

Where CEV began



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Pioneers for “plain” English

Plain language



One day Richard announced that we were leaving

Early CEV



We relocated to Moorfields

Statistical complexity

Historically, much was achieved with a relatively small amount of statistical expertise

The landscape has changed considerably over time, to truly optimise the real potential of your data, complex statistical methods may be needed, and these methods continue to evolve at a rapid rate, particularly in novel areas such as the omics. ¹

1. Increasing value and reducing waste in biomedical research: who's listening? Moher D, Glasziou P, Chalmers I, Nasser M, Bossuyt PM, Korevaar DA, Graham ID, Ravaud P, Boutron I. *Lancet*. 2015 Sep 25. pii: S0140-6736(15)00307-4. doi: 10.1016/S0140-6736(15)00307-4

Brief aside for those new to Systematic Reviews and Meta Analyses

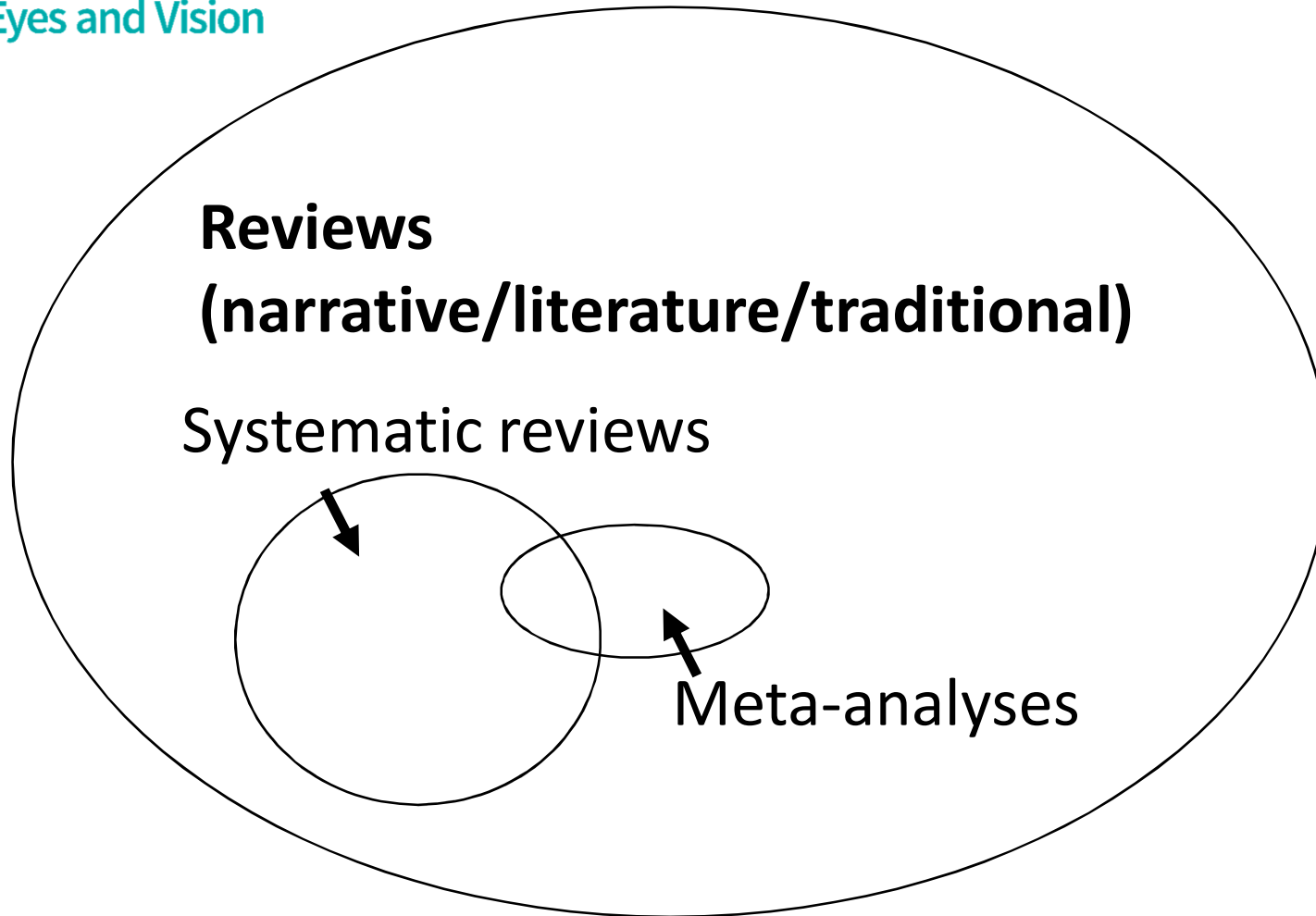
Systematic Review :

- A well-formulated question
- A comprehensive data search
- Unbiased selection
- Critical appraisal of data
- Audit Trail

Brief aside for those new to Systematic Reviews and Meta Analyses

Meta Analysis :

- Systematic analysis of the results, often with the aim to produce a single estimate of an intervention / exposure effect.
- Quantitative pooling of data



Initial role as statistical editor

Meta analysis in 1997 (if we were lucky enough to find trials)

- Are studies similar enough to combine?
- Look at a chi-square test but beware (low power)
- Should we use a fixed effect model or a random effect model

Summer school for Cochrane statisticians 2001



25 attendees from ten countries

Later role as statistical editor

Meta analysis in 2010

- Meta analysis methods for new types of outcome
 - time to event data
 - dealing with ordinal data
- Missing data
- Multiple treatments

Cochrane Statistics methods Group training, 2010



34 participants from eleven countries

Current role as statistical editor

Meta analysis in 2018

- What is the impact of heterogeneity – look at I-square statistic, with confidence interval
- How should I compute my fixed or random effects model - peto, inverse variance, mantel-haenszel
- Is the analysis actually ITT - if not, should I impute and if so how
- Many outcomes – do I adjust for multiplicity?

The future

Gathering new recruits

