



Evidence Ecosystem concept and advances in evidence synthesis and dissemination

Trusted evidence.
Informed decisions.
Better health.

Chris Mavergames
Head of Informatics & Knowledge
Management
Chief Information Officer
Cochrane Central Executive



Conflict of interest statement

I have no actual or potential conflict of interest in relation to this presentation.

I am an employee of Cochrane.



This talk will show ...

...how explicit links between actors are needed – and are now possible - to close the loop between new evidence and improved care

...through a culture for sharing evidence combined with advances in methods and technology platforms

...for digitally structured data in a trustworthy "Evidence Ecosystem".



Outline

- Evidence Ecosystem concept
- Cochrane and innovations in evidence synthesis
- Examples of Ecosystem
- Summary



Cochrane Ecosystem: African Savanna



African Savanna Ecosystem Illustration Key

The following organisms and environmental features are depicted in the African Savanna Community illustration.

1. Grass: producer
2. Jackalberry tree: producer
3. Acacia tree: producer
4. Warthog: primary consumer (herbivore)
5. Cattle (domestic): primary consumer
6. Zebra: primary consumer
7. Impala: primary consumer
8. Elephant: primary consumer
9. Giraffe: primary consumer
10. Hyena: secondary consumer (carnivore), scavenger
11. Leopard: secondary consumer (carnivore)
12. Lion: secondary consumer (carnivore)
13. Human (Maasai tribesman): omnivore
14. Aardvark: omnivore
15. Red-billed oxpecker: insectivore
16. Termite and termite mound: decomposer/detritivore
17. Bacteria: decomposer/detritivore
18. Fungi: decomposer/detritivore
19. White-backed vulture: scavenger
20. Rocks: environmental feature
21. Stream or pond: environmental feature

Ecosystem: African Savanna



Healthy, well-balanced ecosystems are made up of multiple, interacting food chains, called food webs. Carnivores (lions, hyenas, leopards) feed on herbivores (impalas, warthogs, cattle) that consume producers (grasses, plant matter). Scavengers (hyenas, vultures) and decomposers/detritivores (bacteria, fungi, termites) break down organic matter, making it available to producers and completing the food cycle (web). Humans are part of the savanna community and often compete with other organisms for food and space.

The following list defines and provides examples of the feeding (trophic) levels that comprise food webs:

- **Producer:** organism on the food chain that can produce its own energy and nutrients. Examples: grasses, Jackalberry tree, Acacia tree
- **Primary consumer/herbivore:** organism that eats mainly plants. Examples: cows, impalas, warthogs, zebras
- **Secondary consumer/carnivore:** organism that eats meat. Examples: leopard, lion
- **Omnivore:** organism that eats a variety of organisms, including plants, animals, and fungi. Examples: humans, aardvarks
- **Decomposer/detritivores:** organisms that break down dead plant and animal material and waste and release it as energy and nutrients in the ecosystem. Examples: bacteria, fungi, termites
- **Scavenger:** animal that eats dead or rotting animal flesh. Examples: vultures, hyenas
- **Insectivore:** organism that mostly eats insects. Example: Red-billed oxpecker

Savanna Ecosystem Illustration Key

Forms and environmental features are depicted in the African Savanna illustration.

-
- : producer
- : producer
- : primary consumer (herbivore)
- : primary consumer
- : consumer
- : consumer
- : primary consumer
- : consumer
- : primary consumer (carnivore), scavenger
- : secondary consumer (carnivore)
- : consumer (carnivore)
- (tribesman): omnivore
- : ore
- : insectivore
- (mound): decomposer/detritivore
- : decomposer/detritivore
- : decomposer/detritivore
- : scavenger
- : environmental feature
- : environmental feature

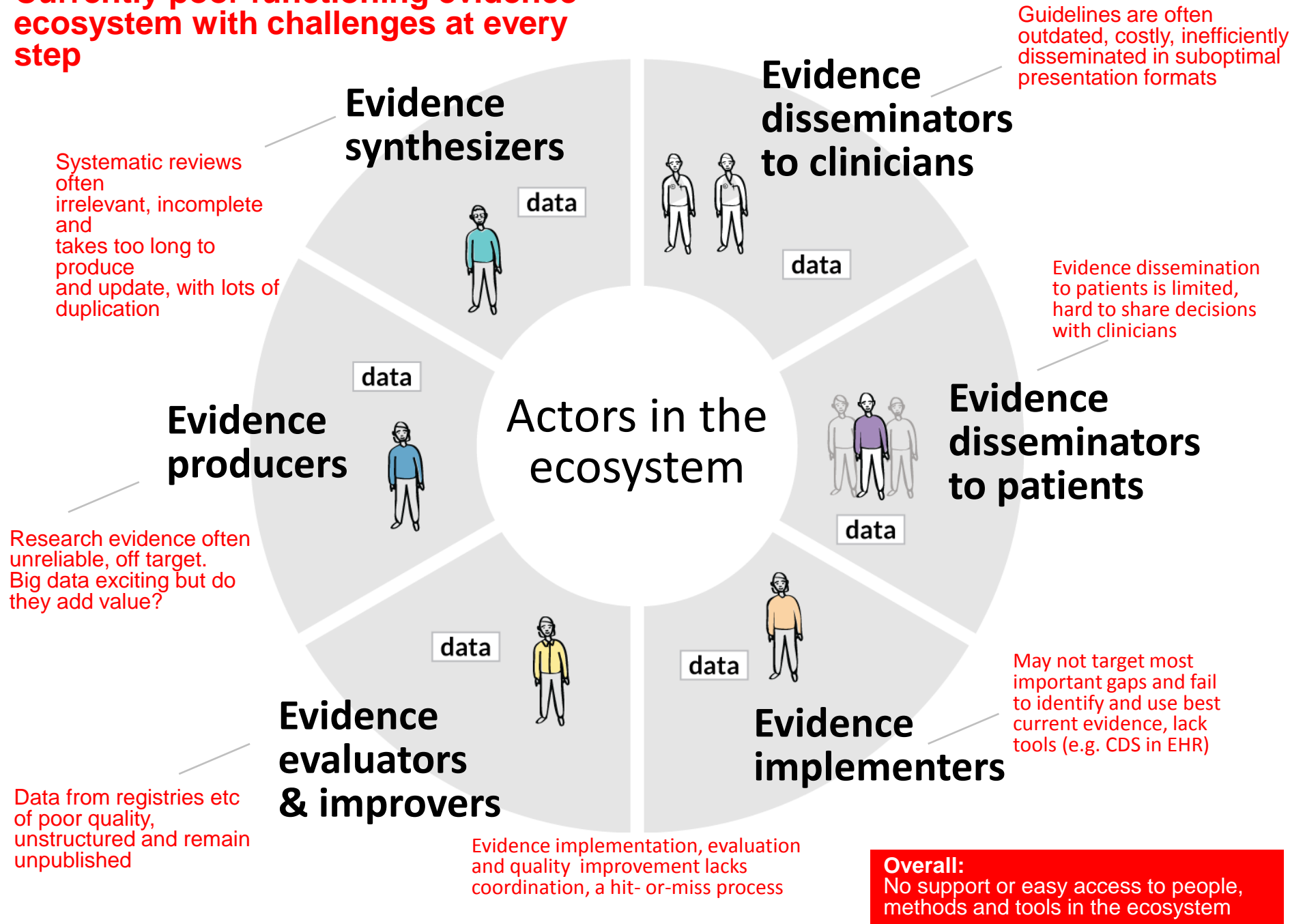


The Digital and Trustworthy Evidence Ecosystem

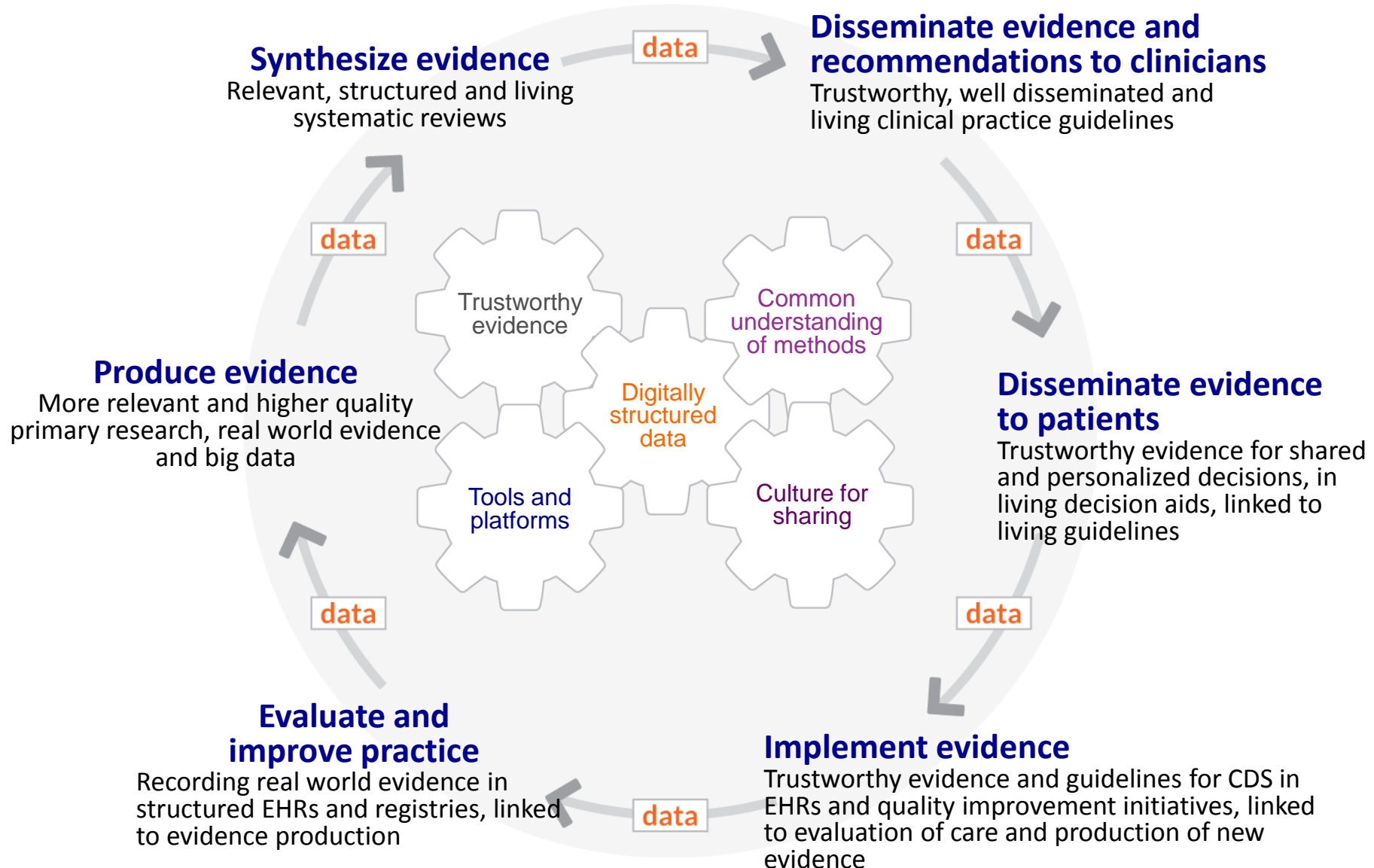
To increase value and reduce waste in
research



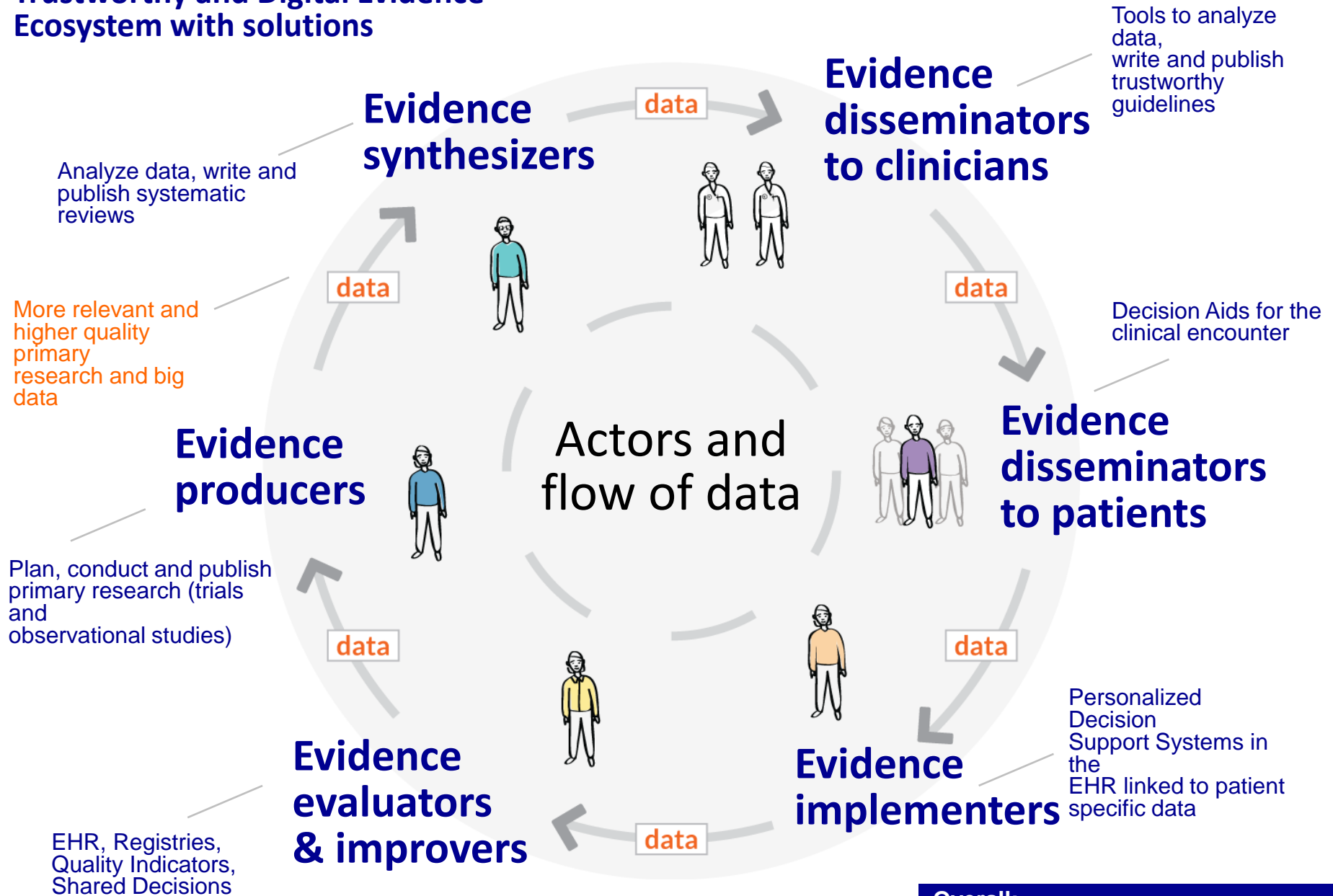
Currently poor functioning evidence ecosystem with challenges at every step



The Digital and Trustworthy Evidence Ecosystem



Trustworthy and Digital Evidence Ecosystem with solutions



Overall:
Support and easy access to people, methods and tools in the ecosystem

The emerging "ecosystem" within Cochrane

How Cochrane is contributing to the
larger ecosystem





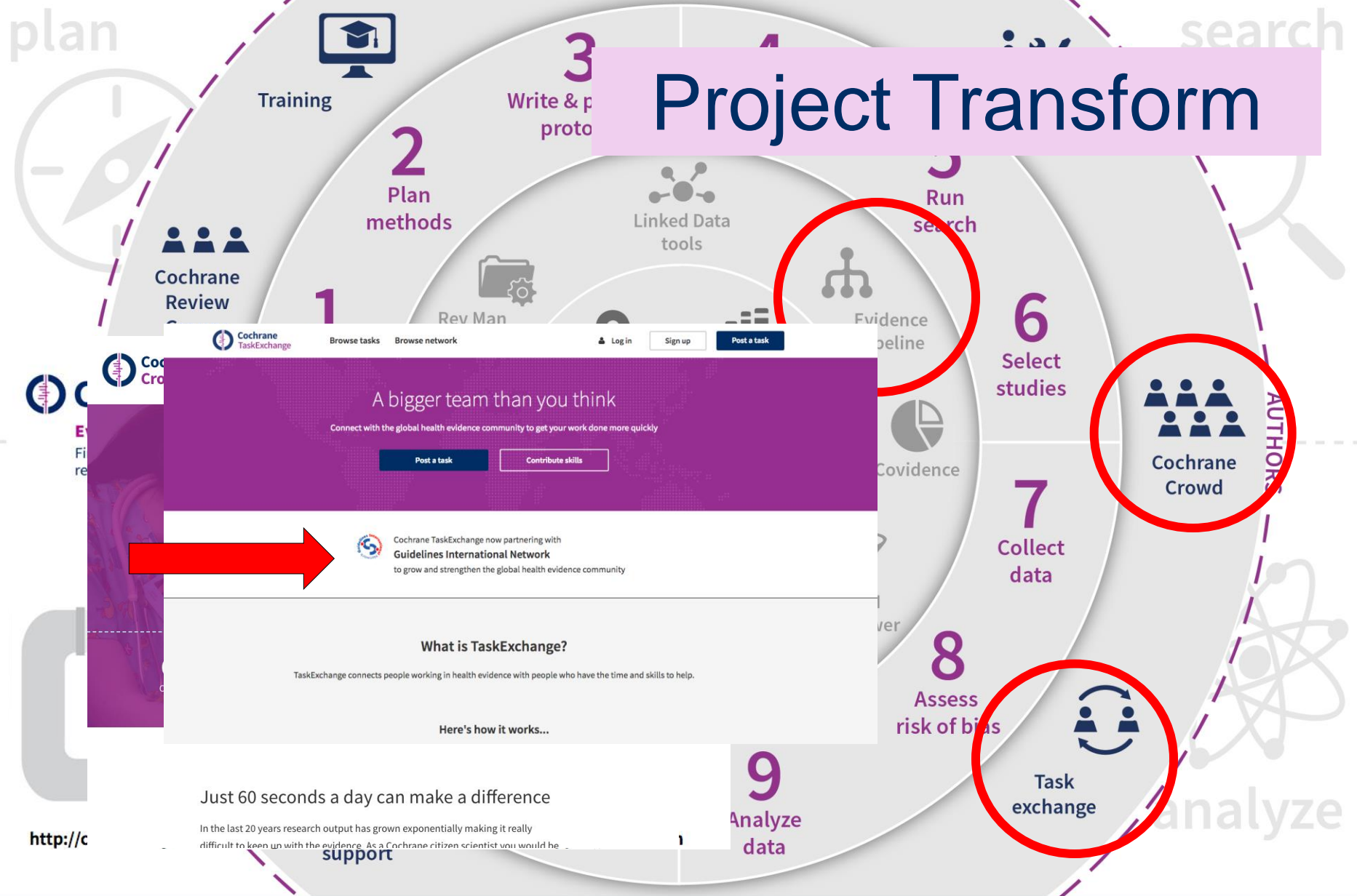
Cochrane Issues in Evidence synthesis

- Processes manual, duplication of effort, lengthy
- Human and machine effort not efficient
- Tools not yet fit for purpose and connected
- Lack of data provenance impedes re-use
- Outputs not optimised for use and impact

Bottom line: new approaches to gathering, synthesizing, and disseminating evidence are needed.



Project Transform



Cochrane TaskExchange
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A bigger team than you think
Connect with the global health evidence community to get your work done more quickly

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Cochrane TaskExchange now partnering with
Guidelines International Network
to grow and strengthen the global health evidence community

What is TaskExchange?
TaskExchange connects people working in health evidence with people who have the time and skills to help.

Here's how it works...



Just 60 seconds a day can make a difference

In the last 20 years research output has grown exponentially making it really difficult to keep up with the evidence. As a Cochrane citizen scientist you would be

Project Transform

4 components:

- **Evidence Pipeline:** uses machine learning and text mining to make study identification more efficient and semi-automated – **including Centralized Search Service**
- **Cochrane Crowd:** uses crowdsourcing to get more people involved in tasks (crowd.cochrane.org)
- **Task Exchange:** Platform for brokering tasks (taskexchange.cochrane.org)
- **Living Systematic Reviews Network:** New models of updating and maintaining systematic reviews
- More info at cochrane.org/transform

The Problem – Data deluge

Seventy-Five Trials and Eleven Systematic Reviews a Day: How Will We Ever Keep Up?

Hilda Bastian, Paul Glasziou, Iain Chalmers

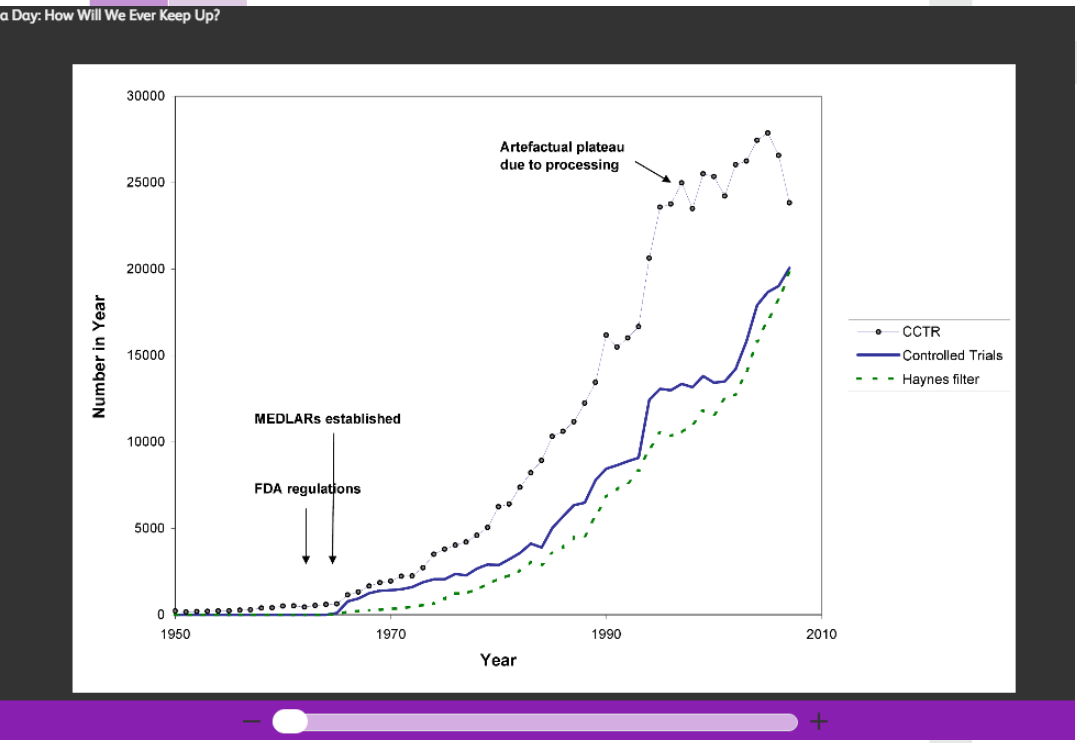
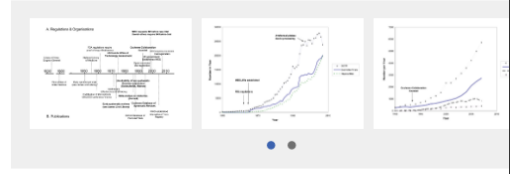
Published: September 21, 2010 • <http://dx.doi.org/10.1371/journal.pmed.1000326>

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- The Landscape
- Where Are We Now?
- How Close Are We to Archie Cochrane's Goal?
- Where to Now?
- Supporting Information
- Acknowledgments
- Author Contributions
- References

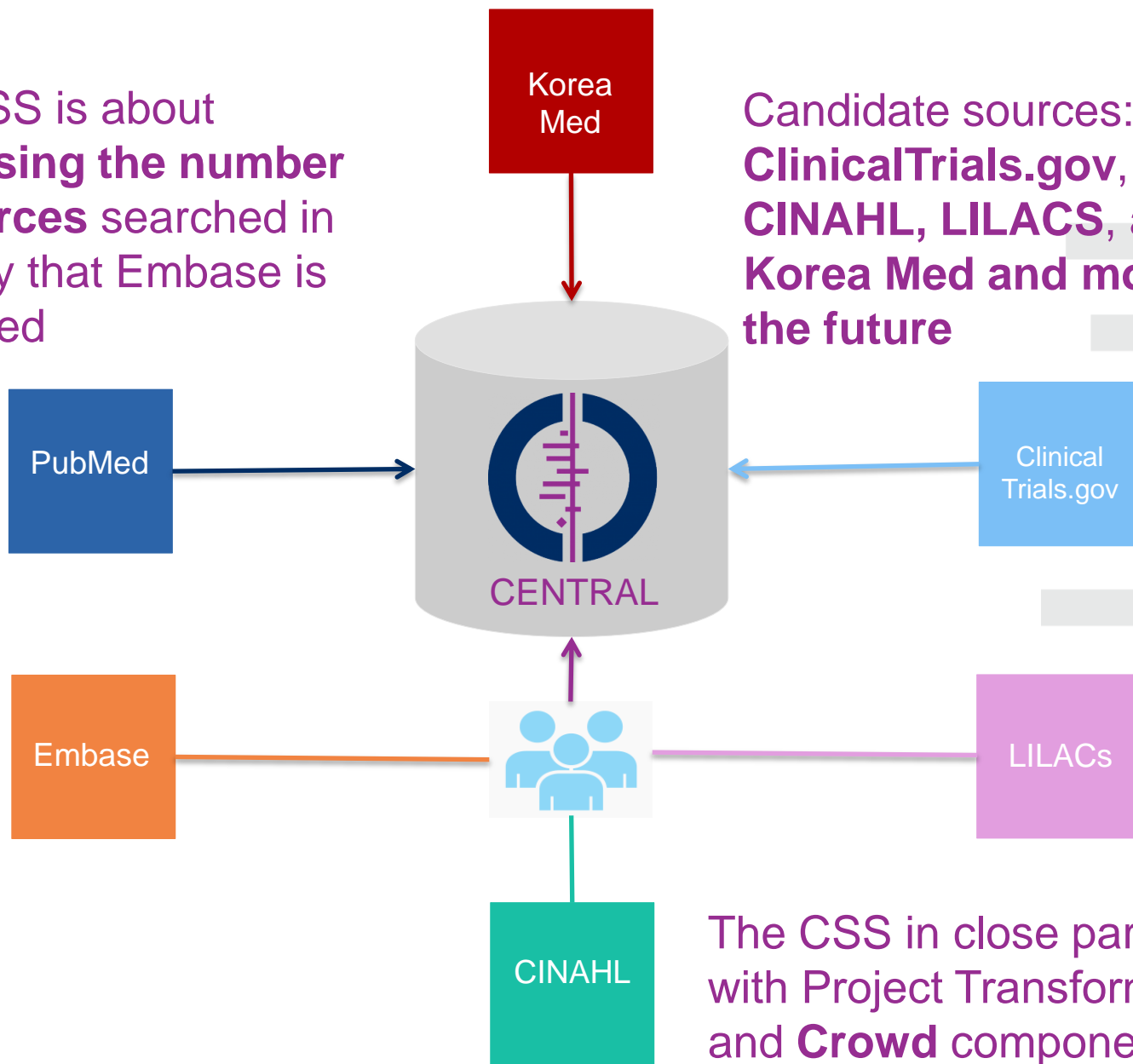
Figures



Cochrane (CSS)

The CSS is about **increasing the number of sources** searched in the way that Embase is searched

Candidate sources: **ClinicalTrials.gov, CINAHL, LILACS, and Korea Med and more in the future**

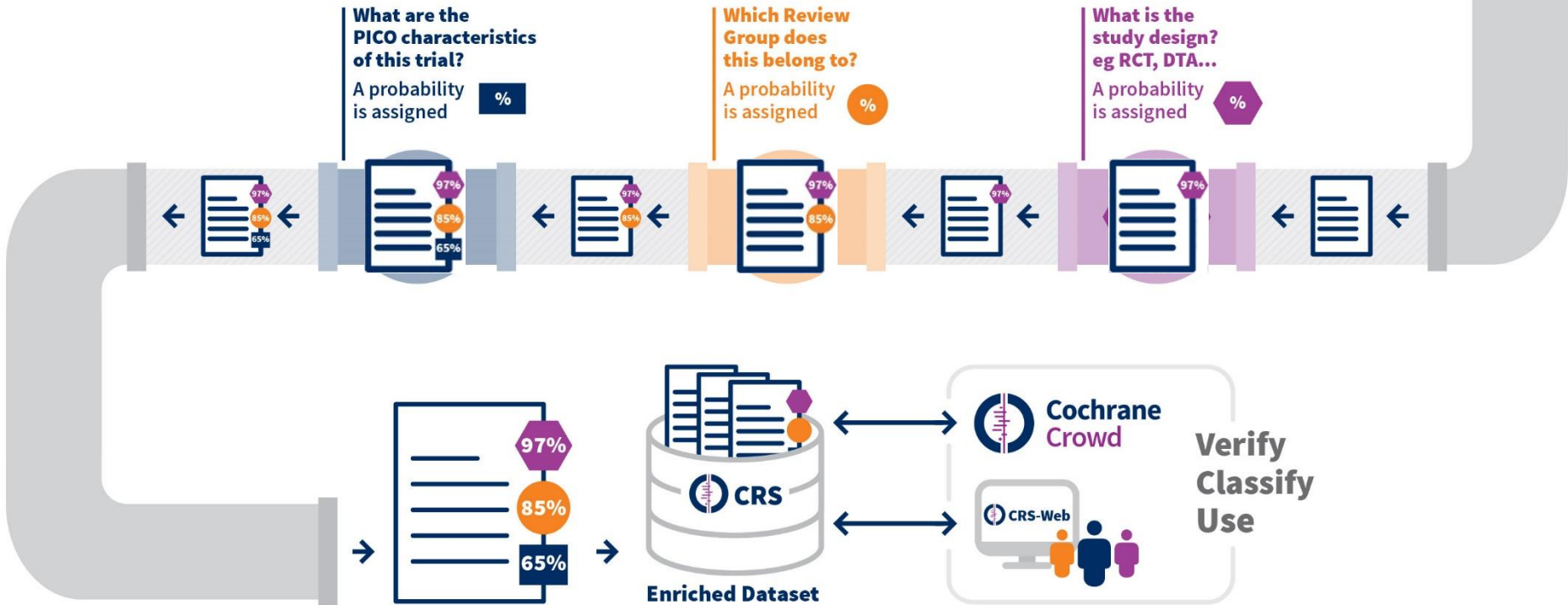
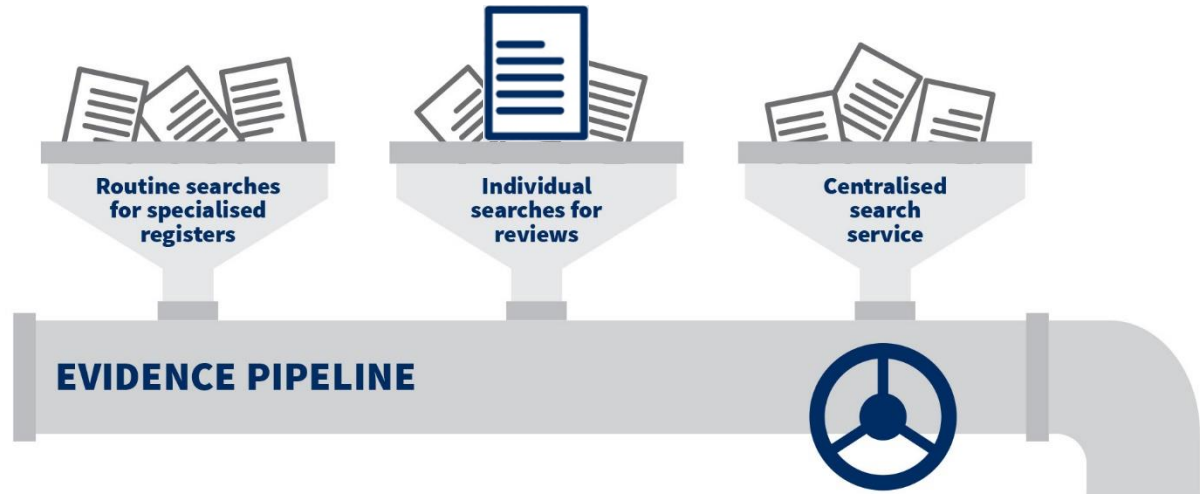


The CSS in close partnership with Project Transform's **Pipeline** and **Crowd** components



Evidence Pipeline

Finding and classifying relevant research





UPLOAD

hep B vaccine articles

View Arrange Action Share Edit Tags Dropbox Search

Name	Date Modified	Size	Kind
Dobson 2013.pdf	Aug 15, 2016, 12:57 PM	273 KB	PDF Document
Giulliano 2011.pdf	Aug 15, 2016, 12:57 PM	427 KB	PDF Document
Goldstone 2013.pdf	Aug 15, 2016, 12:57 PM	688 KB	PDF Document
Hillman 2012.pdf	Aug 15, 2016, 12:57 PM	330 KB	PDF Document
Kreimer 2015.pdf	Aug 15, 2016, 12:57 PM	400 KB	PDF Document
Levin 2010.pdf	Aug 15, 2016, 12:57 PM	330 KB	PDF Document
Petaja 2009.pdf	Aug 15, 2016, 12:57 PM	424 KB	PDF Document
Reisinger 2007.pdf	Aug 15, 2016, 12:57 PM	491 KB	PDF Document
Toft 2014 (2).pdf	Aug 15, 2016, 12:57 PM	1.1 MB	PDF Document
Vesikari 2015.pdf	Aug 15, 2016, 12:57 PM	341 KB	PDF Document

RobotReviewer

Automating evidence synthesis

uses data from Randomized Controlled Trials.
Click to select files to upload!

DEMO SOURCE CODE ABOUT PUBLICATIONS BLOG/NEWS

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

6046

Contributors

118

Countries

1314816

Classifications

Just 60 seconds a day can make a difference

Welcome, Chris.

RCT identification for Cochrane review CD008552

Interventions to increase fruit and vegetable consumption in children aged five years and under

Can you help us identify the randomised trials?

This task is for a specific Cochrane Review. It's for a very new type of Cochrane Review called a *Living Systematic Review* (ooh, exciting, I hear you say!).

If you screen *250 or more records*, you will be *acknowledged* in the review. Read the task FAQs to find out more.

7246

Classifications made

381

RCTs found

0

My assessments



working on this task right now

Start screening

History and settings

Training records

FAQ

Quick reference

CT ID

19976
Assessments

Current task is: DTA identification

0% complete

998
DTAs found

Who should undergo a colonoscopy among patients with incidental colon uptake on PET-CT?.

OBJECTIVES: To investigate the optimal cut-off of the maximum standard uptake value (SUVmax) for the detection of colorectal neoplasms and to suggest those for whom further colonoscopy is recommended among patients with incidental colonic uptake on positron emission tomography-computed tomography (PET-CT). **MATERIALS AND METHODS:** In 306 patients who underwent colonoscopy within 3 months of receiving PET-CT between January and December 2009, measurements of the per-patient and per-lesion diagnostic performance of PET-CT for the detection of colonic neoplasms were obtained. Receiver operating characteristic (ROC) analysis was used to identify the SUVmax that provided a high probability of diagnosing malignancy and high-grade dysplasia. **RESULTS:** The per-patient and per-lesion PET-CT detection sensitivities for malignancies were 93.3% (28/30; 95% confidence interval (CI) 76.5% to 98.9%) and 93.5% (29/31, 95% CI 77.2% to 98.9%), respectively; the sensitivities for high-grade dysplasia were both 90.0% (9/10; 95% CI 54.1% to 99.5%). As a criterion to specifically detect both malignancy and high-grade dysplasia on focal uptake, a SUVmax greater than 2.5 yielded a 92.3% per-lesion sensitivity and a 42.9% per-lesion positive predictive value (PPV). In the ROC curve analysis, a cut-off value of SUVmax = 5.8 was established, at which the sensitivity, PPV and positive likelihood ratio for diagnosing malignancy and high-grade dysplasia were 71.8% (28/39; 95% CI 54.9% to 84.5%), 84.8% (28/33; 95% CI 67.3% to 94.3%) and 6.9, respectively. **CONCLUSION:** The optimal cut-off value to identify a malignancy or high-grade dysplasia was SUVmax = 5.8. However, to avoid missing a malignancy or high-grade dysplasia, a colonoscopy should be performed above a SUVmax = 2.5.



DTA

Reject

Unsure

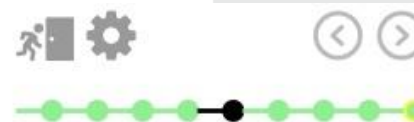
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Crowd-Based Annotation

Using crowdsourcing to perform complex annotations as a series of micro-tasks

Early inhaled steroid use in extremely low birthweight infants: A randomised controlled trial. [201631]


Objective We hypothesised that a prophylactic inhaled steroid would prevent the progression of bronchopulmonary dysplasia (BPD) in extremely low birthweight infants (ELBWIs). **Design** This study was a multicentre, randomised, double-blinded, placebo-controlled trial. **Setting** This investigation was conducted in 12 level III neonatal intensive care units (NICUs). **Patients** A total of 211 ELBWIs requiring ventilator support were enrolled. **Intervention** Starting within 24 h of birth and continuing until 6 weeks of age or extubation, two doses of 50 mug fluticasone propionate (FP) or placebo were administered every 24 h. **Main outcome measurement** The primary outcome measure used to indicate the morbidity of severe BPD incidence was death or oxygen dependence at discharge from the NICU. The secondary measures were neurodevelopmental impairments (NDIs) at 18 months of postmenstrual age and 3 years of age. We performed subgroup analyses based on gestational week (GW) and the presence of chorioamnionitis (CAM). **Results** Infants were randomised into the FP (n=107) or placebo (n=104) groups. No significant differences were detected between the FP and placebo groups with respect to either the frequency of death or the oxygen dependence at discharge or NDIs. In subgroup analyses, the frequencies of death and oxygen dependence at discharge were significantly decreased in the FP group for infants born at 24-26 GWs and for infants with CAM, regardless of the GW at birth. **Conclusions** Inhaled steroids have no effect on the prevention of severe BPD or long-term NDI but might decrease the severity of BPD for ELBWIs with a risk factor. **Trial registration number** UMIN-CTR C000000405. Copyright © 2016 BMJ Publishing Group Ltd & Royal College of Paediatrics and Child Health.



What type of outcome is measured in this study?

Please select a value



Physiological or clinical 
progression of bronchopulmonary dysplasia (BPD)

- Not answered
- Not reported
- No available term
- Answered above

Back

Done

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What is TaskExchange?

TaskExchange connects people working in health evidence with people who have the time and skills to help.

All tasks

These people need your help

Search

Areas of expertise by Topic

Select filters...

Skills

Select filters...

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Anna Sutherland




Cochrane - Pain, Palliative and Supportive Care


Cancer

Checking if a Chinese Language article is a single arm study

Skills: Data Extraction

Please can someone with good Chinese help me to check if this is a single arm or RCT study? The paper is: Xia, Y.; Lu, X.; Du, R.;

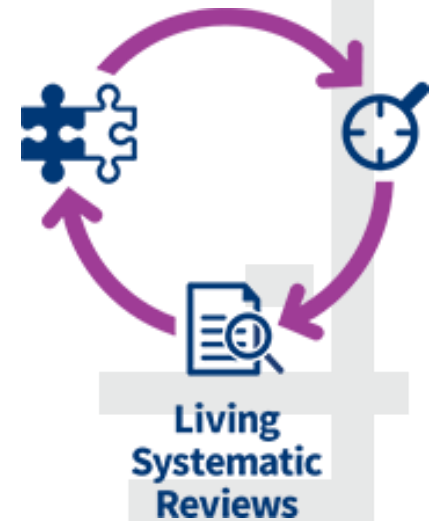
 Needed 13 Oct '17

 Acknowledgement

Share



First two Living SRs published



Trusted evidence.
Informed decisions.
Better health.

Search title, abstract, keyword

Cochrane Reviews ▾ Trials ▾ More Resources ▾ About ▾

Go to old article view

Cochrane Database of Systematic Reviews

Delayed antibiotic prescriptions for respiratory infections

New search Conclusions changed Review Intervention

Geoffrey KP Spurling, Chris B Del Mar, Liz Dooley, Ruth Foxlee, Rebecca Farl

First published: 7 September 2017

Editorial Group: Cochrane Acute Respiratory Infections Group

DOI: 10.1002/14651858.CD004417.pub5 View/save citation

Cited by (CrossRef): 0 articles Check for updates

Am score 3

Abstract

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Cochrane Database of Systematic Reviews

Parenteral anticoagulation in ambulatory patients with cancer

Review Intervention

Elie A Akl, Lara A Kahale, Rami A Ballout, Maddalena Barba, Victor E D Yosiuco, Frederiek F van Doormaal, Saskia Middeldorp, Andrew Bryant, Holger Schünemann

First published: 10 December 2014

Editorial Group: Cochrane Gynaecological, Neuro-oncology and Orphan Cancer Group

DOI: 10.1002/14651858.CD006652.pub4 View/save citation

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Outline

- Abstract
- Keywords
- 1. Introduction
- 2. Opportunities for a different workflow
- 3. Conclusion
- References

Show full outline ▾

Figures (3)



Tables (1)

 Table 1



Journal of Clinical Epidemiology

Volume 91, November 2017, Pages 31-37



Series: Living Systematic Review

Living systematic reviews: 2. Combining human and machine effort

James Thomas ^a  , Anna Noel-Storr ^b, Iain Marshall ^c, Byron Wallace ^d, Steven McDonald ^e, Chris Mavergames ^f, Paul Glasziou ^g, Ian Shemilt ^a, Anneliese Synnot ^{e, h}, Tari Turner ^e, Julian Elliott ^{e, i}
Living Systematic Review Network

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<https://doi.org/10.1016/j.jclinepi.2017.08.011>

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Abstract

New approaches to evidence synthesis, which use human effort and machine automation in mutually reinforcing ways, can enhance the feasibility and sustainability of living systematic reviews. Human effort is a scarce and valuable resource, required when automation is impossible or undesirable, and includes contributions from online communities (“crowds”) as well as more conventional

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AHRQ series on complex intervention system...
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Article Metrics

Social Media

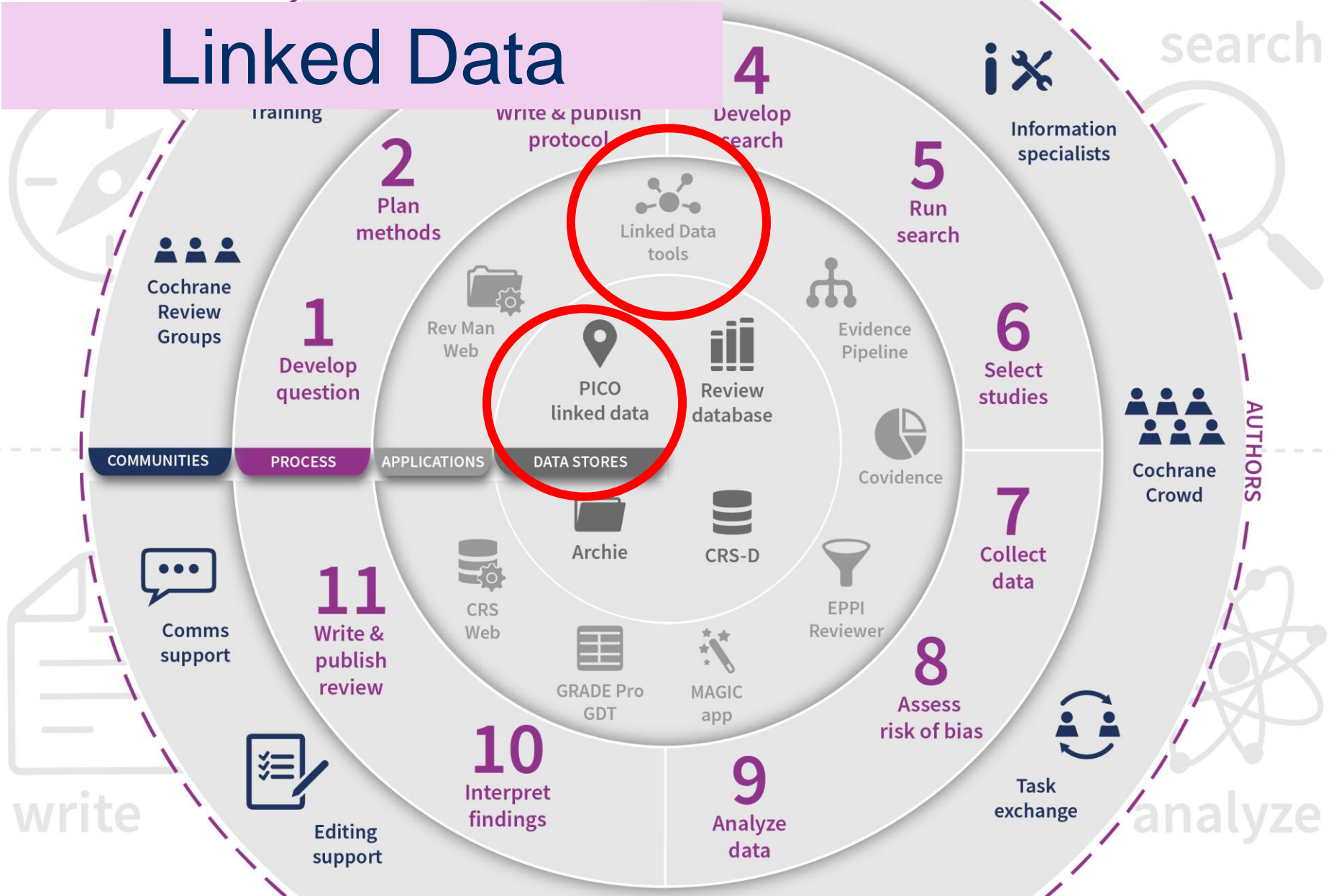
Shares, Likes & Comments: 42

Tweets: 12

Citations

Feedback 

Linked Data



PICO annotation

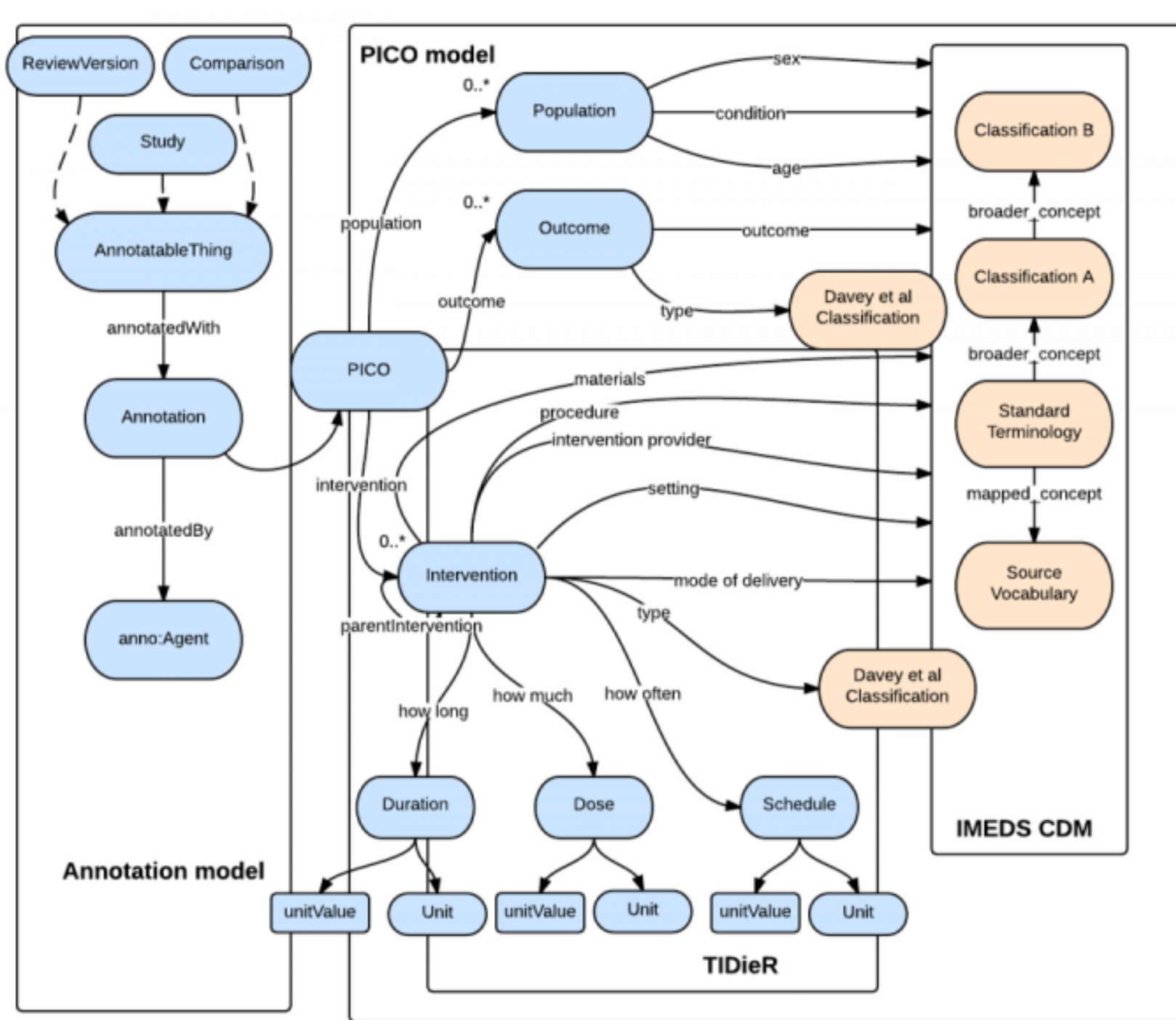
Population/participants

Intervention

Comparator(s)

Outcomes





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 now been accepted as the international standard for clinical terminology by the World Health Organization.



Centre Publications Countries Programmes Governance About WHO

Classifications

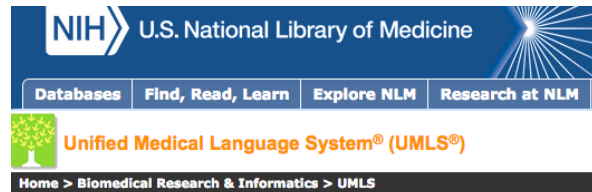
The Anatomical Therapeutic Chemical Classification System with Defined Daily Doses (ATC/DDD)

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.



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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 the mechanism of action, physiologic effect, and therapeutic category.

ement



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

Cochrane Multi-arm trials – Complex PICO

NCT01172821

Baseline characteristics

Study design:

RCT

Study grouping:

parallel group

Open label:

no

Cluster RCT:

no

LAMA add-on (low)

- Number randomised: 257
- Number completed: 245
- Mean age (SD): 43.0 (12.6) years
- % Male: 37.7
- % Predicted FEV₁ : NR
- % White: NR
- Duration of asthma: NR

LABA add-on

- Number randomised: 266
- Number completed: 249
- Mean age (SD): 41.5 (13.1) years
- % Male: 42.5
- % Predicted FEV₁ : NR
- % White: NR
- Duration of asthma: NR

LAMA add-on (high)

- Number randomised: 253
- Number completed: 240
- Mean age (SD): 44.3 (12.7) years
- % Male: 42.3
- % Predicted FEV₁ : NR
- % White: NR
- Duration of asthma: NR

Inclusion criteria: informed consent; men or women aged 18-75 years; ≥ 3 months' asthma at enrolment; diagnosed before 40.5 years, confirmed with FEV₁ increase of ≥ 12% and ≥ 200 mL after salbutamol; on maintenance treatment with a medium, stable dose of ICS for ≥ 4 weeks; ACQ (≥ 1.5) prior to randomisation; pre-bronchodilator FEV₁ 60-90% of predicted normal at screening; variation of absolute FEV₁ of screening (pre-bronchodilator) as compared with visit 2 (pre-dose) must be within ± 30%; non-smoker for ≥ 1 year, and history < 10 pack-years; able to use inhalers and perform trial procedures correctly

Exclusion criteria: lung disease or significant medical illness other than asthma; clinically relevant abnormal screening, haematology or blood chemistry; hospitalised for cardiac failure during the past year; any unstable or life-threatening cardiac arrhythmia; known active TB; resection, radiotherapy or chemotherapy within 5 years for malignancy (treated basal cell carcinoma allowed); thoracotomy with pulmonary resection; significant alcohol or drug abuse within 2 years; current or recent (6 weeks) pulmonary rehabilitation; known hypersensitivity to the study drugs or any other components of the delivery systems; pregnant or nursing women; women of childbearing potential not using effective contraception; investigational drug; beta-

Intervention characteristics

LAMA add-on (low)

- ICS type/dose: maintenance treatment with a medium, stable dose of ICS
- Add-on type/dose: tiotropium Respimat 2.5 mcg once daily
- Co-medications: LABAs, other anticholinergics, cromone, methylxanthines and anti-IgE were not permitted. Continuation with other pre-study maintenance therapy and rescue salbutamol was permitted.
- Type of inhaler: Respimat inhaler (+ inhalation of placebo HFA MDI twice daily)
- Duration of treatment: 24 weeks

LABA add-on

- ICS type/dose: maintenance treatment with a medium, stable dose of ICS
- Add-on type/dose: salmeterol 50 mcg twice daily
- Co-medications: LABAs, other anticholinergics, cromone, methylxanthines and anti-IgE were not permitted. Continuation with other pre-study maintenance therapy and rescue salbutamol was permitted
- Type of inhaler: HFA MDI (+ Respimat placebo once daily)
- Duration of treatment: 24 weeks

Continuous

- Trough FEV₁ (L, change)
- ACQ total
- Trough PEF (L/min, change)
- Trough FVC (L, change)
- AQLQ total
- Peak FEV₁ (L, change)
- Peak FVC (L, change)

Dichotomous

- AEs (all)
- SAEs (all)
- Exacerbations (OCS)
- Exacerbations (hospital)
- ACQ responder

PICO Annotator

Population:

Male and Female, Middle Aged 45-64 years or Young Adult 19-24 years or Aged 65-79 years or Adult 19-44 years: Asthma;

Interventions:

1.) [Pharmacological] Tiotropium Bromide:5.0µg, 1.0x daily for 24.0 week AND [Pharmacological] Glucocorticoids: for 24.0 week;
2.) [Pharmacological] Tiotropium Bromide:2.5µg, 1.0x daily for 24.0 week AND [Pharmacological] Glucocorticoids: for 24.0 week;

Comparators:

[Pharmacological] Salmeterol:50.0µg, 2.0x daily for 24.0 week AND [Pharmacological] Glucocorticoids: for 24.0 week;

Outcomes:

1.) Quality of Life - AQLQ total;
2.) Physiological or clinical - Peak Expiratory Flow Rate; Trough PEF (L/min, change); ;
3.) Physiological or clinical - Fev 1; Trough FEV1 (L, change); Peak FEV1 (L, change);
4.) Physiological or clinical - Exacerbation Of Asthma; Exacerbations (OCS); Exacerbations (hospital);
5.) Physiological or clinical - ACQ responder;
6.) Adverse events - Adverse Event; AEs (all); SAEs (all);



Exploring PICO

Flexible search for combinations of Population, Intervention, Outcome



Population

- ⚡ condition
- 🕒 age
- 👤 sex

Intervention / Comparator

- ⚙️ classification
- 🔪 procedure
- 💧 materials

Outcome

- ♥️ classification
- ⚡ condition

Reviews (1413) Studies (5261) Analyses (76) [Show Comparators](#)

Prev Next (11-20)

- **CD006172** (v5) Home uterine monitoring for detecting preterm labour
- **CD000509** (v12) Inhaled nitric oxide for respiratory failure in preterm infants
- **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
- **CD000352** (v12) Planned hospital birth versus planned home birth
⚡ Pregnancy 🕒 Ages 13 to 64 years 👤 Female Resources and Infrastructure
- **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 impairm...
- **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 Measurement ♥️ Cognitive function
♥️ Quality of life

Exploring PICO

Flexible search for combinations of Population, Intervention, Outcome

Population: Interventions: Comparison: Outcome:

< Back

Population

- condition >
- age >
- sex >

Intervention

- classification >
- procedure >
- materials >
- setting >
- mode of delivery >
- provider >
- rationale >

Comparator

- classification >
- procedure >

https://test-ldp-data.cochrane.org/pico-finder2/#guidelines

Reviews (11) Studies (41) Analyses (0) **Guidelines (9)** Collapse All

Prev Next

Diabetes Management Guidelines

Population	Interventions	Comparisons	Outcomes
<input checked="" type="radio"/> Female <input type="radio"/> Young Adult 19-24 years <input type="radio"/> Adult 19-44 years <input type="radio"/> Adolescent 13-18 years <input checked="" type="checkbox"/> Gestational Diabetes Mellitus <input checked="" type="checkbox"/> Pregnant	<input type="checkbox"/> Sulfonylureas <input checked="" type="checkbox"/> Lifestyle Education <input checked="" type="checkbox"/> metformin <input checked="" type="checkbox"/> Insulin <input checked="" type="checkbox"/> Pharmacological <input checked="" type="checkbox"/> Educational		

WHO recommendations on antenatal care for a positive pregnancy experience

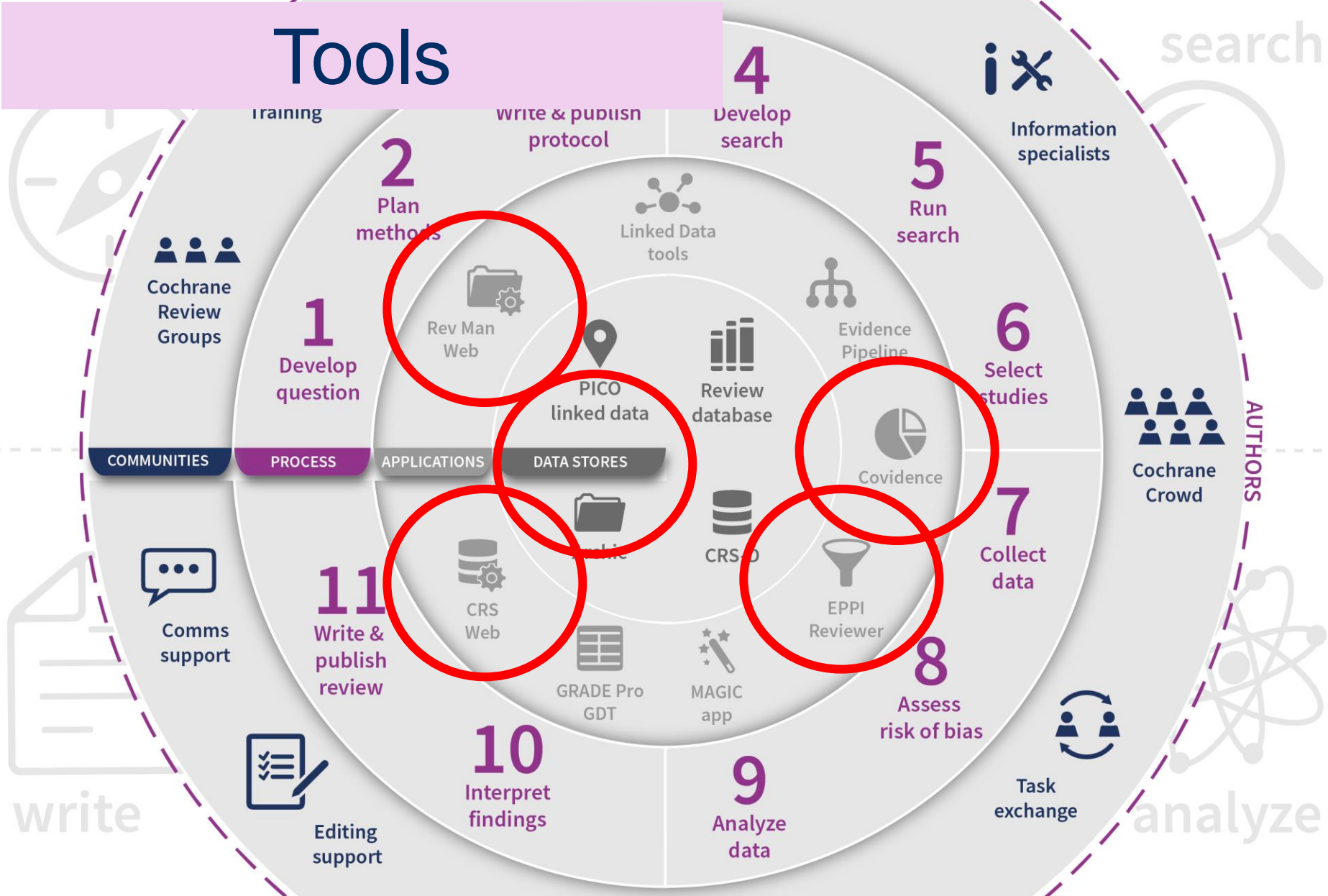
Population	Interventions	Comparisons	Outcomes
<input checked="" type="radio"/> Female <input type="radio"/> Young Adult 19-24 years <input type="radio"/> Adult 19-44 years <input type="radio"/> Adolescent 13-18 years <input checked="" type="checkbox"/> Gestational Diabetes Mellitus <input checked="" type="checkbox"/> Pregnant	<input checked="" type="checkbox"/> Lifestyle Education <input checked="" type="checkbox"/> Insulin <input checked="" type="checkbox"/> Management Of Gestational Diabetes Mellitus <input checked="" type="checkbox"/> Combinations Of Oral Blood Glucose Lowering... <input checked="" type="checkbox"/> Pregnancy Exercise Education <input checked="" type="checkbox"/> Dietary Education For Gestational Diabetes <input checked="" type="checkbox"/> Educational <input checked="" type="checkbox"/> Pharmacological <input checked="" type="checkbox"/> Behavioral		<input checked="" type="checkbox"/> Physiological or clinical <input checked="" type="checkbox"/> Macrosomia <input checked="" type="checkbox"/> Shoulder Dystocia <input checked="" type="checkbox"/> Pre-eclampsia <input checked="" type="checkbox"/> Pregnancy-induced Hypertension

Management of diabetes: A national clinical guideline

Population	Interventions	Comparisons	Outcomes
<input checked="" type="radio"/> Female <input type="radio"/> Young Adult 19-24 years <input type="radio"/> Adult 19-44 years <input type="radio"/> Adolescent 13-18 years <input checked="" type="checkbox"/> Gestational Diabetes Mellitus <input checked="" type="checkbox"/> Pregnant	<input checked="" type="checkbox"/> Blood Glucose Monitoring <input checked="" type="checkbox"/> Dietary Education For Gestational Diabetes <input checked="" type="checkbox"/> Glibenclamide <input checked="" type="checkbox"/> metformin <input checked="" type="checkbox"/> Insulin <input checked="" type="checkbox"/> Screening <input checked="" type="checkbox"/> Educational <input checked="" type="checkbox"/> Pharmacological		

Screening, Diagnosis, and Management of Gestational Diabetes Mellitus

Tools



Tools



RevMan Web Review Dashboard

RevMan - Dashboard x

https://test-archie.cochrane.org/revman/#/742899082012550794/dashboard

Cochrane RevMan

Placebo interventions for all clinical conditions

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REPORT 33%

Dashboard

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Review text

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Status

Stage: Full review
Availability: Not checked out
Editorial workflow: Review Update

Process

QUESTION	100%
PROPOSE	100%
DESIGN	100%
EDIT	100%
IMPLEMENT - FIND	100%
IMPLEMENT - COLLECT	100%
IMPLEMENT - ASSESS	100%
IMPLEMENT - ORGANISE	100%
IMPLEMENT - ANALYSE	100%
IMPLEMENT - INTERPRET	100%
REPORT	33%

Authors

Name	Time	Last Activity	Role	#
Asbjørn Hróbjartsson	Unkno...	Nov 11, 2009	CP+A	1
Peter Gøtzsche	Unkno...	Unknown	A	2
Frankie Achille	Unkno...	Unknown	A	3
Miranda Cumpston	01:48	Unknown	AS	4
Zoë Rose	Unkno...	Unknown	A	5

History

Version	Checked In By	Date	Description
5.1	Megan Pictor	Feb 11, 2014	Review No ch...
5.0	Megan Pictor	Nov 12, 20...	For publication
4.23	Megan Pictor	Nov 12, 20...	FOR PUBLICA...
4.22	Asbjørn Hróbj...	Nov 11, 20...	
4.21	Megan Pictor	Nov 11, 20...	AH to check
4.20	Megan Pictor	Nov 11, 20...	final
4.19	Megan Pictor	Nov 11, 20...	final?
4.18	Asbjørn Hróbj...	Nov 10, 20...	
4.17	Megan Pictor	Nov 10, 20...	changed date...
4.16	Megan Pictor	Nov 10, 20...	Final version, ...

https://test-archie.cochrane.org/revman/

RevMan Web

RevMan - Data x <https://test-archie.cochrane.org/revman/#/742899082012550794/analysesData>

Placebo interventions for all clinical conditions

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Dashboard Review Info Protocol text Studies Analyses Structure Options Data Review text Tables Figures Appendices Feedback

1 Main analysis: clinical conditions investigated in three trials or more

Outcome or Subgroup	Studies	Participants	Statistical M...	Effect Estima...
1.1 Binary outcomes	9		RR - M-H, Ran...	Subtotals only
1.2 Continuous outcomes	119		SMD - IV, Rand...	Subtotals only
Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.2.1 Pain (VAS, ordinal scales, McGill score,...	60	4154	SMD - IV, Random, 95%	-0.28 [-0.36, -0.19]
1.2.2 Insomnia (sleep onset latency in min, ...	6	164	SMD - IV, Random, 95%	-0.19 [-0.50, 0.12]
1.2.3 Hypertension (diastolic, mm Hg; abso...	10	308	SMD - IV, Random, 95%	-0.17 [-0.46, 0.12]
1.2.4 Nausea (VAS, Rhodes Inventory of Na...	7	452	SMD - IV, Random, 95%	-0.25 [-0.46, -0.04]
1.2.5 Smoking (cigarettes per day, self repo...	3	703	SMD - IV, Random, 95%	-0.53 [-1.29, 0.23]
1.2.6 Phobia (fear of snakes and spiders: sn...	3	57	SMD - IV, Random, 95%	-0.63 [-1.17, -0.08]

2 Main analysis: overall pooled analyses

3 Main analysis: patient-reported or observer-reported outcomes

4 Supplementary analysis: adverse effects

5 Effect modification subgroup analysis: type of outcomes

6 Effect modification subgroup analysis: the purpose of the trials

Context

Standards Tips & Tutorials

Entering data with the RevMan calculator by Cochrane UK - 1/3 videos

Notes

RevMan Web

RevMan - Data x

https://test-archie.cochrane.org/revman/#/742899082012550794/analysesData

Placebo interventions for all clinical conditions

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1 Main analysis: clinical conditions investigated in three trials or more

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Binary outcomes	6	119	RR - M-H, Random, 95%	Subtotals only
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Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.2.1 Pain (VAS, ordinal scale, McGill score)	60	4154	SMD - IV, Random, 95%	-0.28 [-0.36, -0.19]
1.2.2 Insomnia (sleep onset latency in minutes)	6	164	SMD - IV, Random, 95%	-0.19 [-0.50, 0.12]
1.2.3 Hypertension (diastolic, mmHg; absolute)	10	308	SMD - IV, Random, 95%	-0.17 [-0.46, 0.12]
1.2.4 Nausea (VAS, Rhodes Inventory of Nausea)	7	452	SMD - IV, Random, 95%	-0.25 [-0.46, -0.04]
1.2.5 Smoking (cigarettes per day, self-reported)	3	703	SMD - IV, Random, 95%	-0.53 [-1.00, -0.23]
1.2.6 Phobia (fear of snakes and spiders: snake phobia)	3		SMD - IV, Random, 95%	-0.63 [-1.17, -0.08]

2 Main analysis: overall pooled analysis

3 Main analysis: patient-reported or observer-reported outcomes

4 Supplementary analysis: adverse effects

5 Effect modification subgroup analysis: type of outcomes

6 Effect modification subgroup analysis: the purpose of the trials

Beta release 2017

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Wednesday, February 24, 2016

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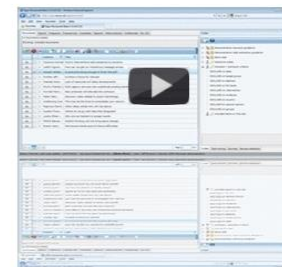
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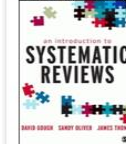


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Long-acting beta2-agonists for chronic obstructive pu...

Chris Mavergames

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Title and abstract screening [0 irrelevant](#) [0 studies to screen](#)

Full text screening [0 excluded](#) [0 studies to select](#)

Extraction [0 extracted](#) [0 studies to extract](#)

TEAM PROGRESS

0 ● DONE 0 ● COMPARISON REQUIRED

0 ● STARTED 0 ● NOT STARTED

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Chris, you have not yet started

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Archie



Covidence



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RevMan Web



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Other Software





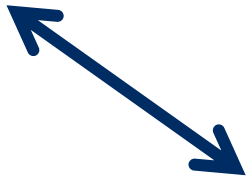
...breathe....

Connecting tools in the Ecosystem

Example: MAGIC and Cochrane
PICOfinder



**Cochrane
PICOfinder**



API



**MAGIC App:
Guideline
authoring tool**

Improving patient care through guidelines, evidence summaries
and decision aids that we can all trust, use and share

A non-profit authoring and publication platform helping you put best current evidence into practice

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Recs

Adjunctive corticosteroid therapy for adults hospitalized with community-acquired pneumonia

Reed Siemiemiuk - WikiRecs Group



Retningslinjer for antitrombotisk behandling og profylakse

Per Olav Vandvik - Norsk Selskap for Trombose og Hemostase



Behandlingsretningslinjer for håndleddsbrudd hos voksne

Hebe Désirée Kvernmo. Medforfattere: Leiv Magne Hove, Adalsteinn Odinsonn, Katrine Bjørnebek Frønsdal, Ingrid Harboe, Yngvar Krukhaug - Norsk Ortopedisk forening

MAGIC app

November update for Organizations and admins.

We currently have over 23 000 users and 125 organisations signed up on our platform.

23 400
Users

34 active
Organisations

81
Public guidelines

New features planned to be released within the next week

New Organization- specific guideline pages

All organizations now get their own branded page where all their public content are listed. The pages has a direct

Organizations can customize guideline colours

All organizations can now theme their guidelines and Organization specific pages to better match their own brand-

**Brief MAGIC “demo” 
& live robot demo **



Add PICO

i Short names are used for the table and mobile to keep layout less cluttered

i Codes are used for user search, finding Systematic reviews and for decision support

Population [↗](#)

People with dementia

Short name

Dementia

ICD-10	Add start of term to search	code	Add
ICD-10	Dementia in Alzheimer's disease	F00	<i>i</i> ✕
SNOMED-CT	Dementia	52448006	<i>i</i> ✕
MeSH	Dementia	D003704	<i>i</i> ✕

Intervention [↗](#)

Memantin

Short name

Memantin

MeSH	Add start of term to search	code	Add
MeSH	Memantine	D008559	<i>i</i> ✕
ATC	Memantin	N06D X01	<i>i</i> ✕

Comparator [↗](#)

No extra treatment, usual care except memantin

Short name

Usual care

MeSH	Add start of term to search	code	Add
MeSH	Placebos	D010919	<i>i</i> ✕

Save Cancel

Under development Cognition (MMSE) Mortality Independent living

1.2



▼ Import/ Export

POPULATION

People with dementia

COMPARATOR

No extra treatment, usual care except Memantine

INTERVENTION

Memantine

OUTCOMES

Under development Cognition (MMSE) Mortality Independent living

Help ?

Literature search

Evidence profile

Summary

References

PICO codes

Evidence Matrix

Evidence feed

A proper literature search should be systematic and thorough. However, sometimes somebody else have done that job for you, in a recently published systematic review or guideline that answer the same questions as yours. Here are some search services to help you start your literature search. Below you find an initial search based on your free text PICO and added PICO codes. Adjust, or go directly to resouces to improve it.

Find Studies and Systematic Reviews

PICOfinder
powered by Cochrane linked data

➤ **CD003154** (v14) Memantine for dementia Last search 24.10.13 Published 25.04.15

Add to references

Dementia + Memantin + Usual care

Search

Autofill search data

Population	ICD-10	Dementia in Alzheimer's disease	F00	✘
	SNOMED-CT	Dementia	52448006	✘
	MeSH	Dementia	D003704	✘
Intervention	MeSH	Memantine	D008559	✘
	ATC	Memantin	N06D X01	✘
Comparator	MeSH	Placebos	D010919	✘

Population

- ⚡ condition
- 🕒 age
- 👤 sex

Intervention / Comparator

- ⚙️ classification
- 💧 materials / procedures

Outcome

- ♥️ classification

Search..

💧 Memantine ✕

Reviews (1) Studies (17) **Analyses (58)**

Show Comparators

Prev Next (10-58)

➤ **CD003154 Comparison:** Memantine vs placebo for dementia (cause not specified) (4-6 weeks)
 Outcome: Number of dropouts
 ⚡ Dementia 🕒 Ages 65 to 80 years and over 👤 Male and Female 💧 Memantine 💧 Memantine ♥️ Number of drop-outs

➤ **CD003154 Comparison:** Memantine vs placebo for moderate-to-severe Alzheimer's disease. 6 month studies. ITT-LOCF data.
 Outcome: Clinical Global: CIBIC+ (24-28 weeks)
 ⚡ Dementia Due To Alzheimer's Disease 🕒 Ages 65 to 80 years and over 👤 Male and Female 💧 Memantine ♥️ Clinical Global: CIBIC+ (24-28 weeks)

▼ **CD003154 Comparison:** Memantine vs placebo for moderate-to-severe Alzheimer's disease. 6 month studies. ITT-LOCF data.
 Outcome: Number suffering agitation as an adverse event

Comparison 1. Memantine vs placebo for moderate-to-severe Alzheimer's disease. 6 month studies. ITT-LOCF data.

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.7. Number suffering agitation as an adverse event	3	1005	Odds Ratio (MH, 95% CI)	0.60 [0.42, 0.86]

⚡ Dementia Due To Alzheimer's Disease 🕒 Ages 65 to 80 years and over 👤 Male and Female 💧 Memantine
 ♥️ Number suffering agitation as an adverse event

➤ **CD003154 Comparison:** Memantine vs placebo for mild-to-moderate Alzheimer's disease. Published, 6 month studies. ITT-LOCF data
 Outcome: Clinical global: CIBIC+ (at 24 weeks)
 ⚡ Dementia Due To Alzheimer's Disease 🕒 Ages 65 to 80 years and over 👤 Male and Female 💧 Memantine ♥️ Clinical global: CIBIC+ (at 24 weeks)

1.2



Import/ Export

POPULATION

People with dementia

COMPARATOR

No extra treatment, usual care except Memantine

INTERVENTION

Memantine

OUTCOMES

Under development Cognition (MMSE) Mortality Independent living

Help ?

Literature search Evidence profile Summary References PICO codes Evidence Matrix Evidence feed

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condition

- Dementia SNOMED 52448006
- Dementia Due To Alzheimer's Disease SNOMED 142811000119304
- Mild Cognitive Impairment SNOMED 888271000000301
- Dementia Due To Parkinson's Disease

intervention

Outcome

Search..



Dementia Pharmacological Memantine

Reviews (1) Studies (17) Analyses (58) Show Comparators

Prev Next (10-58)

CD003154 Comparison: Memantine vs placebo for dementia (cause not specified) (4-6 weeks)
Outcome: Number of dropouts
Dementia Ages 65 to 80 years and over Male and Female Memantine Memantine Number of drop-outs

CD003154 Comparison: Memantine vs placebo for moderate-to-severe Alzheimer's disease. 6 month studies. ITT-LOCF data.
Outcome: Clinical Global: CIBIC+ (24-28 weeks)
Dementia Due To Alzheimer's Disease Ages 65 to 80 years and over Male and Female Memantine Clinical Global: CIBIC+ (24-28 weeks)

CD003154 Comparison: Memantine vs placebo for moderate-to-severe Alzheimer's disease. 6 month studies. ITT-LOCF data.
Outcome: Number suffering agitation as an adverse event

Comparison 1. Memantine vs placebo for moderate-to-severe Alzheimer's disease. 6 month studies. ITT-LOCF data.

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.7. Number suffering agitation as an adverse event	3	1005	Odds Ratio (MH, 95% CI)	0.60 [0.42, 0.86]

Dissemination using the Ecosystem

Example: Dentistry guideline



Cochrane Alpha testing the ecosystem in dentistry

C O V E R S T O R Y

2010



Evidence-based clinical recommendations regarding screening for oral squamous cell carcinomas

Michael P. Rothman, DDS, MS; William Carpenter, DDS, MS; Ezra E.W. Cohen, MD; Joel Epstein, DMD, MSD, FRCD(C), FDS RCS(Ed); Caswell A. Evans, DDS, MPH; Catherine M. Flaitz, DDS, MS; Frank J. Graham, DMD; Philippe P. Hujoel, MSD, PhD; John R. Kalmar, DMD, PhD; Wayne M. Koch, MD; Paul M. Lambert, DDS; Mark W. Lingen, DDS, PhD; Bert W. Oettmeier Jr., DDS; Lauren L. Patton, DDS; David Perkins, DMD; Britt C. Reid, DDS, PhD; James J. Sciubba, DMD, PhD; Scott L. Tomar, DMD, DrPH; Alfred D. Wyatt Jr., DMD; Krishna Aravamudan, BDS, MS; Julie Frantsve-Hawley, RDH, PhD; Jennifer L. Cleveland, DDS, MPH; Daniel M. Meyer, DDS; for the American Dental Association Council on Scientific Affairs Expert Panel on Screening for Oral Squamous Cell Carcinomas

The American Cancer Society (ACS) estimated that there would be 35,720 new cases of cancer of the oral and pharyngeal region in the United States in 2009, with 7,600 deaths from the disease.¹ When focusing specifically on the oral cavity, ACS estimated that in 2009, there would be 23,110 new cases of cancer of the oral cavity (hereafter referred to as "oral cancer") and 5,370 deaths.¹ Nearly 90 percent of these malignancies are squamous cell carcinomas.² More than 97 percent of U.S. cases of these cancers occur among adults 35 years and older.³ Although the incidence rate (IR) of oral and pharyngeal cancers is decreasing overall, the IR of cancers of the tongue, oropharynx and tonsil is increasing.⁴ The 2002-2006 age-adjusted (to the 2000 U.S. population) IR of oral and pharyngeal cancers in the United States was 10.3 per 100,000 per year. The age-adjusted IR was more than twice as high among men (15.9) as among women (6.0), as was the mortality rate (men, 4.0; women, 1.5).¹

ABSTRACT



Background. This article presents evidence-based clinical recommendations developed by a panel convened by the American Dental Association Council on Scientific Affairs. This report addresses the potential benefits and potential risks of screening for oral squamous cell carcinomas and the use of adjunctive screening aids to visualize and detect potentially malignant and malignant oral lesions.

Types of Studies Reviewed. The panel members conducted a systematic search of MEDLINE, identifying 332 systematic reviews and 1,499 recent clinical studies. They selected five systematic reviews and four clinical studies to use as a basis for developing recommendations.

Results. The panel concluded that screening by means of visual and tactile examination to detect potentially malignant and malignant lesions may result in detection of oral cancers at early stages of development, but that there is insufficient evidence to determine if screening alters disease-specific mortality in asymptomatic people seeking dental care.

Clinical Implications. The panel suggested that clinicians remain alert for signs of potentially malignant lesions or early-stage cancers while performing routine visual and tactile examinations in all patients, but particularly in those who use tobacco or who consume alcohol heavily. Additional research regarding oral cancer screening and the use of adjuncts is needed.

Key Words. American Dental Association (ADA); biopsy; brush; cancer; carcinoma; squamous cell; evidence-based dentistry; mouth neoplasms; oral cancer; practice guidelines.

JADA 2010;141(5):509-520.



Cochrane Database of Systematic Reviews

2015

Diagnostic tests for oral cancer and potentially malignant disorders in patients presenting with clinically evident lesions (Review)

Macey R, Walsh T, Brocklehurst P, Kerr AR, Liu JLY, Lingen MW, Ogden GR, Warnakulasuriya S, Scully C



Cochrane Database of Systematic Reviews

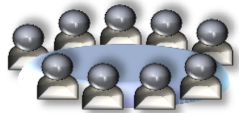
2013

Clinical assessment to screen for the detection of oral cavity cancer and potentially malignant disorders in apparently healthy adults (Review)

Walsh T, Liu JLY, Brocklehurst P, Glenny AM, Lingen M, Kerr AR, Ogden G, Warnakulasuriya S, Scully C

Alpha testing the ecosystem in dentistry

Early detection OC (2010)



PICO

Update

GRADE

Daily assessment		Recommendation	Quality	Notes
Rating	Limitation	Recommendation	Quality	Notes
High	None	Strongly recommend	High	
Low	None	Weakly recommend	Low	
Very Low	None	Do not recommend	Very Low	
None	None	Do not recommend	None	



Recommendations

3 months!!!



2013

Cochrane Library

Diagnostic tests for oral cancer and potentially malignant disorders in patients presenting with clinically suspected lesions (Review)

2015

Cochrane Library

Clinical assessment to screen for the detection of oral cavity cancer and potentially malignant disorders in apparently healthy adults (Review)

76%

Evidence-based clinical practice guidelines for the use of...
A report of the American Dental Association and the American...
System of Clinical Recommendations on the Assessment of Pre- and Post-Operative...
Early Warning

Lessons after the experience

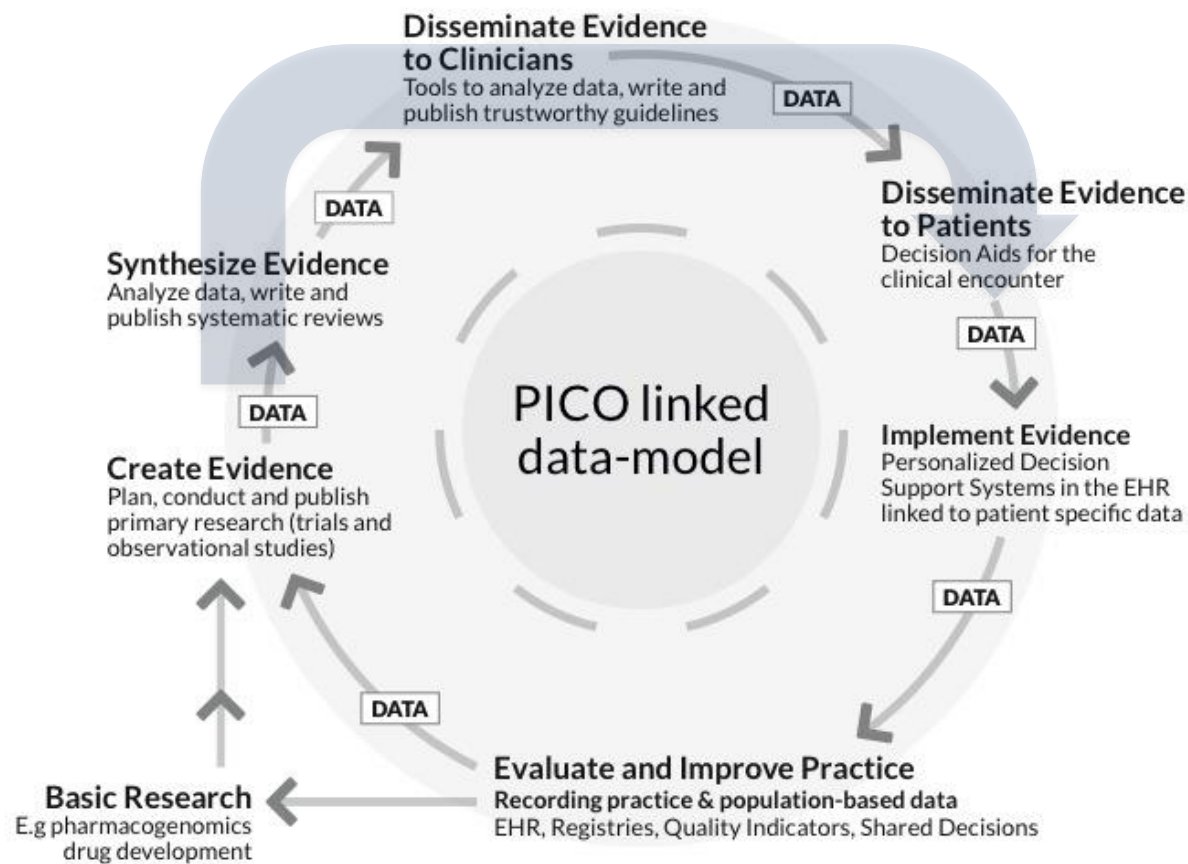


1. Reduction in time from two years to three months
2. Reduction in resources
3. Additional guidance on the analysis
4. Provided a framework to summarize the evidence

1. Need to update the searches
2. Context dependence of the review and the guideline
3. The panel needed specific comparisons (reorganization of the data)
4. Many methodological decisions needed to be reviewed by the ADA team

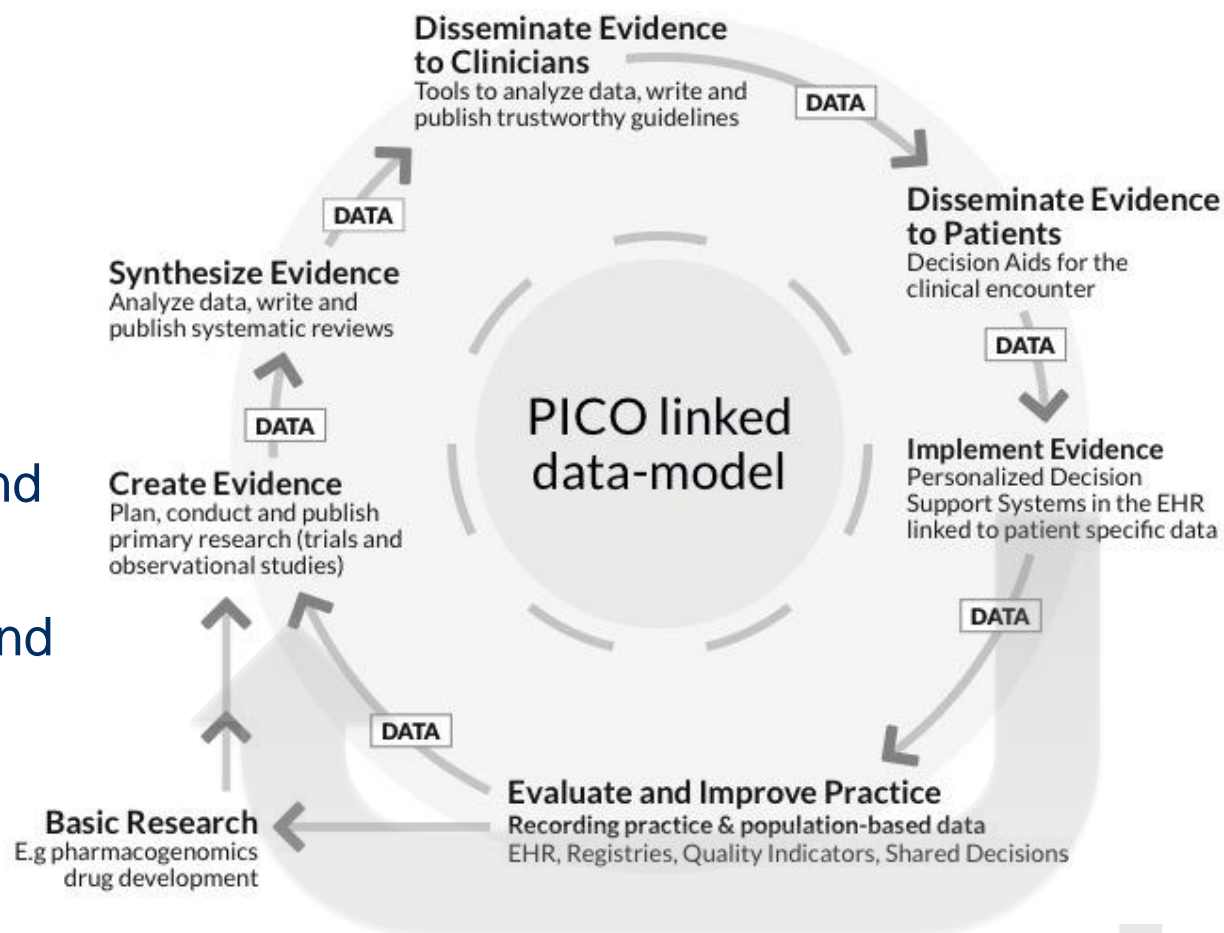
Challenges of operating in the ecosystem

1. Poor quality of clinical practice guidelines and SRs
2. Lack of channels to share data
3. Lack of communication across institutions
4. Methodologies not standardized
5. Lack of a common platform/software
6. Poor understanding of shared decision-making



Challenges of operating in the ecosystem

1. Lack of implementation of decision support systems in the EDR
2. How to measure compliance with recommendations and outcomes
3. Lack of a common and digital platforms to share data
4. Lack of connection between “real-data in clinical practice” and basic research



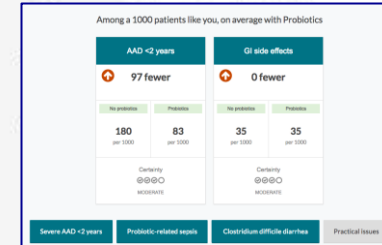
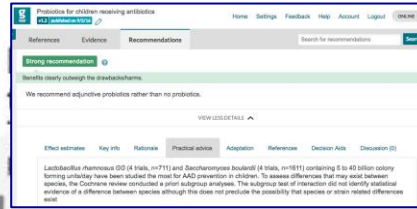
Closing the loop in the ecosystem

Example: RapidRecs



Digital and Trustworthy Evidence Ecosystem

From RapidRecs pilot to closing the loop in Finland and Belgium



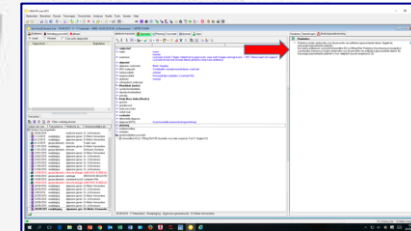
DATA

DATA

DATA

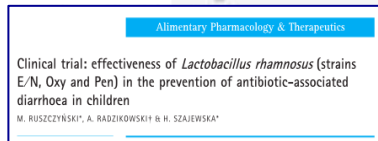
DATA

PICO linked data-model



Offer probiotics

23 trials
n=4000



Basic Research
E.g pharmacogenomics
drug development

Evaluate and Improve Practice
Recording practice & population-based data
EHR, Registries, Quality Indicators, Shared Decisions

Baseline:
3 of 100
offered
probiotics

To practice: 17-month old "Stella" with pneumonia is prescribed antibiotics in Belgian primary care



Doctor prescribes antibiotics in the EHR....

The screenshot displays the 'HEALTH one 2016 (Voorschrift)' interface. The main window shows a patient's medical history with a red arrow pointing to the text: "Lisa heeft al twee keer ernstige diarree gehad bij vorige kuren antibiotica." A 'Voorschriftenbeheerder' window is open, showing the prescription details for 'Enterol (c) 250mg 20 poeder voor orale suspensie'. The price is listed as 0.85. The 'Voorschrift wijzigen' dialog box is also open, showing the prescription details: 'R/ Enterol (c) 250mg DT/20 poeder voor orale suspensie' for 33.92 EUR. The dialog includes fields for quantity (1 zakje(s)), frequency (3 x / 1 dagen), and duration (7 dagen). It also features a table for dosing times (Onthijt, Middageten, Avondeten) and a 'Parameters' section with checkboxes for 'Gegeven geneesmiddel', 'Toegestane herhalingen', 'Voorgescreven door specialist', 'Voorschrift op stofname', 'Automatisch bewaren', 'Schrijf voor', and 'Vitalink'. The 'Parameters' section is currently empty. The 'Link met pathologie' section is also empty. The 'Allergieën en reacties' section shows 'niet verdragen medicaties' and 'allergieën'. The 'Transacties' list on the left shows a series of medical consultations from 2015 to 2016, with the most recent one on 20/09/2016 by Dr. Mieke Vermandere.

needed

Recommendation - evidence summary - all the way to the meta-analysis?



Probiotics for children receiving antibiotics

v1.2 published on 9/2/16

Home Help Acco

References Evidence Recommendations

Search for recommendations

2 Probiotics for children receiving antibiotics for an infection

Children 1 month to 2 years old receiving antibiotics for an infection.

Strong recommendation ?

Benefits clearly outweigh the drawbacks/harms.

We recommend adjunctive probiotics rather than no probiotics.

[VIEW LESS DETAILS](#) ^

Research evidence Key info Rationale Practical info Adaptation Decision Aids Feedback (0)

Population	Intervention	Comparator
Children 1 month to 2 years old View	Adjunctive probiotic therapy	No probiotic therapy

Evidence profile Summary References

Outcome Timeframe	Study results and measurements	Absolute effect estimates		Certainty in effect estimates (Quality of evidence)	Summary
		No probiotics	Probiotics		
AAD <2 years	Relative risk 0.46 (CI 95% 0.35 - 0.61) Based on data from 3898 patients in 22 studies Follow up: 1-12 weeks.	180 per 1000	83 per 1000	Moderate Due to serious inconsistency.	Probiotics appear to decrease the incidence of AAD.

Acting on – and implementing - the evidence together



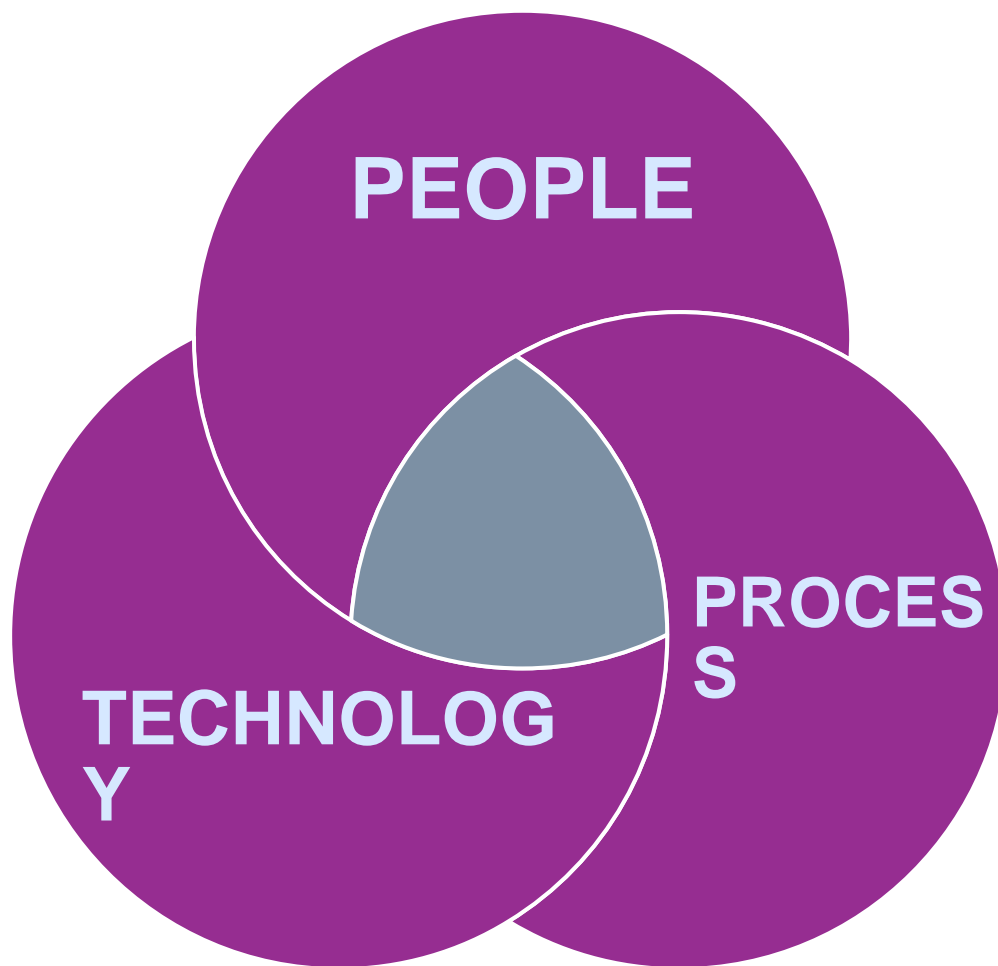
And the same goes for Finland...

The screenshot displays a medical record interface. On the left, a prescription form for Amoxin is visible, including fields for dosage (100 mg/ml), frequency (2 millilitraa 2 kertaa vuorokaudessa), and packaging (1 Pakkaus, 60 ml). The right side of the interface shows a sidebar with sections for 'Työkalut' (Tools) and 'Muistutukset' (Reminders). Under 'Muistutukset', a reminder is triggered, stating: 'Potilas sai antibioottireseptin (Amoxin). Probiootteja (Lactobacillus tai Saccharomyces boulardii) suositellaan antibioottiripulin ehkäisemiseksi. Niiden turvallisuutta ei kuitenkaan ole varmistettu immunosuppressoituilla henkilöillä.' (The patient received an antibiotic prescription (Amoxin). Probiotics (Lactobacillus or Saccharomyces boulardii) are recommended for the prevention of antibiotic diarrhea. Their safety has not been confirmed for immunosuppressed individuals.) A blue arrow points from the reminder text to the 'Muistutukset' section header.

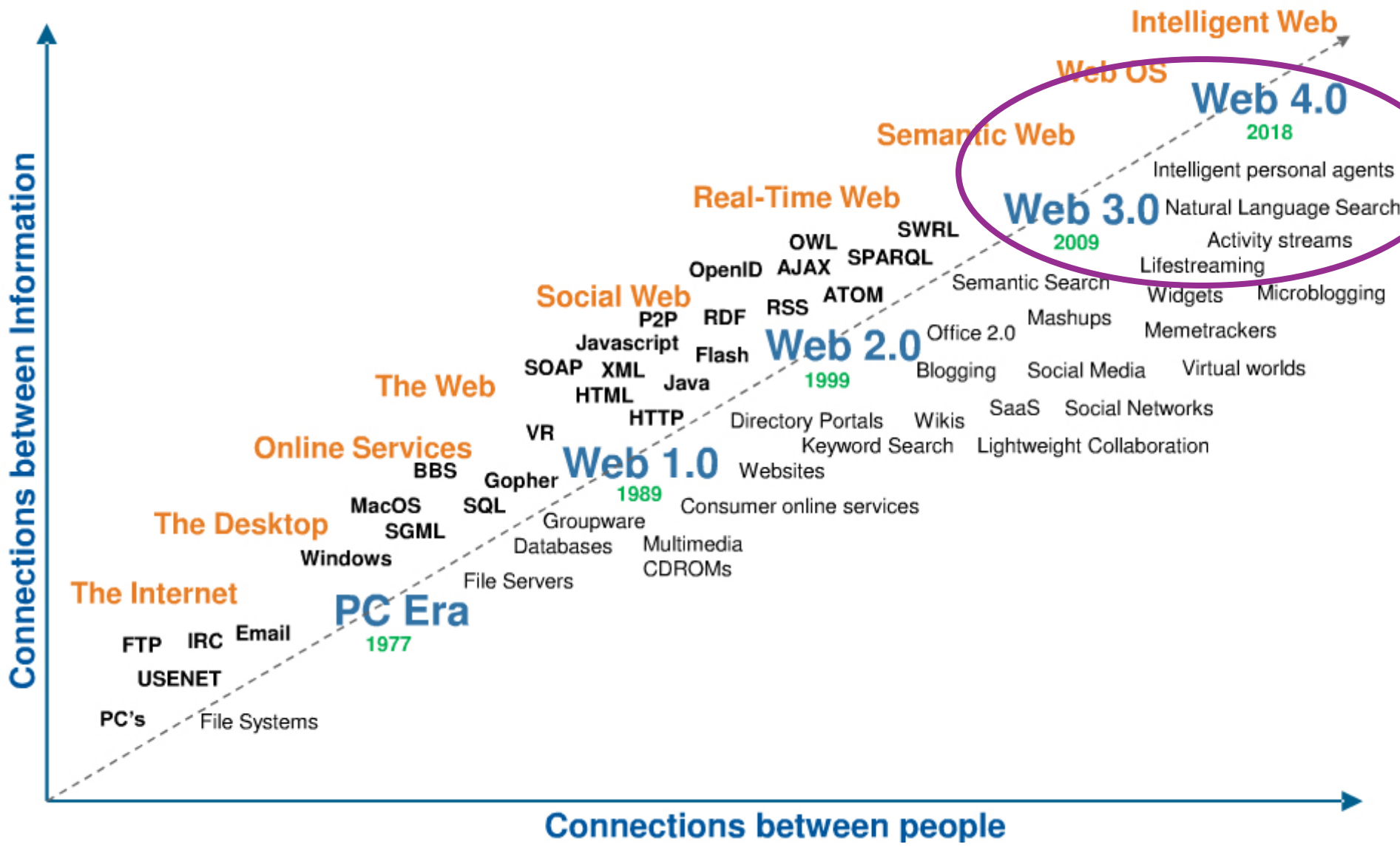
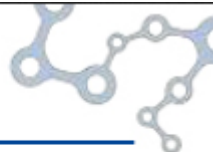
Automatic reminder triggered in a Finnish medical record:
The patient got a prescription of antibiotics (Amoxin). Probiotics (Lactobacillus or Saccharomyces boulardii) are recommended for the prevention of antibiotic diarrhea. In immunosuppressed patients their safety has not been confirmed.

Summary

- The “Digital and Trustworthy Evidence Ecosystem” is emerging:
 - New and improved methods and tools are available
 - Digitally structured, linked data with sharing across platforms and organizations is now possible
- People and process need to evolve to leverage the new “Ecosystem” including:
 - Promote a culture of sharing
 - Adapt to standards and structuring of data
 - Common understanding of research methods
 - Incorporation of evidence from “diverse” sources



The Intelligence is in the Connections



Cochrane Deutschland Stiftung nun offiziell

Am 26. Oktober 2017 wurde die unabhängige und gemeinnützige Cochrane Deutschland Stiftung (CDS) mit Sitz in Freiburg offiziell gegründet. Die Stiftung wird ab sofort vom Bundesministerium für Gesundheit mit bis zu einer Million Euro pro Jahr gefördert, um die Aktivitäten von Cochrane in Deutschland dauerhaft realisieren zu können.

Am 9. November äußerte sich der Bundesgesundheitsminister Hermann Gröhe in einer offiziellen Erklärung wie folgt:

“Wir brauchen unabhängige Forschung, die den Stand der Erkenntnisse immer wieder wissenschaftlich auf den Prüfstand stellt und uns so verlässliche Informationen über die besten Behandlungsmethoden liefert. Deshalb habe ich mich dafür eingesetzt, dass der Bund die Arbeit von Cochrane in Deutschland mit der Cochrane Deutschland Stiftung endlich nachhaltig fördern kann.“

Damit endet eine zwanzigjährige Phase der projektbasierten Finanzierung von Cochrane in Deutschland. Die Stiftung kann sich nun angesichts stabiler Finanzierung und planbarer Ressourcensatzungsgemäß nachhaltig für die Generierung und Implementierung von Wissen aus Cochrane Evidenz für alle relevanten Nutzergruppen einsetzen,



Cochrane Kompakt
unabhängiges Gesundheitswissen

kurz | verständlich | auf Deutsch



W Wissen Was Wirkt

Cochrane bloggt auf deutsch



Thank you



Attribution: Scott Marsland -