Embracing FOAM as an Academic Community

Nicole Munz, DO and Esther H. Chen, MD

We read with particular interest and enthusiasm the article written by Dr. Grock et al., describing his team's strategy to search for, collate, categorize, and assess the quality and content of written free online open-access medical education (FOAM).¹ As educators and consumers of FOAM, we have waited too long for someone to undertake this effort and applaud their collaboration with a national organization dedicated to scientific inquiry. This article highlights some important points about the appropriate use of FOAM and the shared responsibility between the consumer and contributor.

We were most surprised by the authors' assessment that only 0.3% of the written posts were appropriate as a point-of-care resource. In our experience, trainees frequently reference FOAM while on shift, and widespread use has been reported in the literature.² As the authors point out, this 0.3% statistic may be due to the nature of the renal and genitourinary topic selected and be different for other topics such as critical care. Moreover, some resources were considered to be too detailed to be useful for on-shift review. However, we can imagine a scenario in which an attending or senior resident, who may have already read a resource in its entirety, uses a specific section to highlight some important points during bedside teaching or is able to search quickly for an infographic to help guide patient management. Our clinical environment has become so technologically prevalent that it is often easier to look something up on the computer than to find a textbook.

Another important but less surprising finding is that only 10% of the posts were determined to be high quality based on the rMETRIQ score. As there is no criterion standard for assessing the quality and accuracy of FOAM, this tool provides a set of objective criteria that expands on prior work to determine quality, such as the quality checklists for blogs and podcasts and the ALiEM-approved institutional resources score.^{3,4} One benefit of FOAM is rapid dissemination of and reference to primary literature. While we believe that creators of FOAM aim to present accurate and high-yield information, Dr. Grock's analyses suggest that there is significant room for improvement. This article reminds creators of FOAM that they need to be extra careful and precise in what they write, because consumers may view their content without critically appraising the primary sources themselves.⁵ Just as researchers must follow guidelines when writing their manuscripts, we encourage future FOAM authors to use objective criteria, like the rMETRIQ score, to guide them in creating high-quality FOAM content. Furthermore, this article reminds educators, who may also be using FOAM for asynchronous learning, to use objective criteria as a guide for evaluating online content.

Free online open-access medical education can be an incredibly useful tool in our pursuit of lifelong learning as physicians. With a quick online search, we can find easily digestible summaries on almost any topic or recent article relevant to our clinical practice. There will likely be generations of learners who

Department of Emergency Medicine, University of California at San Francisco, San Francisco, CA

Received April 1, 2019; accepted April 16, 2019.

The authors have no relevant financial information or potential conflicts of interest to disclose.

Related articles appear on pages 375 and 398.

Supervising Editor: John H. Burton, MD.

Address for correspondence and reprints: Esther H. Chen, MD; e-mail: Esther.Chen@ucsf.edu

EDUCATION AND TRAINING 2019;3:396–397

primarily use FOAM for their core learning and have gaps in their medical knowledge.⁶ Dr. Grock and colleagues found that the relevant FOAM posts did not sufficiently cover the breadth or depth of most renal and genitourinary topics in the Model of the Clinical Practice of Emergency Medicine but was heavily weighted toward common conditions (e.g., renal calculi, urinary retention, and cystitis).⁷ Therefore, FOAM should not be a stand-alone tool for learning core content and cannot replace textbooks or other structured curricula for junior learners, even if it is not their preferred learning resource.^{6,8} We encourage learners to read the primary literature referenced in FOAM posts before changing their clinical practice.

Finally, as part of an academic community, we have a responsibility to encourage the use of a formal evaluation process like the SOAR Review to vet online content that will be featured on a national organization's website. SAEM's Online Academic Resources (SOAR) project, which serves as SAEM's home for online education, is a repository of FOAM resources. In this role, how much responsibility should the academy have to ensure this content is accurate and of high quality, like its journals? Is it enough to use the rMETRIQ score to evaluate these written posts? As academic physicians let's use this project as a launching pad for advancing FOAM, by approaching it with the same critical eye as we do scientific literature.

References

1. Grock A, Bhalerao A, Chan T, et al. Systematic online academic resource (SOAR) review: renal and genitourinary. *AEM Educ Train* 2019;3:000–00.
2. Patocka C, Lin M, Voros J, Chan T. Point-of-care resource use in the emergency department: a developmental model. *AEM Educ Train* 2018;2:221–8.
3. Thoma B, Joshi N, Trueger NS, et al. Five strategies to effectively use online resources in emergency medicine. *Ann Emerg Med* 2014;64:392–5.
4. Lin M, Joshi N, Grock A, et al. Approved Instructional Resources (AIR) Series: a national initiative to identify quality emergency medicine blog and podcast content for resident education. *J Grad Med Educ* 2016;8:219–25.
5. Thoma B, Murray H, Huang SY, et al. The impact of social media promotion with infographics and podcasts in research dissemination and readership. *CJEM* 2018;20:300–6.
6. Mallin M, Schlein S, Doctor S, et al. A Survey of the current utilization of asynchronous education among emergency medicine residents in the US. *Acad Med* 2014;89:598–601.
7. Counselman FL, Babu K, Edens MA, et al. The 2016 Model of the Clinical Practice of Emergency Medicine. *J Emerg Med* 2017;52(6):846–9.
8. Purdy E, Thoma B, Bednarczyk J, et al. The use of free online educational resources by Canadian emergency medicine residents and program directors. *CJEM* 2015;1717:101–6.