

# Query Transformations

- What's been done?
  - Query generation [41] and query expansion/reduction [46, 76] have had success in **clinical IR fields** with **non-Boolean queries**
    - Can be used to generate variations in order to **suggest** more effective queries
    - Aspects of a query are modified (e.g. terms are added or removed) in order to create a **more effective query**
- What's the gap?



**unclear how to apply these techniques to Boolean queries**

[41] Bevan Koopman, Liam Cripwell, and Guido Zuccon. Generating clinical queries from patient narratives: A comparison between machines and humans. In Proceedings of the 40th annual international ACM SIGIR conference on Research and development in information retrieval, 2017.

[46] Gang Luo, Chunqiang Tang, Hao Yang, and Xing Wei. Medsearch: a specialized search engine for medical information retrieval. In Proceedings of the 17th ACM CIKM conference on Information and Knowledge Management, pages 143–152, 2008.

[76] Luca Soldaini, Arman Cohan, Andrew Yates, Nazli Goharian, and Ophir Frieder. Retrieving medical literature for clinical decision support. In Proceedings of the 37th European Conference on IR Research, pages 538–549, 2015.

# Screening

- Once a query has been formulated and approved, the **screening phase** may begin
- Researchers use the query they formulated to retrieve citations, then screen these citations for trials and studies that are **potentially relevant**
- It is in the **eligibility** phase that the **full text** of studies are assessed to determine if they should be included or excluded from the systematic review