Initially created to democratize education through technology, FOAM has undergone successive waves of evolution as FOAM creators and evaluators adapt to challenges. The original FOAM post, produced by an expert and potentially lacking many known markers of quality today, was published without peer review.

One reaction by ALiEM was to introduce a traditional peer review process for clinical FOAM content. Later, they created a post-publication peer review.

In terms of assessing quality, unfortunately, gestalt alone has been shown to be unreliable for FOAM quality assessment among learners. Quality evaluation aids were then created. The ALiEM AIR scoring tool was created by and for a group of 8 medical educators and has some validity and reliability data among that group. The ALiEM AIR-PRO scoring tool exists but has yet to undergo formal reliability and validity analysis.
The METRIQ study utilized multiple modified Delphi processes and literature reviews to determine the most important features associated with quality. The process produced the METRIQ 5 and the METRIQ 8 scoring tools which have themselves undergone one wave of evolution based on user feedback to create the rMETRIQ scoring tool.

Lastly, the Social Media Index categorizes FOAM sites in order of impact. Recent data shows that quality evaluation for the SMI-50 posts correlates with evaluation by formal scoring tools.

Creating scoring tools presents unique challenges to medical educators and users. In our activity, small groups focused on specific parts of creating scoring tools: deciding on a specific metric, determining the importance of each metric, utility of anchors and comment sections, and determining the cut-off for quality.

rMETRIC Scoring Tool with Anchors

Questions	Options
Q1: Does the resource provide enough background information to situate the user?	3 - Yes, the resource provides sufficient background information to situate the user and also directs users to other valuable resources related to the topic. 2 - Yes, the resource provides sufficient background information to situate the user 1 - No, the information presented within the resource cannot be situated within its broader context, but users are directed to resources with this information. 0 - No, the information presented within the resource cannot be situated within its broader context without looking up information independently.
Q2: Does the resource contain an appropriate amount of information for its length?	3 - No unnecessary, redundant or missing content, all content was essential 2 - Some unnecessary, redundant or missing content, but most content was essential 1 - Lots of unnecessary redundant, or missing content 0 - Insufficient content
Q3: Is the resource well written and formatted?	3 - The resource is very well written and formatted in a way that optimized and benefits learning. 2 - The resource is reasonably well written and formatted, but aspects of the organization or presentation are distracting or otherwise detrimental to learning. 1 - The resource is somewhat well written and formatted, but could benefit from substantive editing (e.g. grammatical errors are seen, or better organized). 0 - The resource is poorly written and/or formatted and should not be a resource for learning.

Q4: Does the resource cite its references?	3 - Yes, the references are cited, clearly map to specific statements within the resource, and all statements of fact that are not common knowledge are supported with a reference 2 - Yes, the references are cited and clearly map to specific statements within the resource, but statements of fact that are not common knowledge are made without the support of a reference 1 - Yes, there are references listed but they do not map to specific statements within the resource 0 - No, no references are cited
Q5: Is it clear who created the resource and do they have any conflicts of interest?	3 - Yes, the identity and qualifications of the author are clear and they specify that they have no relevant conflicts of interest 2 - Yes, the identity and qualifications of the author are clear, but they do not disclose whether they have any conflicts of interest 1 - Yes, the identity of the author is clear, but they do not list their qualifications or disclose whether they have any conflicts of interest 0 - No, the author of the resource has significant conflicts of interest or is not clearly identified (e.g. no name or a pseudonym is used)
Q6: Are the editorial and pre-publication peer review processes that were used to create the resource clearly outlined?	3 - Yes, a clear review process is described on the website and it was clearly applied to the resource 2 - Yes, a clear review process is described on the website, but it was not clear whether it was applied to the resource 1 - Yes, a review process is mentioned on the website, but it was not clearly described 0 - No, it is unclear whether or not the website has a review process; or, there is no process
Q7: Is there evidence of post-publication commentary on the resource's content by its users?	3 - Yes, a robust discussion of the resource's content has occurred that expands upon the content of the resource. 2 - Yes, some comments have been made on the resource, but a robust discussion about the resource's content has not occurred. 1 - There was a mechanism to leave comments but none had been made. 0 - No, there was no mechanism to leave comments or comments that were present were either unrelated to the post or unprofessional.

Tier 1: BEEM Rater Scale	Score-choose only 1	Tier 2: Content accuracy	Score-choose only 1	Tier 3: Educational Utility	Score-choose only 1	Tier 4: EBM	Score-choose only 1	Tier 5: Referenced	Score-choose only 1
Assuming that the results of this article are valid, how much does this article impact on EM clinical practice?		Do you have any concerns about the accuracy of the data presented or conclusions of this article?		Are there useful educational pearls in this article for residents?		Is this article reflect evidence based medicine (EBM) and thus lack bias?		Are the authors and literature clearly cited?	
Useless information	1	Yes, many concerns from many inaccuracies	1	Low value: No valuable pearls	1	Not EBM based, only expert opinion (and thus more biased)	1	No	1
Not really interesting, not really new, changes nothing	2		2		2		2		2
Interesting and new, but doesn't change practice	3	Yes, a major concern about few inaccuracies	3	Yes, but there are only a few (1-2) valuable or multiple (>=3) less-valuable educational pearls	3	Minimally EBM based	3		3
Interesting and new, has the potential to change practice	4		4		4		4		4
New and important: this would probably change practice for some EPs	5	Minimal concerns over minor inaccuracies	5	Yes, there are several (>=3) valuable educational pearls, or a few (1-2) KEY educational pearls that every resident should know before graduating	5	Mostly EBM based	5		5
New and Important: this would change practice for most EPs	6		6		6		6		6
This is a "must know" for EPs	7	No concerns over inaccuracies	7	Yes, there are multiple KEY educational pearls that residents should know before graduating	7	Yes exclusively EBM based (unbiased)	7	Yes	7
Your Score									

METRIQ – 8 and 5

Concise content – does the resource contain an appropriate amount of information for its length?	
Content Construction – are the processes (eg editorial, peer review, evaluation, etc) that were used to create the resource outlined?	
References – does the resource cite its references?	
Editorial process – Is there an editorial process	
Consistency with citations – are the resource's statements consistent with its references?	
Background – does the resource provide enough background information to situate the learner in the context of prior knowledge?	
Moderation – are the interactions between learners moderated effectively to ensure professional conduct?	
Publisher – is it clear who published the resource?	
TOTAL SCORE:	