



Best Evidence = Best Practice

Bias

One factor that often leads to interference with the truth in the medical literature is bias. It can be very difficult if not impossible to remove bias from the picture. This is one of the strengths of the systematic review – the detailed criteria that authors of systematic reviews must follow help to eliminate as much bias as possible. But, if you know what types of bias are lurking in the literature, you will be able to better understand how they might affect the results of outcomes data you are reading. Then, you can use your skills as a manager of knowledge to compensate as best as you can. Below are the kinds of bias that show up most often in the medical literature.

- **Attrition Bias:** were all original subjects in a study reported in the results? If not, what happened to them?
- **Publication Bias:** only publish what worked. Unsuccessful research left out.
- **Information Bias:** presentation of data implies misleading results.
- **Comparator Bias:** comparing new treatment to placebo rather than current standard of care.
- **Outcome Bias:** not all study results are published due to lack of space or statistical significance.
- **Selection Bias:** research only reports data that supports hypothesis. Patients without beneficial results do not get reported.
- **Performance Bias:** research study is inappropriately blinded and may cause providers to treat subjects differently.
- **Detection Bias:** while researchers may be properly blinded, judges are NOT and can result in how intervention and control groups are measured.
- **Commercial Bias:** who has funded the research? Might there be any conflict of interest between the author of a study and the presented data?