

Performance Prediction

- Rather than changing the types of queries used to search, what about improving existing queries?
 - query performance prediction (**QPP**) [29]
- QPPs are a way of estimating the effectiveness of a query without relevance assessments
 - **pre-retrieval QPPs** use query and collection statistics [26]
 - **post-retrieval QPPs** use statistics about documents that have been retrieved [91, 40, 72, 20]
- **It is unknown how to apply QPPs to Boolean queries**

Query Transformations

- Query generation [41] and query expansion/reduction [46, 74] have had success in clinical IR fields with non-Boolean queries
- Aspects of a query are modified (e.g. terms are added or removed) in order to create a **more effective query**
- However, again it is **unclear how to apply these techniques to Boolean queries**