

FOAM Club: A Spin on the Traditional Journal Club Format Focused on Blogs and Podcasts

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NEED FOR INNOVATION

Free Open Access Medical (FOAM) resources are a widely available source of education and practice changing information that health care providers utilize in parallel to traditional medical journals.^{1–3} The tried and true journal club format as we know it today has its origins in the latter half of the 19th century, and this collaborative review of peer-reviewed and publisher-controlled resources has long been a part of medical education.⁴ No such widely adopted format exists for the critical appraisal of FOAM content. Given the rapid proliferation of FOAM resources, and the Accreditation Council for Graduate Medical Education (ACGME) endorsement for the use of asynchronous online materials to count for didactic and interactive educational credit in emergency medicine residency training there is a definitive need to create an experience akin to journal club for open educational resources in medicine that teaches users how to critically appraise blogs, podcasts, and other FOAM resources.^{5–7}

BACKGROUND

Medical knowledge outpaces the rate of publication in traditional journals. The need to incorporate a structured assessment of FOAM resources is now more critical than ever as the spread of new knowledge occurs largely online.⁸ This deluge of information assumes many forms including primary literature, manuscripts, data published online before peer review, and FOAM resources such as blogs and podcasts which are being created by collaborative networks among a growing multidisciplinary community of practice.³ It is crucial that we critically appraise both FOAM resources and traditional peer-reviewed articles alike. While graduate medical education (GME) includes instruction on the appraisal of primary source articles, there is a gap in training on how to appraise FOAM resources. Our innovation sought to fill this need, and FOAM Club closes this gap.

Ongoing work supports a structure and methodology that allows educators and clinicians to assess the quality of FOAM blogs and podcasts using an

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evolving series of user-friendly tools that incorporate factors unique to these online educational materials.^{9,10} The work to develop these tools is paramount, as it has been noted that individual gestalt ratings for FOAM resources are unreliable for quality assessment.¹¹ The most high profile of these tools is the ALiEM AIR (Academic Life in Emergency Medicine Approved Instructional Resources) score which is based in part on the Best Evidence in Emergency Medicine (BEEM) score and is used to assess content for ALiEMU, an asynchronous online platform that has been widely adopted by emergency medicine residency programs to fulfill the ACGME requirements for monitored asynchronous online educational content.⁹

In contrast to the ALiEM AIR score, which is designed for use by educators and requires multiple assessors, the revised METRIQ score (rMETRIQ) is designed for point-of-care use in the assessment of blog articles and was recently used in a systemic review of emergency medicine–focused FOAM content.^{12,13} Separate rating tools for the assessment of blogs and podcasts, like those published by Colmers et al.,¹⁰ are particularly attractive for an educational experience like FOAM Club, because we believe that reviewing quality indicators unique to each modality enriches the discussion. Ultimately, any of these tools may serve as a well-structured template that can teach health care providers about the critical appraisal of FOAM resources in an interactive format that is true to the spirit of the traditional journal club.

OBJECTIVE OF INNOVATION

The goal of our educational innovation is to provide instruction on the quality assessment of blogs and podcasts using existing materials in an in-person and online format that is applicable in numerous GME settings.⁸ Structurally, our platform echoes the traditional journal club format and that familiar scaffolding is leveraged to promote a novel educational experience that will effectively teach attendees how to critically appraise FOAM content in a manner that allows them to assess resources that impact clinical practice and the education of colleagues and trainees.

DEVELOPMENT PROCESS

Our innovation targets GME programs with residents and teaching faculty that possess a strong foundation in primary literature appraisal. To best meet the needs

of this advanced adult learner, we sought to rely on group learning, hands-on teaching, and curation of a community of learners. We developed a 60-minute educational experience called “FOAM Club” that involves both didactic and interactive elements. It echoes the format of existing journal clubs and can be readily incorporated into protected educational time, academic half-days, and online video-based learning. As is the case in the traditional journal club format, attendees are expected to review materials in advance. One blog post and one podcast episode are selected for review, and learners are given access to introductory materials and the assessment tools. The project was exempted by the institutional review board (HUM00174632).

IMPLEMENTATION PHASE

The 60-minute FOAM Club didactic was piloted at two pediatric emergency medicine fellowship programs. The details of the sessions were recorded by facilitators who took detailed written notes and solicited feedback from attendees.

We piloted our educational innovation at the University of Michigan and Cincinnati Children’s Divisions of Emergency Medicine in fall 2019. We intentionally selected a blog article and podcast episode that focused on a topic familiar to fellows and attendings (the limping child). This emphasized the appraisal tools, rather than shifting the focus to unfamiliar clinical concepts. The process of preparing for and the execution of FOAM Club is shown in Figure 1.

Planning for the session included a series of introductory e-mails with a brief overview of the topic and the assigned blog article and podcast episode for review in advance. The in-person educational experience (Figure 1) began with a brief interactive introduction into the evidence supporting the use of the checklists. The majority of each FOAM Club session was spent in small, facilitated groups applying the checklists to the selected blog article and podcast episode. The session concluded with a facilitated large group discussion. A written learner survey, which was developed by the investigators and based on one in use at Cincinnati Children’s was used to gather feedback. The results were analyzed via descriptive statistics and content analysis of the written comments.

We posted detailed instructions and a step-by-step guide, including reference materials,



Figure 1. Timeline used for executing FOAM Club (top) and day-of schedule for the FOAM Club session (bottom). FOAM = Free Open Access Medicine.

introductory content, and facilitator resources on FOAM-club.com. Our hope is that by sharing both our methodology and our resources in a fashion that is true to the spirit of FOAM it will allow other programs to easily incorporate FOAM Club into their curricula.

OUTCOMES

Anonymous feedback was obtained from 18 participants. One-third (6/18, 33%) reported any prior education on FOAM resource appraisal. All attendees noted their ability to appraise FOAM resources as

“confident” or “very confident” following the session. The written comments were largely supportive of incorporating FOAM appraisal into the current curriculum (13/18 respondents) with one respondent noting that “it would be nice to have this in addition to journal club.” Themes in the narrative comments included the value of the group discussion and the structured presentation. One respondent noted that “part of the beauty of FOAM is that it can be done individually and asynchronously.” We can imagine that they would use these tools for independent review in the future. And finally, attendees remarked that it “would also be good to have an example of a poor resource.”

REFLECTIVE DISCUSSION

Developing an educational intervention when the tools and evidence that supports it are still a work in process is, in many ways, true to the spirit of FOAM. The ongoing work of the METRIQ study group and others promises to refine what we know about the impact of FOAM content and how we assess it in the near-term future.^{12,13} Sharing our work on a freely available website will allow us to solicit feedback and update the content at a pace that matches that of the evolving evidence. With many assessment tools at our disposal we ultimately chose the individual blog and podcast assessment checklists for FOAM Club because we felt that this would facilitate a more engaging discussion and highlight some of the differences in each platform.¹⁰ The ALiEM AIR score is used by educators for curriculum development, and rMETRIQ is point of care, but specific to blogs.^{9,12} Anecdotally, many of our colleagues consume one or the other but not necessarily both. FOAM Club should offer practice in assessing both blog articles and podcast episodes while exposing attendees to the ongoing work that is being done. In the future we should focus on the impact of learning these skills on clinical practice and engagement with the FOAM community. Finally, FOAM Club coupled with a related journal club reviewing the FOAM material’s key source references would make for a stimulating academic half-day.

CONCLUSION

Residents, fellows, students, and faculty can all benefit from learning how to critically appraise FOAM

resources. FOAM Club is a novel, highly interactive, 1-hour educational intervention that can improve self-reported confidence and teach new skills in the assessment of popular online educational resources.

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Supporting Information

The following supporting information is available in the online version of this paper available at <http://onlinelibrary.wiley.com/doi/10.1002/aet2.10516/full>

Data Supplement S1. Supplementary Material.