

2020 Key Outputs

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2020 Highlight:

Implementation of prognosis reviews within Cochrane is almost completed



Research and development

- Framework for meta-analysis of prediction model studies with binary and time-to-event outcomes has been published in the journal Statistical Methods in Medical Research
- Co-authored papers on reporting of and methods for primary prognosis studies, including <u>TRIPOD for abstracts</u> and <u>guidance for sample size calculations for prediction model</u> <u>development</u>
- Developing guidance for reporting and quality assessment of prediction models developed using Machine Learning techniques. This will result in TRIPOD-ML and PROBAST-ML. As a starting point, we are performing a systematic review aiming to evaluate the reporting quality, the methodological conduct, and the risk of bias of prediction model studies that applied ML techniques for model development and/or validation (PROSPERO CRD42019161764).
- Three Cochrane reviews were published in the past year. Two on prognostic factors (<u>Aldin et al</u>, <u>Hayden et al</u>) and one on prognostic models (<u>Kreuzberger et al</u>). They can serve as exemplars for upcoming reviews, regardless of the clinical domain or topic.



Best practice and guidance

Developed new material to support the implementation of reviews of prognosis studies within Cochrane, e.g. peer review templates for protocols and full reviews, a full workflow from title registration up to publication of the full review, and a FAQ for authors and editors. Continuous updating of TRF, protocol and review template is in place. Example data extraction files and example meta-analysis scripts are open source available. All tools are easily accessible via https://methods.cochrane.org/prognosis/welcome



Methods implementation

• Facilitated online courses on systematic reviews of prognosis studies for Cochrane authors.