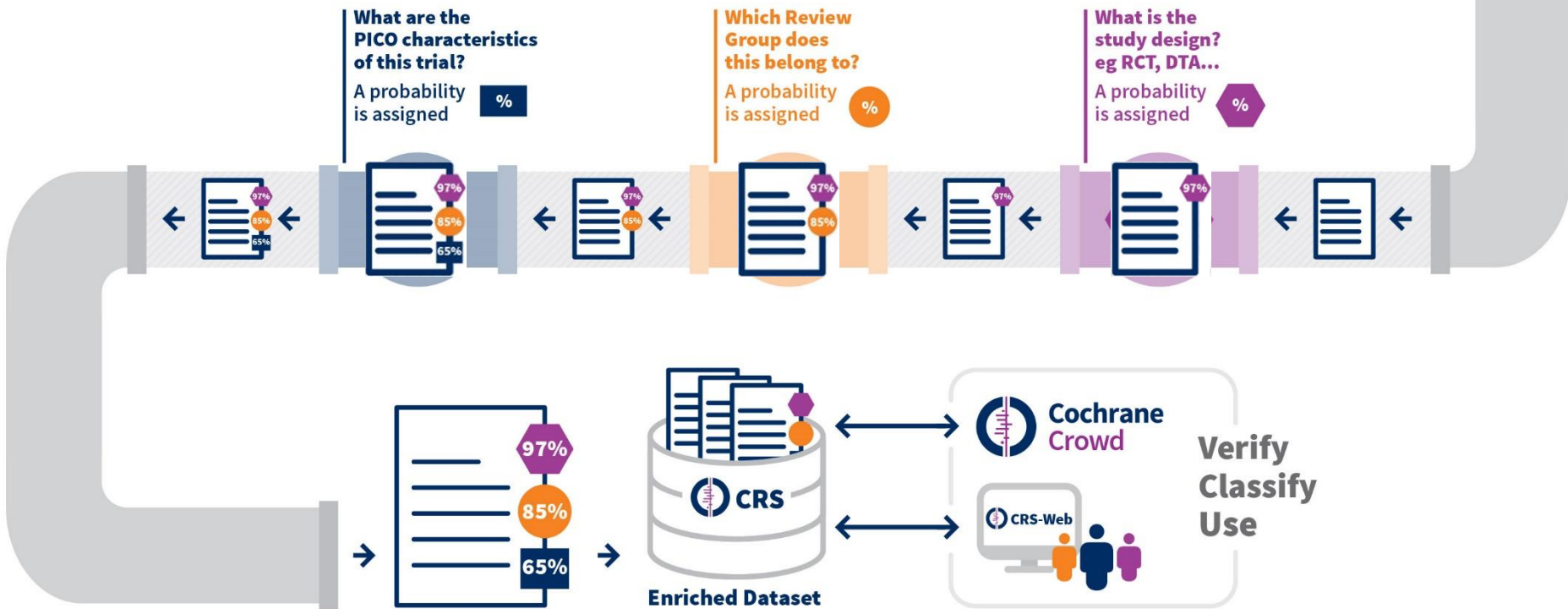
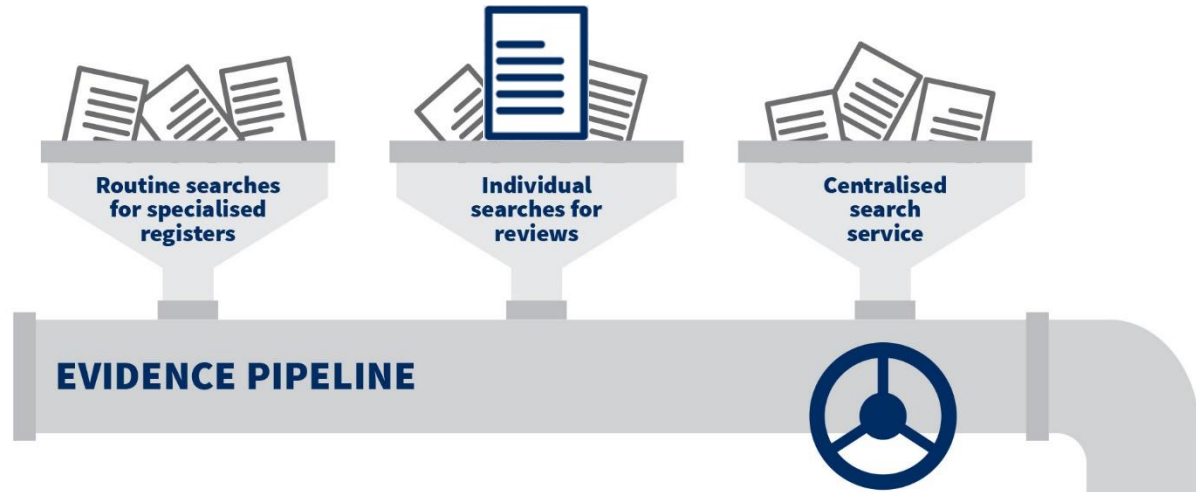
Evidence Pipeline and Cochrane Crowd





Evidence Pipeline

Finding and classifying relevant research



You can make a difference

Become a Cochrane citizen scientist. Anyone can join our collaborative volunteer effort to help categorise and summarise healthcare evidence so that we can make better healthcare decisions.

Give it a try

3676

Contributors

88

Countries

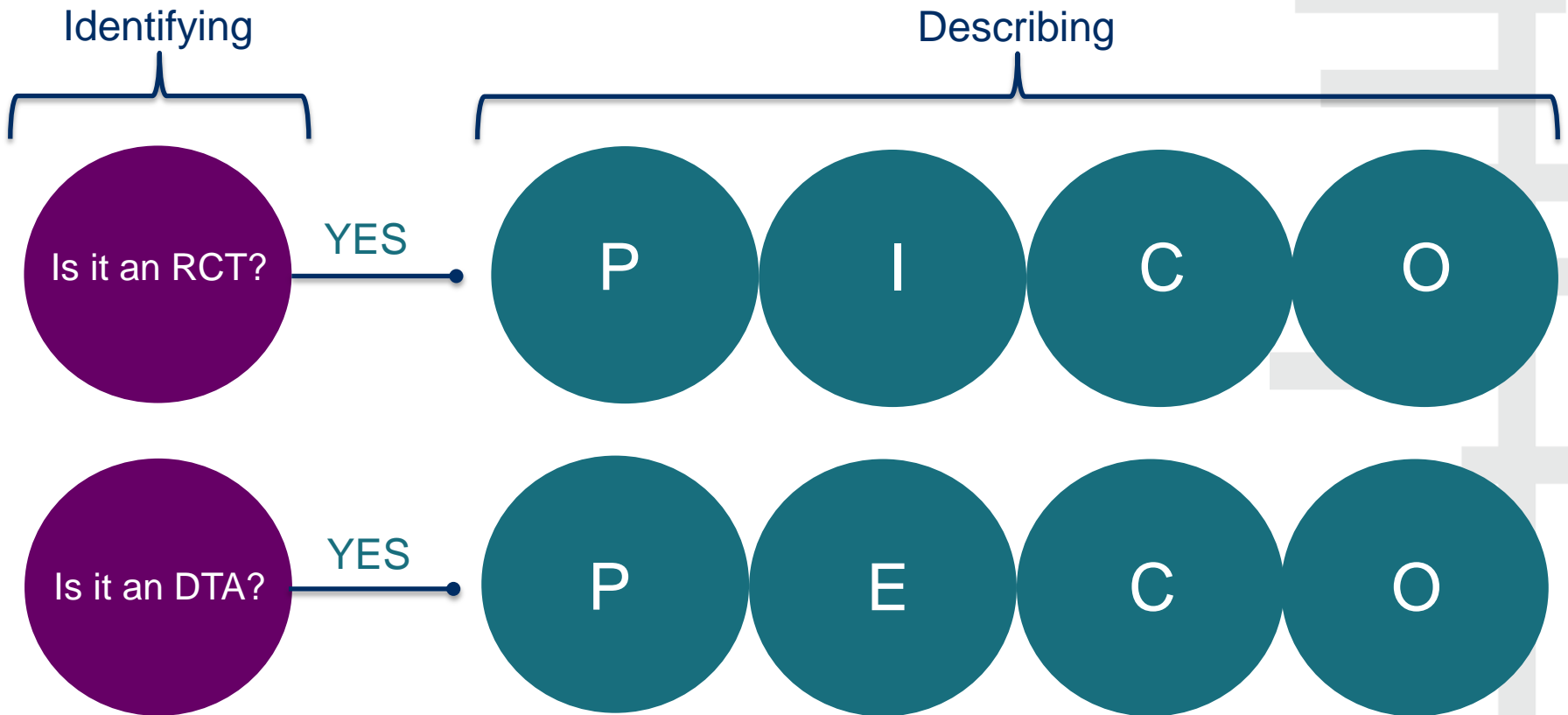
923093

Classifications

crowd.cochrane.org

Just 60 seconds a day can make a difference

More microtasks



Questions and ideas

- We think we've taken a complementary approach to that of COMET
- What are we missing?
- What questions do you have?
- What use cases do you have?
- What ideas do you all have in how we can work together? Collaboration opportunities?
 - For example, curating outcome sets together?
 - Mapping our annotations to COSs?
 - Our process will surface loads of issues that could inform your work



Thank you

