FOR CANADIAN PARAMEDICS

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Introduction

The chances are if you are a paramedic and on social media the hashtag #FOAMed has slinked across your device screen as you've scrolled through news, memes and public commentary. What is this hashtag and why does it create such a stir in the medical community? For those who have always wondered, FOAM (FOAMed) is an acronym that stands for Free Open Access Medical education. The FOAM community is involved in sharing a multitude of resources that can include blogs and podcasts among other freely accessible education materials.(1) This resource sharing is not limited to just physicians or specialists but rather can be accessed by anyone who has an interest in all things medical, this includes of course, paramedics. FOAM content is not limited to a specific medium but can consist of anything from blogs, vlogs, websites, podcasts and research papers and while this phenomenon is not necessarily new it has grown exponentially. Twitter is considered the prominent medium for sharing FOAM material. There are however a multitude of other platforms that a user can adopt to search out this educational material including Facebook and Reddit simply by searching "#FOAMed".(2)

This educational movement has reached breakneck speeds and is a resource that can be accessed by anyone who has ever scrolled through the pages of a social media site. However, as with any innovative movement, it can be overwhelming to those new to the concept. This is especially the true when paramedics delve into this field for the first time given our history with structured and often traditional continuing medical education models. Recent studies have demonstrated mixed results regarding paramedics' use of FOAM resources, further complicating the issue.(1,3,4) Since inception, the FOAM movement has expanded to include a multitude of medical subspecialties that can be identified by unique hashtags (Table 1, adapted from Mason, 2018).

Table 1: Example hashtags and corresponding specialty

Hashtag	Specialty
#FOAMed	Medicine and Medical Science
#FOAMems	EMS and Prehospi- tal Medicine
#FOAMcc	Critical Care / Intensive Care
#FOAMped	Pediatric Medicine

These are just a few examples of the many hashtags that identify FOAM topics of interest for those looking to expand their knowledge. There are instances where information crosses specialty boundaries and the consumer will see multiple hashtags that may identify the subject matter. Specifically for paramedics the #FOAMems hashtag helps identify subject matter that is focused to those in the field of prehospital medicine - this moniker was coined in 2014 to help effectively identify and streamline the important specialty of FOAM for EMS.(5) Paramedics now have an identifiable hashtag to help direct them towards free online medical education to expand their own knowledge base, learn about a new topic relevant to them, or engage in discussions with other prehospital professionals.

Traditionally paramedics in Ontario and throughout Canada have various requirements to maintain certification. In many cases this done through continuing medical educations (CME). In Ontario, the various Base Hospital Programs set the requirements for Advanced Care Paramedics (ACP) and Primary Care Paramedics (PCP) in terms of CME credits; ACPs require 24 credits and PCPs require 8

credits. In provinces with regulatory colleges, the CME or Continuing Professional Development (CPD) requirements are similar, for example the Alberta College of Paramedics requires that practitioners complete 120 hours of CPD with each hour equalling 5 credits to a maximum of 30 hours per activity within a 2 year cycle.

FÓAM can be a useful adjunct to help paramedics not only stay up to date on the latest research and trends in prehospital medicine but there may exist an option to satisfy CME requirements too. Instead of attending a costly course, a paramedic could in theory listen to a teaching used in paramedic education, but it should be approached as a feasible and credible option for further education.

Paramedic and medical education in general has relied on conventional methods to share knowledge. FOAM differs significantly from this as it provides the paramedic access to some of the most up to date information out there. Perhaps one of the most accurate statements regarding the FOAM movement suggests:

"If you want to know how we practised medicine 5 years ago, read a textbook. If you want to know how we practised medicine 2 years ago, read a journal. If you want to know how we practise medicine now, go to a (good) conference. If you want to know how we will practise medicine in the future, listen in the hallways and use FOAM." (6)

For medical professionals, education has usually relied on textbooks and lectures for their core training; however, the low cost of online resources has resulted in them becoming an acceptable alternative to traditional education. (7) Instead of sitting in a classroom, paramedics can stay abreast of the latest medical information, practice and research which can be released and disseminated significantly quicker than through traditional means. Speed of information does come with its own set of issues.

FOAM content hits the digital presses at an alarming rate. This does beg the question: can

it be trusted and is it credible? These questions, and concerns regarding the processes used in the creation of FOAM content prevent many users from utilising these resources further.(8) Even if you have just taken a peek behind the curtain the dizzying amount of information available can be enough for you to put down your phone and never log onto social media again. Fortunately for paramedics, there are a few ways to approach FOAM to ensure you are accessing a quality source. There are evaluation checklists for medical education podcasts and blogs that identify specific quality indicators.(9) There have been efforts to measure the accuracy of FOAM resources using the Social Media Index to guide users to quality resources online. (10-12) Additionally, users can approach a source using a systematic approach similar to a life-threat approach to patients: by assessing the ABCs (Table 2).(2)

Table 2: The ABC's of FOAM

Authority and Accuracy	What is the website/ source of informa- tion? Is the author credi- ble? Do they have a history of publishing / sharing credible info? What sources were cited? If the sources were research, was the methodology sound?
Background and Bias	Is the author / source speaking within the depth of their expertise? Is the info attempted to sell a product or service? When was data originally collected?
Currency and Coverage	Is the subject matter current? It may have been posted recently, but when was it created? Is the content a repackaging of old material? Is this content going to be shared with the right audience? Look at the overall context of the information: What is the sum of the ABC's?

Using an approach such as this makes exploring the world of FOAM a lot easier. It allows paramedics to do something they already do quite well: critically analyse information. It doesn't mean that you have to meticulously go through a checklist every time you read an article online but rather take a minute to appreciate what the article / blog / study / podcast is trying to convey, and perhaps more importantly how they are attempting to convey it. Is it a ground-breaking, practice changing study? Or is it a commentary on a subject that may or may not pertain to your practice? Is the context of the article important to consider?

So we've established what FOAM is and why it has become a force to change medical education - so what now? How do Canadian paramedics access and use this information to better their education and overall practice? Well there are many resources that are tried, tested and true FOAM outlets - just follow the hashtags #FOAMed or #FOAMems. Some of these have Canadian content, others focus on international content, but all are sound sources for FOAM.

Unfortunately at present, Canadian prehospital focused sources for FOAM (#FOAMems) are rare, with the exception of two: Canadian Prehospital Cast (@CPH_Cast) and Rapid - Fire EMS (@rapidfireEMS). Canadian Prehospital Cast aims to provide Canadian paramedics with a collection of resources from the international FOAM library that are purely prehospital, or can be translated to the prehospital setting. They also produce FOAM material, whether that occurs in the form of informal surveys, whiteboard sessions, blog posts, videos or other media, CPH_Cast attempts to share the importance of FOAM with paramedics across Canada. Rapid-Fire EMS was created to promote the #FOAMems movement, distribute FOAM to prehospital professionals, and to streamline FOAM resources into one easily accessible source. It shares credible and reliable international resources that are relatable or applicable to prehospital medicine. It has an associated website (www.rapidfireems.com) that releases intermittent reviews of hand-picked research articles that pertain to prehospital medicine.

What if Twitter, Facebook or Reddit aren't your thing? What other options do Canadian prehospital providers have when they are seeking FOAM resources? In Ontario, many paramedics can refer to their regional base hospital for educational material that is free and relevant to their practice. The Center for Paramedic Education and Research (CPER) provides free access to a monthly digest that addresses common questions pertaining to paramedic practice and the navigation of provincial and regional medical directives for paramedics - and yes,



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they are archived.(13) CPER also provides an interactive method for paramedics within their capture area to interact directly with medical directors to ask questions via their AskMED program - also archived for later viewing on their website. Southwestern Ontario Regional Base Hospital Program (SWORBHP) provides its own FOAM to its paramedics through free webinars discussing a variety of topics from MCI, to paediatric respiratory arrests, tourniquet use and toxidromes, with webinars archived since 2010.(14) If you prefer analysing and delving into research papers then the Canadian EMS Research Network (CERN-RCRSP) offers Canadian paramedics access to streamed journal club sessions, and a database of articles with a uniquely Canadian influence, either with Canadian authors or contributors.(15)

Conclusion

Ultimately, we all strive to be great paramedics and practice high-quality prehospital medicine. With the advent of social media comes an opportunity to step away from traditional educational approaches, and embrace the free, open access education revolution. Staying current on prehospital research and practice doesn't have to be tedious or difficult. Paramedics can now focus on their specific area of interests in an easily accessible and affordable way. While the amount of Canadian based prehospital FOAM resources are currently limited, as Canadian paramedics adopt this movement, become more familiar with it and begin to explore the incredible world of FOAM we may very well see a northern FOAM explosion. P

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of their employers or organisations.

Conflicts

IMcC is a co-creator of CPH_Cast. AB registered the FOAMems hashtag. Neither benefit financially from these affiliations.

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