



Evaluating the Use of Social Media to Enhance the Educational Experience of a Medical School Surgery Clerkship

BN Reames MD MS¹, KH Sheetz MD MS¹, MJ Englesbe MD¹, SA Waits MD¹

¹University of Michigan, Department of Surgery, Section of General Surgery

Background

- Online social media has become a widely popular means of interpersonal interaction and communication.
- Numerous scholarly articles have investigated the use of Twitter in medicine, including a recent JAMA article identifying more than 300 physicians with greater than 500 followers.
- Despite increasing social engagement by tech savvy medical students, no evidence exists to examine the potential for use in medical education.

Hypothesis

- Integration of social media into a medical school surgical clerkship will improve knowledge and engagement during the clerkship period.

Methods

- Students were assisted with installing Twitter application on their mobile device and demonstrated how to follow MLearnSurgery.
- Pre-Post Surveys were distributed to assess knowledge, motivation, interest and engagement.

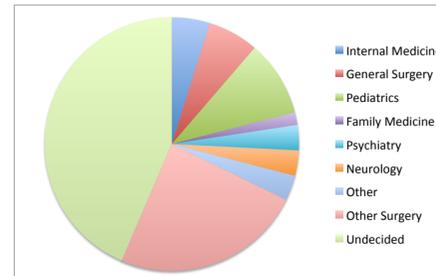
Results

- Overall, 97 students completed the pre-survey and 84 students completed the post-survey.
- A total of 62 students completed both surveys and were able to be matched for pre-post analysis.

Results

Pre-Test Results

| Student Demographics | |
|-----------------------|-----|
| Sex (M) | 57% |
| Own a Smartphone | 86% |
| Social Media on Phone | 78% |
| Twitter on Phone | 15% |



Medical Students Specialty Preference at Time of Survey

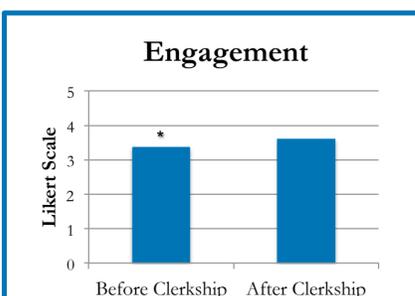
Post-Test Results



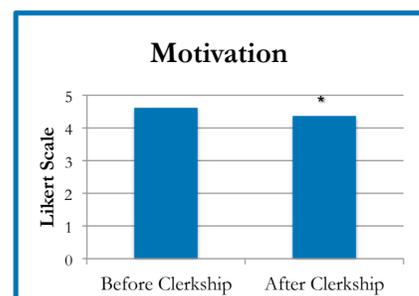
60% of Students Felt Twitter Had a Positive Effect on their Knowledge

| | |
|-----------------------|-----|
| Used Twitter Feed | 73% |
| Increased Twitter Use | 30% |
| Twitter was Useful | 85% |
| Stimulated to Learn | 24% |

- No significant change in Interest in career in surgery.
- 82% of students had a positive overall rating of the intervention



8% of Students Felt Twitter Had a Positive Effect on their Engagement



18% of Students Felt Twitter Had a Positive Effect on their Motivation

Student Feedback

- ✓ "I just had my twitter forward as a text message to my phone. It's nice...like a fact of the day thing. Keep's me thinking about how I need to study for the shelf."
- ✓ "I followed the tweets as they came in pretty routinely."
- ✓ "I enjoyed the high yield facts and they often prompted me to read more about various topics."
- ✓ "The things tweeted were things that I know I've read, but may not have completely memorized. The tweets help solidify that and are a great reminder to tell me that I should study for the shelf."
- ✓ "I don't think it had an affect on my engagement. I was already eager to engage, the twitter was more informational for me"

Conclusions

- Integration of Twitter based medical facts has the potential to improve knowledge base and engagement during a surgical clerkship. Further work is needed to determine the optimal distribution patterns.

Example Tweets

- Welcome to the University of Michigan Surgery Clerkship Twitter! Stay tuned for frequent updates
- Pearl: in your #wcpockets: Pens, stethoscope (not around your neck), penlight, a snack, some key dressing supplies, a book to study
- GCS: Eyes 4(spont.commd.pain), Verbal 5(orient.conf.inappr.incomp), Motor 6(obey.local.withdr.decor.decer) 1=none
- Hallmark of acute limb ischemia are the 5 Ps: Pain, pallor, parasthesia, pokilothermia, paralysis, pulselessness
- Causes of post-operative fever: Wind (atelectasis d2), Water (UTI d3), Wound d5, Walking (DVT, PE d7-9), Wonder Drug
- 50 % of all small bowel cancers are primary adenocarcinoma, older patients in duodenum, poor prognosis
- One way to read vent settings: mode, RR, tidal volume, FiO2, PEEP,PS: Mr Jones is on SIMV, 14, 500, 60%, 5 and 15, ABG is...

Funding

- Thank you to ISL for the generous support of our project.

