Background: Evidence based medicine (EMB) has become the effective approach to improve the health care quality and outcomes of patients. It is one of the core milestones/skills that residents work on during training and are periodically evaluated on as well. The goal is to develop a lifelong learning skill to provide the highest quality of care. Journal club has been a venue to improve EBM skills for many years. A few of the main common goals of journal club are developing critical appraisal skills, having an impact on clinical practice, and staying up to date with the current literature. In the Summer of 2021, the American Board of Family Medicine (ABFM) launched the National Journal Club pilot. It is a pilot program that provides 100 articles annually for Diplomates and residents to utilize to keep up with contemporary, practice-changing evidence.

The purpose of this project is to explore the correlation between the quality of articles chosen as a part of the pilot program and our journal club evaluation metrics to identify components of journal articles associated with better learning outcomes.

Methods: We performed a bibliometric analysis to describe the body of literature selected by the ABFM for its journal club pilot. Each article was scored using the Medical Education Research Quality Instrument (MERSQI) to assess methodological quality. This instrument includes 10 items grouped in 6 domains of study quality, including: study design, sampling (number of institutions and response rate), type of data, validity evidence (internal structure, content, and relationships to other variables), data analysis (appropriateness and complexity), and outcomes. The total MERSQI score ranges from a minimum possible score of 5 and a maximum possible score of 18, with higher scores indicating higher quality. Before our inaugural journal club session, we collected baseline survey data to document participants’ previous research experience and confidence critiquing journal articles. Following each journal club session, evaluation data were collected to assess learner satisfaction. We plan to explore correlations between MERSQI scores and evaluation data to guide article selection moving forward.

Results: 43 journal club articles from 25 journals were included in the ABFM Journal Club Pilot. MERSQI scores ranged from 13 to 18, with the average being 16.31. At baseline, a majority of residents indicated they had none or minimal experience evaluating journal articles (n=22, 52.4%). For instance, only a third of our residents were confident in critically evaluating a clinical research study and more than a third did not feel confident in their ability to interpret statistical methods, confidence intervals or study's power. Though the pilot is still ongoing, preliminary evaluation data indicates increased residents’ confidence in research appraisal skills.