

## The Case of FOAM Faux Pas

### Case

Dr. Brent Thoma

### Objectives / Questions:

Dr. Teresa Chan

Eve Purdy

### Expert Responses

Dr. Anton Helman

Dr. Tessa Davis

### Curated Community

#### Commentary

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It was only her sixth month as staff, but Stacy had found her groove. In addition to all of her board exam studying, she had been regularly listening to podcasts and reading up on the latest literature on her favorite medical blogs. She felt like she may be as up-to-date on the medical literature as she may ever be and she was finally starting to feel comfortable as the attending in the department. She just had to determine the disposition for a couple more patients and she'd be off to go prepare for a date with her husband that night. Then she saw Dr. Walters coming towards her – and he looked mad.

"Just what were you thinking yesterday!?" he asked her, angrily.

Stacy thought back to her day yesterday to try and figure out what he was referring to. She had urgently consulted him on a globe rupture and he hadn't been upset with her then. There was also that patient with the corneal abrasion that she sent to him for follow-up. That case had been so simple though – she didn't miss something, did she?

"I'm not sure what you're referring to, Dr. Walters."

"Tetracaine? You gave Tetracaine to a patient with a corneal abrasion? What were you thinking!? I thought we taught you better than that at this medical school."

"Well..."

"Well what?" he cut her off, "She could have lost her eye! Who taught you that this was okay?"

"Well actually, Dr. Walters, I heard about it on a podcast. I understand that there's some new evidence that suggests it's actually safe to use dilute tetracaine in these pat-"

"A podcast..." he replied, "A podcast? So is that how we practice medicine these days? Looking up what some random quacks on the internet have to say? I thought we taught you better than that."

Stacy's eyes dropped to the floor as she began to question herself.

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*You are one of Stacy's long term mentors and she just relayed this story to you. She is quite distraught both over how Dr. Walters responded and questioning her use of secondary sources such as blogs and podcasts for her education.*

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## Questions for Discussion

1. How would you counsel Stacy about this negative encounter with her colleague? What are main factors contributing to the conflict? What should she do next?
2. Do you think Dr. Walters' skepticism of Stacy's reliance on secondary sources is reasonable? With the large body of available primary literature how should emergency medicine physicians stay "safely" up to date?
3. How would you have responded to Dr. Walters in this scenario?

## Competencies

ACGME	CanMEDS
Professional Values (PROF1) Practice-based Performance Improvement (PBLI) Team Management (ICS2)	Professional Communicator Collaborator Scholar

## Intended Objectives of Case

1. Discuss and identify a consumer's responsibility in applying knowledge acquired via secondary sources (e.g. FOAM, textbook).
2. Describe an approach for handling differences in opinion with a colleague about patient-care.
3. List specific things measures that might increase interdisciplinary discussion and collaboration.

## Reflective Listening & Handling a Challenge

by Anton Helman MD, CCFP(EM)

Most of us who have practiced Emergency Medicine have encountered similar upsetting situations to the case presented. Here, Stacy was quite sure that her decisions and actions were well founded and reasonable, yet another health care professional disagreed vehemently, and even behaved in an unprofessional manner.

If Stacy approached me after this situation, my first goal would be to show empathy, as I might with a patient who has experienced an upsetting event. While I would be tempted to launch into a rant describing the poor behavior of Dr. Walters and defend the validity of medical podcasts and blogs, instead I would start with Reflective Listening.

There are four steps to effective reflective listening which help to convey empathy:

1. **Echo:** repeat what Stacy tells me; this conveys the message that I am listening carefully to what she has to say
2. **Paraphrase:** paraphrase what Stacy tells me; this gives her the message that I understand what she is upset about
3. **Identify the feeling:** for example, I might say 'you seem upset' or 'you seem frustrated'; this produces trust
4. **Validation:** validate Stacy's feelings by saying 'I can see why you feel that way'

After I have actively gone through the steps of *Reflective Listening*, the next steps involve showing Stacy that I can *relate* to her situation. To this end, I use a mnemonic, 'RELATE': **R**eassure her and **E**xplain to her that she performed a reasonable, evidence-based therapeutic maneuver that I would have done myself (Topical anesthetics in the 'MOTE' trial proved to be safe for uncomplicated corneal abrasions as well as provide more effective pain relief than saline placebo<sup>1</sup>, and has been rated highly effective for pain relief by patients in another trial<sup>2</sup>). **L**isten, rather than hear what she has to say and **A**nswer by summarizing what she has said. Then, **T**ake Action by suggesting to Stacy to print off the articles that show that Tetracaine can be effective as well as safe, and give them to Dr. Walters, while explaining (in a calm tone) the reason for her therapeutic decision. Finally, **E**xpress Appreciation by thanking Stacy for confiding in me.

Stacy appropriately applied knowledge obtained from a podcast to patient care. As a producer of a FOAM podcast, I have come to realize the burden that I bear to ensure that the knowledge being disseminated is high quality, accurate and evidence-based. While podcasts and blogs have proved to have significant impact in terms of knowledge dissemination (ALiEM's pages have been viewed by tens of thousands of EM providers, and approximately 45,000 EM Cases podcasts are downloaded each month), research to develop quality indicators for these media is only very recently being studied. There are, however, several reasons why FOAM sources are driven to provide high quality material. First, knowing that my podcasts have wide dissemination, I feel a deep responsibility to provide the most accurate information that I possibly can. Second, crowd-sourced, swarm-based, peer review helps to improve quality. One advantage of FOAM over more traditional modes of knowledge acquisition is that immediate feedback from learners across the globe can, and does occur, so that if an error is posted on a blog, the error can be fixed immediately with rapid dissemination to learners. Another advantage of FOAM is that it encourages learners to not only read original journal articles, but to consider multiple differing opinions of researchers, educators and peers from different practice environments, so that the learner can make educated decisions for themselves.

An important distinction that producers of FOAM should make clear to their audience is the one between expert opinion and evidence-based medicine. Expert opinion has educational value as an adjunct to evidence-based medicine; tacit knowledge sharing is vital to effective learning, and FOAM is an excellent vehicle for disseminating the real-life experiences of EM colleagues.

FOAM is not perfect. We need to be careful as FOAM gains popularity that we produce the highest quality material that we can. I hope for a day in the future when the old school (represented here by Dr. Walters) and new school (Stacy) can work together to make quality improvements across all learning modalities, from textbooks through journal articles,



### About the Expert

Dr. Anton Helman (@EMCases) is the founder and host of EM Cases podcast. He is also the Education Innovation Lead for Schwartz-Reismann Emergency Medicine Institute and a member of the advisory board for The Teaching Institute.

# Expert Response

to blogs and podcasts, so that we can all learn from each other.

Together, we're smarter!

## **References**

1. Ting JY, Barns KJ, Holmes JL. Management of Ocular Trauma in Emergency (MOTE) Trial: A pilot randomized double-blinded trial comparing topical amethocaine with saline in the outpatient management of corneal trauma. *J Emerg Trauma Shock*. 2009;2:(1)10-4. [pubmed]
2. Waldman N, Densie IK, Herbison P. Topical tetracaine used for 24 hours is safe and rated highly effective by patients for the treatment of pain caused by corneal abrasions: a double-blind, randomized clinical trial. *Acad Emerg Med*. 2014;21:(4)374-82. [pubmed]

# Expert Response

## FOAM Controversy

by Tessa Davis MBChB, MA, FACEM

Although Dr. Walters may not have the kindest manner, he is merely expressing a view held by many medical professionals. While those of us creating and using FOAM regularly can see the multitude of benefits these resources provide, there remains a significant proportion of the medical population who are skeptical about the quality and usefulness of these education innovations. It's essential to be mindful of this when discussing this important topic.

One of the frequent criticisms of FOAM is that, unlike primary literature published in renowned medical journals, it is not peer-reviewed in the same robust manner.<sup>1</sup> The reality, however, is that one of the main benefits of FOAM is that it has effective post-publication peer review, which allows for a global online discussion with quick feedback and correction of any errors. The utility of this was well illustrated in 2013, when a post on Intensive Care Network resulted in a correction to the statistical analysis of an article in the New England Journal of Medicine.<sup>2</sup>

There is a lot to love about FOAM, but it is important to be realistic and realize that, like all change, not everyone will feel the same passion as Stacy. It will take time to integrate FOAM as a standard of practice. Be prepared to discuss and understand the pros and cons.

### Referencing your sources

What Dr. Walters is missing though, is that FOAM is not a source in itself. FOAM is simply a term to encompass the concept that the content is freely available. Just as there are good journal articles and bad ones, there are good and poor quality FOAM resources. Similarly, a podcast is merely a platform to deliver information.<sup>3</sup> Podcasts exist on various ends of the spectrum and can be delivered by my three-year-old child or by the renowned physicist Stephen Hawkin as he discusses his latest research. Essentially, whether the information was found on the internet, in a book or in a journal is not the crux of the issue in question; what is important is the quality and reliability of the content.

When discussing a case with a colleague, Stacy should be referencing the primary literature rather than focusing on the platform she used to learn about it. The same information could have been delivered as, "I am aware of a recent article in X

Journal which demonstrated that Tetracaine was safe to use in corneal abrasions for short-term relief...". This would encourage some debate around the issue itself, rather than being side-tracked by Dr Walters' views on the internet and FOAM material.

Clinical debate is a valuable part of practicing medicine, so we should be prepared to defend our decision-making and reference appropriately.

### Dealing with difficult colleagues

Finally, it is important to be aware that there will always be times in your career when someone is unreasonable or disrespectful when discussing alternate views of clinical practice. Developing strategies to approach and manage these uncomfortable situations constructively is part of growing as a doctor and a human.

As junior doctors, it is not unusual to rotate between hospitals a few times before finding a permanent position, sometimes changing environments as frequently as every few months.<sup>4</sup> It is a constant adjustment of finding our way, establishing ourselves, trying to gain respect from our colleagues, consultants and superiors. The goal is to find the balance between being inquisitive and enthusiastic whilst still 'fitting in'. Being mindful of potential areas of friction, considering how to maximise your role within that particular environment, and having a good support network will help ease the transition.

### References

1. Nickson, CP. and Cadogan, MD. (2014), [Free Open Access Medical education \(FOAM\) for the emergency physician](#). *Emergency Medicine Australasia*, 26: 76-83.
2. 2+2 = 4, <http://intensivecarenetwork.com/711-nejm-decolonization-paper-stats-wrong/>, accessed online 15<sup>th</sup> April 2015.
3. Thoma, B. Joshi, N. Trueger, NS. Chan, TM. Lin, M. (2014), [Five Strategies to Effectively Use Online Resources in Emergency Medicine](#). *Annals of Emergency Medicine*, 64(4): 392-395.



### About the Expert

Tessa Davis (@TessaRDavis) is a Pediatrics Registrar at Sydney Children's Hospital. She is the founder and genius behind Don't Forget the Bubbles blog and the director of iClinicalApps.

# Curated Community Commentary

By Eve Purdy

## What is a Legitimate Source?

The ALiEM community largely agreed that, in this particular instance, Stacy should not have cited a podcast to justify her treatment decisions to Dr. Walter. The most commonly cited reason was that Stacy should know the evidence first-hand around practice changing decisions but it was also commonly appreciated that the medical world is not ready to hear “I heard it on a podcast”.

Participants noted that it is impossible to stay up to date on primary literature for all components of practice. In the past, physicians have relied on secondary sources (textbooks, conferences, peers). Free open access medical education (FOAM) simply is a multi-platform way to consume, distribute and translate knowledge in a similar way. Hayes and Swaminathan noted that FOAM sources are often more extensively vetted than other secondary sources.

Lalani and Swaminathan both suggested out that we should redirect the conversation away from the medium, back to the quality of the evidence to most constructively engage with the patient care decision at hand. Participants agreed that engaging with other professionals online is one way to put the evidence in context and engage in the critical appraisal of primary evidence.

## How do we critically appraise FOAM?

Jeff Riddell wisely said “FOAM [as a secondary source] isn’t going anywhere” and suggested that we might find ways to help identify high quality FOAM sources. A number of suggestions were put forward:

- FOAM Gate Keepers (Swaminathan): A staff at each residency program can review content and know which sites are reliable. AIR Modules and using impact factors can also be an indicator of quality.
- FOAM Club (Tina Choudri): We learn how to critically appraise Journal Articles at Journal Club but we don’t learn about critically appraising secondary sources. She suggested creating a FOAM Club to encourage similar conversations around the quality of FOAM sources. Jeff Riddell discussed an tool/curriculum his institution is developing to help users critically evaluate their workflow. [insert annals paper]
- Asynchronous Learning Course (Gita Pensa): Uses modules and FOAM sources to discuss topics each week. Often the conversation revolves around when one needs to return to the primary literature and the quality of the resources used.

Some participants lamented that the traditional critical appraisal skills of many physicians are poor. Without a good critical appraisal toolkit, frequent practice and a skeptical eye, using primary

## Contributors

*Thanks to the participants (in alphabetical order) for all of their input:*

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literature is not a foolproof way to make good clinical decisions either. This digression reminded us that while improving the critical appraisal skills around secondary sources is important, so too is the ability to effectively interpret the primary evidence.

## Promoting Collaboration

Despite agreeing that Stacy might have presented here case more effectively and being unimpressed with Dr. Walters’ unprofessional response, the group felt that Stacy does need to stand her ground and engage with Dr. Walters around the issue, though Rogers suggested that this is likely better done once Dr. Walters’ temper has cooled. The participants unanimously agreed that these two should collaborate and suggested a few ways that Stacy might make that possible.

- Return to the Evidence: many participants that Stacy provide Dr. Walters with some of the primary evidence she has used to inform her opinion. This could be in the form of links to articles in an email or printed off and left in his mailbox. Either way, an accompanying note, clarifying the earlier confusion would be a nice, collaborative, touch.
- Ask to learn: Taking a page out of the students’ book, generalists have the advantage of asking those we are working with to provide their expertise and ask questions as they do so to improve understanding. While doing so, Stacy could have also provided her own interpretation of the evidence on the subject and this might lead to a productive discussion on the issue at hand.

# Curated Community Commentary

- Engage consultants in FOAM: One way to help consultants understand the utility of blogs and podcasts is to have them write or review them. Chan gave an example of having a Chief of Nephrology write a post on the management of hyperkalemia for an EM blog.
- Interdisciplinary Grand Rounds (Rezaie): One participant noted that his institution holds interdisciplinary rounds on “hot topics”. An event that brings together an expert from different field to do a review of the evidence on the same topic. This helps develop consensus between groups that started with differing opinions.

Though adamant that Stacy needs to try to find a way to engage Dr. Walters in the evidence on this topic, a number of participants regrettably agreed that, occasionally, one might come across a personality that is not willing to collaborate in this way.

That doesn't mean we shouldn't stop trying!

## Gender

Dr. Walters and Stacy were consulting physicians yet only the male physician held the prefix doctor. Some discussion occurred about why this was the case. It could represent discrimination against female physicians or it might represent the way that Stacy sees herself in her new role as a junior attending. Alternatively it could portray the difficulty in transition in roles from resident to staff when an individual remains at the same institution. Either way, we would enjoy further discussion on this topic, please feel free to comment below.

## A Call to Action

### About

The Medical Education In Cases (MEdIC) series puts difficult medical education cases under a microscope. We pose a challenging hypothetical dilemma, moderate a discussion on potential approaches, and recruit medical education experts to provide their insights. The community comments are also similarly curated into a document for reference.

### Did you use this MEdIC resource?

We would love to hear how you did. Please email MEdIC@aliem.com or tweet us @Brent\_Thoma and @TChanMD to let us know.

Debate around the responsibility to ensure and rank quality of resources ensued both on the blog and on twitter. Some participants felt that formal rating and quality metrics should be created to define quality. There was reference to ongoing research in this area. Others felt that having individuals at institutions, so-called ‘gatekeepers’, defining quality might be best. Despite the differences in opinion around quality metrics, most participants agreed that consumers of FOAM have a responsibility to truly engage with the resources. The group endorsed a “call to action” to leave comments, provide expertise, correct wrongs and promote high quality resources within the existing online community.

## Resources

### Websites

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Thoma B. Social Media Index (SM-i) – Beta. Academic Life in Emergency Medicine. <http://www.aliem.com/social-media-index/> Published 2014. Accessed April 29, 2015.

Hayes B. Is FOAM to blame when a medical error occurs? Academic Life in emergency Medicine. <http://www.aliem.com/is-foam-to-blame-when-a-medical-error-occurs/> Published September 18, 2013. Accessed April 29, 2015.

### Journal articles

Thoma B, Chan TM, Paterson QS, Milne WK, Sanders JL and Lin M. Emergency medicine and critical care blogs and podcasts: establishing an international consensus on quality. Annals of EM. 2015; in press. DOI: <http://dx.doi.org/10.1016/>

## Purpose

The purpose of the MEdIC series is to create resources that allow you to engage in “guerrilla” faculty development – enticing and engaging individuals who might not have time to attend faculty development workshops to think about challenging cases in medical education.

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