

## **UC Irvine**

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#### **Title**

What's All The Chatter? A Mixed-Methods Analysis of Emergency Physician's Tweets

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PRESENTER: \_\_\_\_\_ DATE: \_\_\_\_\_  
 TOPIC: \_\_\_\_\_  
 LECURE ASSESSMENT FORM  
 LEADERSHIP • EXCELLENCE • OPPORTUNITY

Please use this space to provide narrative feedback to the lecturer.

Please select the level *most consistent* with the performance/preparation of the lecturer

Competency Domains	Level 1	Level 2	Level 3	Level 4	Level 5
<b>Goals &amp; Objectives / Content Relevance</b>	<ul style="list-style-type: none"> <li>Does not state the goals of the lecture</li> <li>Goals not relevant to the clinical practice of the audience, or stated goals unrealistic</li> <li>Subject matter not specific or relevant to audience</li> </ul>	<ul style="list-style-type: none"> <li>Goals/objectives implied but not clearly stated</li> <li>Goals/objectives are relevant but not achievable in either lecture format or time frame</li> </ul>	<ul style="list-style-type: none"> <li>Goals and objectives clearly stated</li> <li>Goals and objectives achievable in time frame allotted</li> <li>Content of the topic somewhat relevant to the audience</li> </ul>	<ul style="list-style-type: none"> <li>Goals and objectives clearly stated and successfully met by the lecture</li> <li>All content within the lecture is relevant and/or of interest to the audience</li> </ul>	<ul style="list-style-type: none"> <li>Specific, stated goals relevant to clinical practice of learners of all levels of training</li> <li>Subject matter specifically tuned to audience interest and skill level</li> <li>Goals and objectives focused on clinical implications of content</li> </ul>
<b>Content Expertise</b>	<ul style="list-style-type: none"> <li>Speaker has superficial knowledge of the topic</li> <li>Unable to answer simple questions from the audience</li> <li>Presented lecture content inaccurate or not representative of latest evidence</li> </ul>	<ul style="list-style-type: none"> <li>Able to answer basic fund-of-knowledge questions, but has difficulty with more complex questions</li> <li>Presents less relevant or less current evidence to support lecture content</li> </ul>	<ul style="list-style-type: none"> <li>Able to answer some questions from audience, defers to available expertise when appropriate</li> <li>Appropriate use of evidence to support lecture content</li> </ul>	<ul style="list-style-type: none"> <li>Able to answer most questions without external support</li> <li>Content representative of latest available evidence</li> </ul>	<ul style="list-style-type: none"> <li>Recognized by peers as expert on topic</li> <li>Seamlessly answers all questions</li> <li>Responses to questions reflect a breadth and depth of knowledge</li> <li>Content reflects a mix of evidence-based discussion and appropriate experiential input</li> </ul>
<b>Competency Domains</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
<b>Presentation Design/ Structure</b>	<ul style="list-style-type: none"> <li>Audiovisuals that are unrelated to the topic, or lack professionalism</li> <li>Material difficult to read</li> <li>Multiple text errors/typos</li> <li>Disorganized or unclear presentation structure</li> </ul>	<ul style="list-style-type: none"> <li>Audiovisuals are professional but superficial to the presentation</li> <li>Few text errors/typos</li> </ul>	<ul style="list-style-type: none"> <li>Uses a balance of text and audiovisual materials</li> <li>Uses material as a roadmap for presentation without over-reliance on materials</li> <li>Appropriate use of audiovisuals (avoids extraneous materials)</li> <li>Logical presentation structure</li> </ul>	<ul style="list-style-type: none"> <li>Appropriately discusses and interprets audiovisuals for audience</li> <li>Minimizes text, uses audiovisual material as cue</li> </ul>	<ul style="list-style-type: none"> <li>Audiovisual content enhances concepts being taught and spoken presentation</li> <li>Introduces new concepts early in lecture</li> <li>Provides closure at the end of lecture</li> <li>Creative and effective use of novel design modalities</li> </ul>
<b>Audience Engagement</b>	<ul style="list-style-type: none"> <li>Speaker has minimal interaction with the audience</li> <li>Reads from script</li> </ul>	<ul style="list-style-type: none"> <li>Questions directed to the audience ineffective in stimulating discussion</li> <li>Addresses to rigid teaching plan</li> <li>Attempts to interact with audience, but unsuccessfully</li> </ul>	<ul style="list-style-type: none"> <li>Encourages audience participation through open-ended questioning or by inviting questions from the audience</li> <li>Uses simile/analogy/metaphor/ anecdotes</li> </ul>	<ul style="list-style-type: none"> <li>Effectively manages off-topic questions</li> <li>Questions audience to monitor acquisition of knowledge/ learner engagement</li> <li>Uses silence effectively to allow for audience response</li> </ul>	<ul style="list-style-type: none"> <li>Allows audience to take active role in lecture (small group exercises, directed questioning, encourages dialogue)</li> <li>Uses simile/analogy/metaphor/ anecdotes that meaningfully connect with audience</li> <li>Audience inspired to learn more about lecture content</li> </ul>
<b>Lecture Presence</b>	<ul style="list-style-type: none"> <li>Does not leave oneself physically open to the audience (back to audience/ anchored to lectern)</li> <li>Excessive or distracting postulations</li> <li>Multiple verbal placeholders (umms)</li> <li>Voice does not project</li> <li>Inappropriate dress</li> <li>Inappropriate language or humor</li> <li>Directly reads from materials</li> </ul>	<ul style="list-style-type: none"> <li>Monotonous verbal tone</li> <li>Does not respect lecture timing</li> <li>Casual dress</li> <li>Leans on podium/poor posture</li> <li>Reads from materials rarely or recites lecture by rote memory</li> </ul>	<ul style="list-style-type: none"> <li>Few verbal placeholders</li> <li>Effective eye contact with audience</li> <li>Most content delivered without reliance on notes</li> <li>Appropriately dressed for lecture setting</li> <li>Lecture prepared to fit the allotted time</li> <li>Voice projects well</li> </ul>	<ul style="list-style-type: none"> <li>No verbal placeholders</li> <li>Uses inflection and changes of cadence of speech to highlight key points</li> <li>Effective time management despite unexpected interruptions</li> <li>Moves throughout lecture space with purpose</li> </ul>	<ul style="list-style-type: none"> <li>Presenter a role model for more junior lecturers</li> <li>Inspires others through presentation</li> <li>Audience eager for additional lectures by speaker</li> </ul>

EVALUATOR: \_\_\_\_\_

Fig. 1.

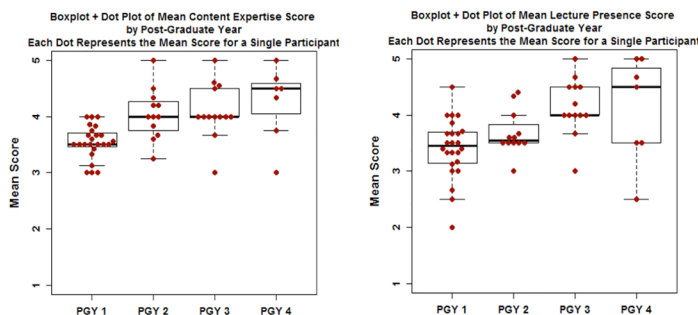


Fig. 2.

# 48 What's All The Chatter? A Mixed-Methods Analysis of Emergency Physician's Tweets

Brown A, Riddell J, Jauregui J, Yang J, Nauman R, Robins L /University of Washington, Seattle, WA

**Background:** Twitter is growing in popularity and influence among emergency physicians (EP), with over 2,200 self identified EP users. Despite this popularity, there are competing ideas about its value for EPs. Some argue that social media is time wasted. Others assert a virtual community of practice exists among EPs on Twitter sharing a common domain, community, and practice. Deep exploration of the conversation, culture, and content of Twitter use among EPs can help us better understand its value while promoting mindful social media engagement.

**Objectives:** To explore the nature of EPs conversations on Twitter.

**Methods:** We performed a mixed methods analysis of publicly available tweets from the 62 most influential EPs on Twitter defined in a previous study. We analyzed tweets from a sample of random days in 2015. In addition to recording quantitative data, we performed qualitative thematic analysis to analyze tweets. We followed best practices in qualitative research, including reflexivity, memoing, and using a diverse team of coders.

**Results:** 1084 unique tweets were analyzed. The majority of tweets (75%) had some engagement in the form of re-tweets, likes, or replies. Messages were split evenly between new initiations of conversation and replies to other tweets (52%, 48% respectively). Most were related professionally to the broad domain of medical practice (70%), while fewer were social (30%). 79% of tweets were statements, 9% were questions, and 12% answers to questions. We identified several distinct types of tweets. Common observed themes among tweets are presented in Table 1. Self promotion and advertisements were rare, occurring in less than 5% of tweets.

**Conclusions:** Influential EPs are engaging in professional and social conversations on Twitter. Resources and opinions are being shared and rapport is being built. This data may help inform mindful social media engagement. Next steps include exploring perceptions of value of Twitter to individual faculty and resident users.

**Table 1.** Observed themes among tweets of influential emergency physicians.

Code	Definition	Exemplary Tweet
Resource summary	A mostly-sterile accounting of the main points of something - including the title of a linked to resource or the summary of a case.	The problem with calf clots? Everyone handles them differently...and @emergencypdx explains why <a href="http://blog.ercast.org/the-problem-with-calf-clots/">http://blog.ercast.org/the-problem-with-calf-clots/</a> ... #FOAMed
Rapport Building	Explicitly pursuing relational connection, especially harmonious or sympathetic relation.	@JohnPurakal @mksheehy @UICBrownCoat Really great idea and stellar start. Can't wait for the next video! Keep up the good work
Illumination	A statement that adds substantially to, clarifies, explains, reveals, or enlightens - including their interpretation of data, conclusions, and results. Often in the middle of a conversation.	@FireEMSCchief There was probably a little leeway between 30 and 60. Also the breathalysers were reasonably inaccurate for this sort of thing
Opinion	The substantive idea that a person has about something or someone, which is based mainly on their feelings, beliefs, or personal views.	agree w @ketaminh bad hypotension with verapamil I have good results with dilt @MDaware @RAGEpodcast @stemlyns
Humor	Attempting to offer a funny or comical slant to a topic in discussion	As everyone leaves for #smaccus, ketamine use plummets in EDs around the world..
Reflection	Meditation or serious thought about one's character, actions, professional practice, and motives with purpose of understanding self or situation.	Sitting amongst the debris of Monday, picking up pieces of rubble & turning them over. My hands are grubby with start of week dust & decay.
Networking	Interacting to meet professionally, exchange information, or develop contacts - especially to further one's career.	.@PEMEMS @artangelo I'd be happy to look at what you sent, but I meant he should DM me too. I'd be happy to send him resources.

## 49 You've Got Mail: Efficacy of an Electronic Mail System as an Educational Strategy in Residency Training

VanDePol E /Grand Rapids Medical Education Partners (GRMEP) / Michigan State University Emergency Medicine Residency Program, Grand Rapids, MI

**Background:** Computer-assisted instruction (CAI) has been used in many areas of medical education to improve teaching and compares favorably with lectures or reading. Our emergency medicine (EM) residency program has

been sending a daily emergency medicine-based question electronically to all learners since July 2010.

**Objectives:** To assess a computer-based teaching program utilizing multiple-choice questions sent daily to EM learners. Our study hypothesis was that daily CAI throughout residency training would lead to higher scores on qualifying examinations.

**Methods:** A prospective, self-administered online survey sent to residents, graduates and mid-level providers affiliated with one EM residency program. The survey instrument had 13 open-ended and closed questions to assess the level of training, clinical experience, recommendations, satisfaction with electronic mail system and quality (content) of the CAI. A secondary outcome measure was the annual composite scores on resident inservice exams and written board exams for the past 7 years. To assess the statistical significance of trends in exam scores, we used weighted ?2 test for trend.

**Results:** Sixty-six respondents completed the survey (50% response rate), and included board-certified physicians (59%), residents (26%), mid-level providers (9%), and board-eligible physicians (6%). Respondents have been receiving daily CAI for approximately 4 years, and that they read the CAI daily (54%) or weekly (43%). The majority (97%) felt the content of the CAI was “of high quality and relevant to my practice” and 98% believed the content would “help in preparation for the national written exams.” Overall, 98% replied that the content was balanced across all of the core topics in Emergency Medicine. The main reason for reading the CAI was to keep current with the medical literature (60%), followed by preparing for written tests (29%), and “just for fun” (11%). Despite the overwhelming acceptance of CAI by respondents, the secondary outcome measures (annual composite scores on resident inservice exams and written board exams) showed no significant long-term impact over the last seven years.

**Conclusions:** CAI using a daily question format was well received by clinicians in our residency program. Surprisingly, the majority of respondents used the questions to keep current with medical literature rather than to prepare for written qualifying examinations.

### Innovations Abstracts

## 1 A 3D Printed Model for Simulated Arthrocentesis Training

Henry C, Corbo S, Bronner J/University of Kentucky, Lexington, KY

**Background:** Arthrocentesis is a commonly performed emergency department procedure. Improper performance