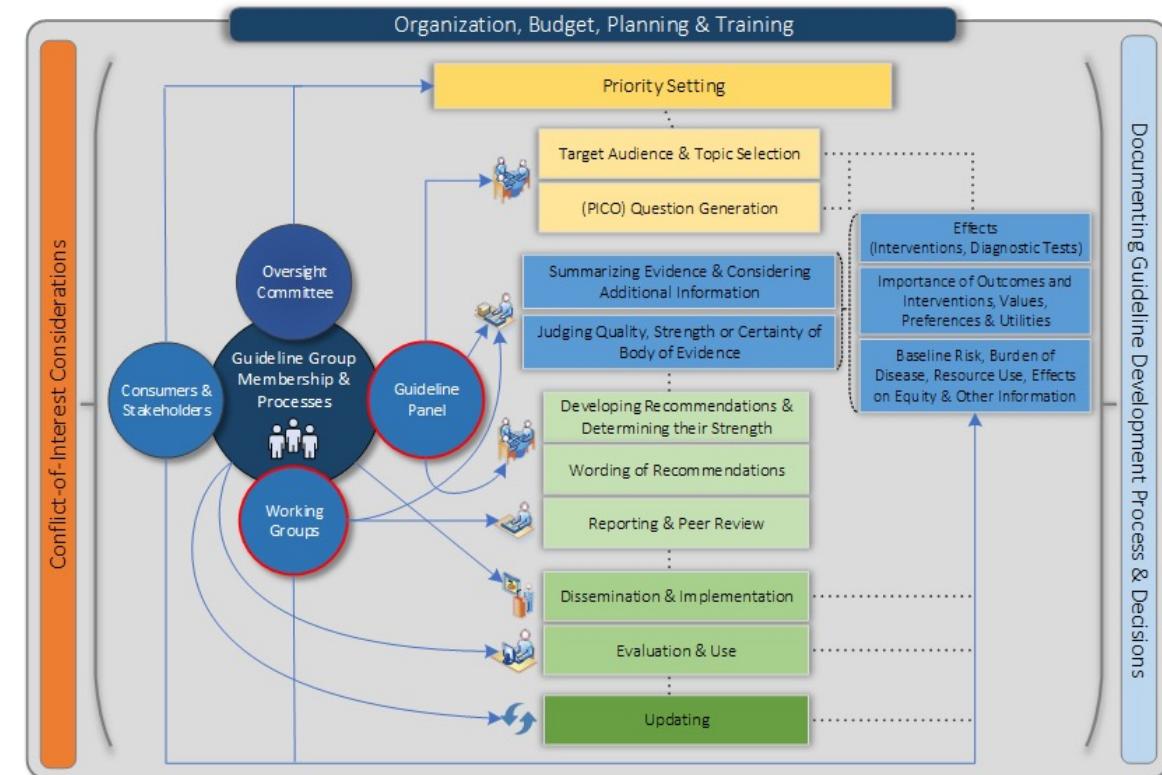


Evidence-Based AI Development Plan

- Determine the topic and scope
- Set up a group (independent reviewers)
- Formulate systematic review questions [1][2]
- Conduct a comprehensive literature search next page, Fig.1
- Synthesize research evidence with a systematic review method, grade the quality of research evidence [3]
- Form conclusion or hypothesis next-page, Fig.2



[1] If clinical research, try PICOS format (<https://mcw.libguides.com/EBM/PICO>).

[2] If technique research, try Example in [SOP-R-1_Technique_Landscape_Analysis.Example.Top-Med-AI-Labs-Checklist.pdf](#)

[3] Try GRADE standard for clinical research; Try impact-factor or SCI-Q or annual-citation-in-recent-5-years for technique papers.

Evidence-Based AI Development Plan (Appendix)

- Comprehensive literature search (Fig.1). Two experts work independently to select target papers. 1 QA make final decision if paper-selection-result conflicts.
- Results are mainly presented in forest plots (Fig.2). Q1: what about AI accuracy performance? Maybe we can use ROC instead of OR in forest plots.
- Q1: what about bio-signal feature importance? Maybe linear regression/stepwise regression.

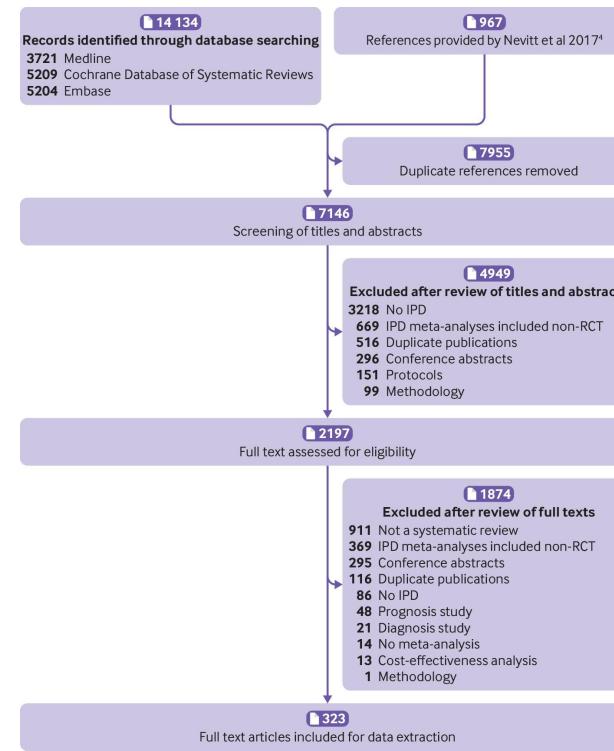


Fig1. Good literature research: comprehensively collect published literature (e.g. MESH/good-keywords), good process of literature quality evaluation (e.g. independent reviewers), eliminate low-quality literature, analyse and process research heterogeneity, detect publication bias, conduct sensitivity analysis, and meet the requirements of the PRISMA statement [1]

No.patient, OR(95-Cl,p), Year

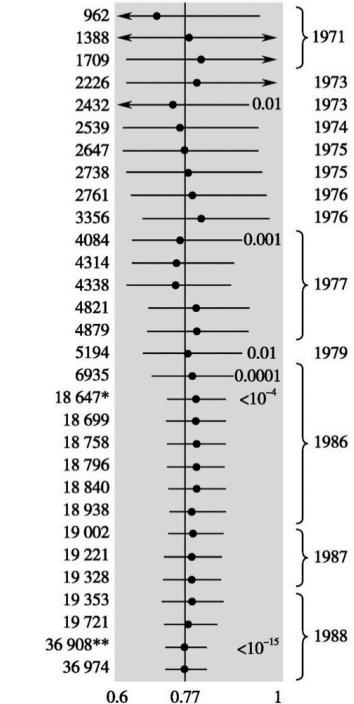


Fig2. Cumulative meta-analysis of randomized controlled trials of intravenous streptokinase for myocardial infarction