Improving the translation of search strategies using the Polyglot Search Translator: a randomized controlled trial

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APPENDIX A

Description of how the Polyglot Search Translator (PST) (intervention) works

The Polyglot Search Translator (PST) is not designed to replace the need to understand how the database works: it is designed to help those with that knowledge achieve search translations faster. A key component that the PST does not do is to automatically map subject terms such as Medical Subject Headings (MeSH) terms across databases. Users still need to conduct this task themselves by looking up the appropriate thesaurus in each database.

To use the PST, copy and paste either a PubMed or Ovid MEDLINE into the "Your query" box, then click on the arrow next to database name to reveal the translated search string. Copy this search string into the search box of the appropriate database. If the search does not run as expected, you can paste it into a Word document and make any required edits (for instance, if you have not changed over the MeSH subject term to the subject term of the new database). More details on how the PST works can be found from the PST help guide, available at crebp-sra.com/#/help/polyglot.

The PST is a free tool that can be accessed from crebp-sra.com/#/polyglot and is available as MIT-licensed open source software at https://github.com/CREBP/sra-polyglot.

For example, the PST replaces the Ovid MEDLINE adjacency operator "ADJ" with "NEAR" when translating the search string to the Cochrane Library, and the truncation symbol "?" with "*" when translating search strings from Ovid to PubMed (Figure S1 and Figure S2). Thesaurus terms need to be manually translated by the searcher. Search strings can be translated from either, PubMed or Ovid MEDLINE, into the PubMed, Ovid MEDLINE/Ovid Embase/Ovid PsycINFO, Embase.com, Cochrane Library, Web of Science, Scopus, or CINAHL databases.

Figure S1 Screenshot of the Polyglot Search Translator (PST) translating a PubMed search to the Cochrane Library

Figure S2 Screenshot of the PST translating an Ovid MEDLINE search to Embase.com