## Cost & Workload

- What's been found?
  - A majority of reviews require >1,000 hours to complete [3]
  - And can cost upwards of a quarter of a million USD [50]
  - Most expensive and laborious phases prior to eligibility [50]
- What's the gap?



Systematic reviews are **highly costly and time consuming** to produce [87]

<sup>[3]</sup> I. Elaine Allen and Ingram Olkin. Estimating time to conduct a meta-analysis from number of citations retrieved. Journal of the American Medical Association, 282(7): 634–635, 1999.

<sup>[50]</sup> Jessie McGowan and Margaret Sampson. Systematic reviews need systematic searchers (irp). Journal of the Medical Library Association, 93(1):74, 2005.

<sup>[87]</sup> Byron C Wallace, Joël Kuiper, Aakash Sharma, Mingxi Brian Zhu, and Iain J Mar-shall. Extracting pico sentences from clinical trial reports using supervised distant supervision. Journal of Machine Learning Research, 17(132) 1–25, 2016.

## Formulating a Query

- After a research question has been defined, a query is formulated in order to search literature to answer this question
- In systematic reviews, an (often) complex Boolean query is used in order to find citations
- Queries are formatted in an iterative process with the help of an information specialist and are submitted to a panel for quality assurance