

Innovative Models of Education: Using Technology Appropriately in Medical Education

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IOM ROUNDTABLE

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Hashtag: #IOMGenomics



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Disclosure

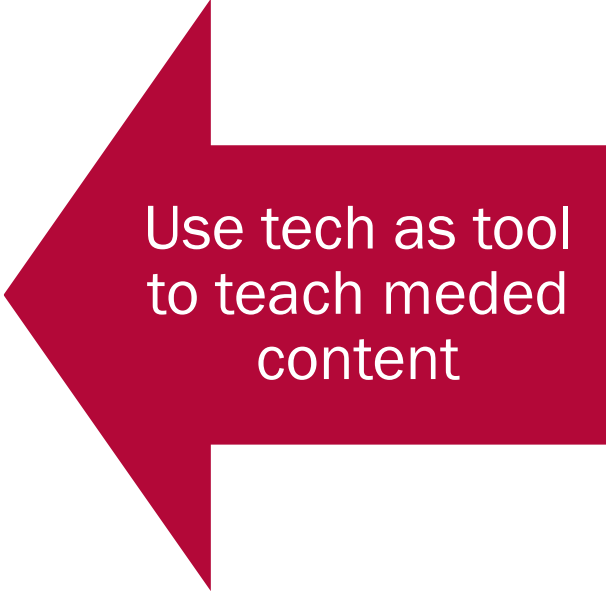
- I report no conflicts of interest, and have nothing to disclose
- I do NOT receive any financial remuneration from any app, device, technology or pharmaceutical industry company, specifically any mentioned today
- I am interested in emerging technology for myself, my learners, and patients for the purpose of improving education & patient care

Learning Objectives

After participating in this session, you should be able to:

- Balance health care professionals' (HCPs) use of technology at the bedside with human connection necessary for therapeutic patient-HCP relationship
- Elucidate different methods for effectively utilizing technology in medical education
- Consider how emerging technology can drive physician and HCP education

Technology in Medical Education



Use tech as tool
to teach meded
content



Teach tech
content to
meded learners

- This presentation: follow on Twitter right now
- Watching webinar on mobile device
- Workshop to doctors on how to use LinkedIn
- Audience Response Systems



Social Media for Medical Educators

- Identify and reflect on one's digital identity
- Observe and establish comfort first;
"Think, then contribute"
- Use social media to disseminate evidence-based health information
- Apply social media guidelines
- Tap into power of community



Social Media and Journal Club

- *Annals of Emergency Medicine* hosted an asynchronous global Emerg Med journal club on a blog
- Comments moderated on the blog and Twitter



Twitter at Conferences

- Great to create a “back-channel”
- Highlight important aspects of meeting
- Can be done as part of a formal presentation

-Desai T. Tweeting the meeting: an in-depth analysis of Twitter activity at **Kidney** Week 2011. *PLoS One* 2012;7(7):e40253.

-Chaudhry A. Trends in twitter use by physicians at the **ASCO** meeting, 2010 & 2011. *J Oncol Pract* 2012;8(3):173-8.

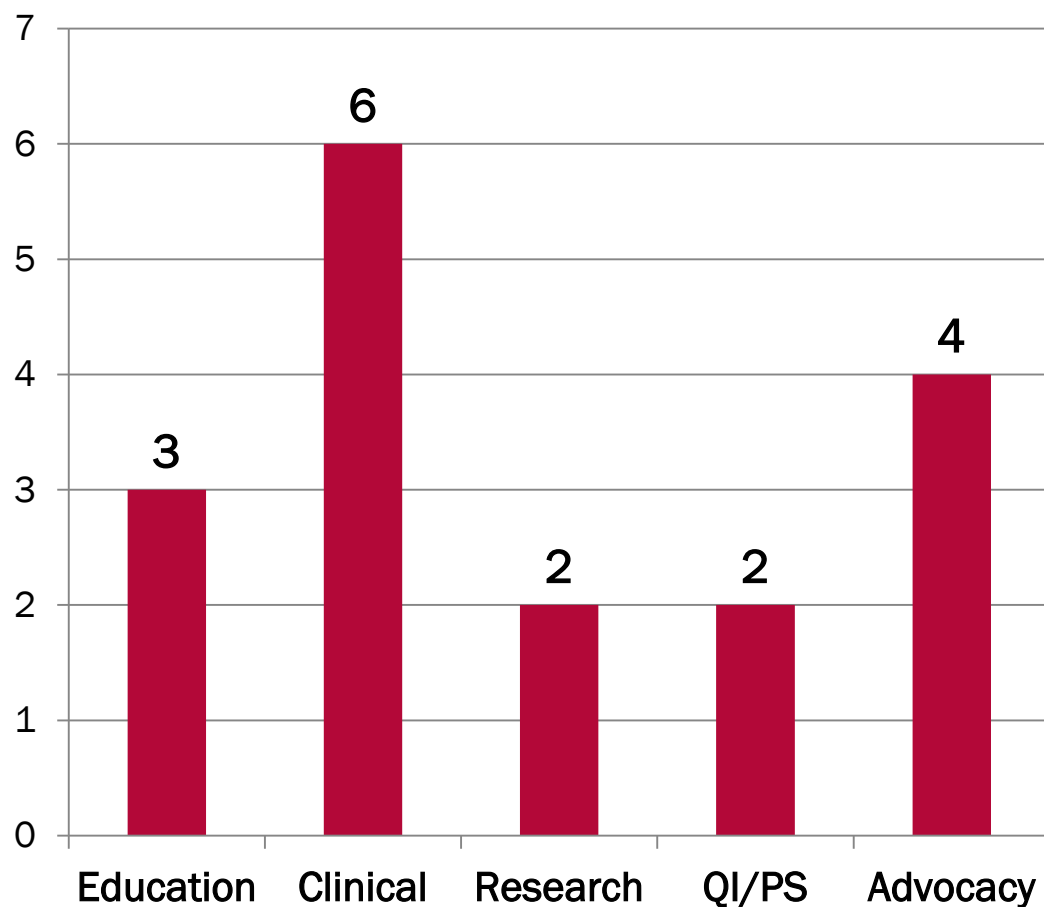
-Matta R. The dramatic rise of social media in **urology**. *J Urol* 2014 Aug;192(2):494-8.

-Neill A. The impact of social media on a major international **Emergency Medicine** conference. *Emerg Med J* 2014;31(5):401-4.

-Logghe H. Twitter usage at **Clinical Congress** rises markedly over two years. *Bull Am Coll Surg* 2013;98(2):22-4.



GR Tweeted March – August 2012



- **17** presentations
 - Education
 - Clinical
 - Research
 - QI/PS
 - Advocacy
- **613** Tweets
- **61** separate participants

Balance of Technology



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Pediatrics 2014

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Commentary



The Gateway to Journal Improvements

Lewis R. First, MD, MS^a, Alex R. Kemper, MD, MPH, MS^b, Kate Larson, MPH^c,
and Joseph Puskarz^c

[+ Author Affiliations](#)

Key Words:

[• medical journalism](#) [• social media](#) [• peer review](#)[« Previous](#) | [Next Article »](#)[Table of Contents](#)

This Article

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First LR. The gateway to journal improvements. *Pediatrics* 2014;133(1):139-40.

Pediatrics 2014

- 60% of users access journal on device
- Full text mobile app
- Online version is now “official” version
- Journal is more active on social media, through Facebook and Twitter
- Editor is tweeting: @lewis_first



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First LR. The gateway to journal improvements. *Pediatrics* 2014;133(1):139-40.

Caution – *Academic Pediatrics* 2014

- Connection between two parties can be compromised by technology

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Pediatrics and the Lure of Technology

[Ellen F. Crain, MD, PhD](#)

Received 19 September 2013; accepted 19 September 2013.

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More Caution

- *“Technology itself is no panacea ... some fear that [learners] may be losing sight of humanism in medicine.”*
- *“Clinician-Educators must model the effective use of technology such that it ultimately strengthens the patient-doctor relationship ...”*

The Cost of Technology



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Toll E. The Cost of Technology. *JAMA* 2012;307(23):2497-8.



UC-Irvine *iMedEd Initiative* - Etiquette



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UC – Irvine Mobile Etiquette Checklist



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<http://www.imeded.uci.edu/docs/MobileTechnologyEtiquette.pdf>

Audience Response Systems

- Classroom Engagement
- Learning Improves
- Assessment Improves

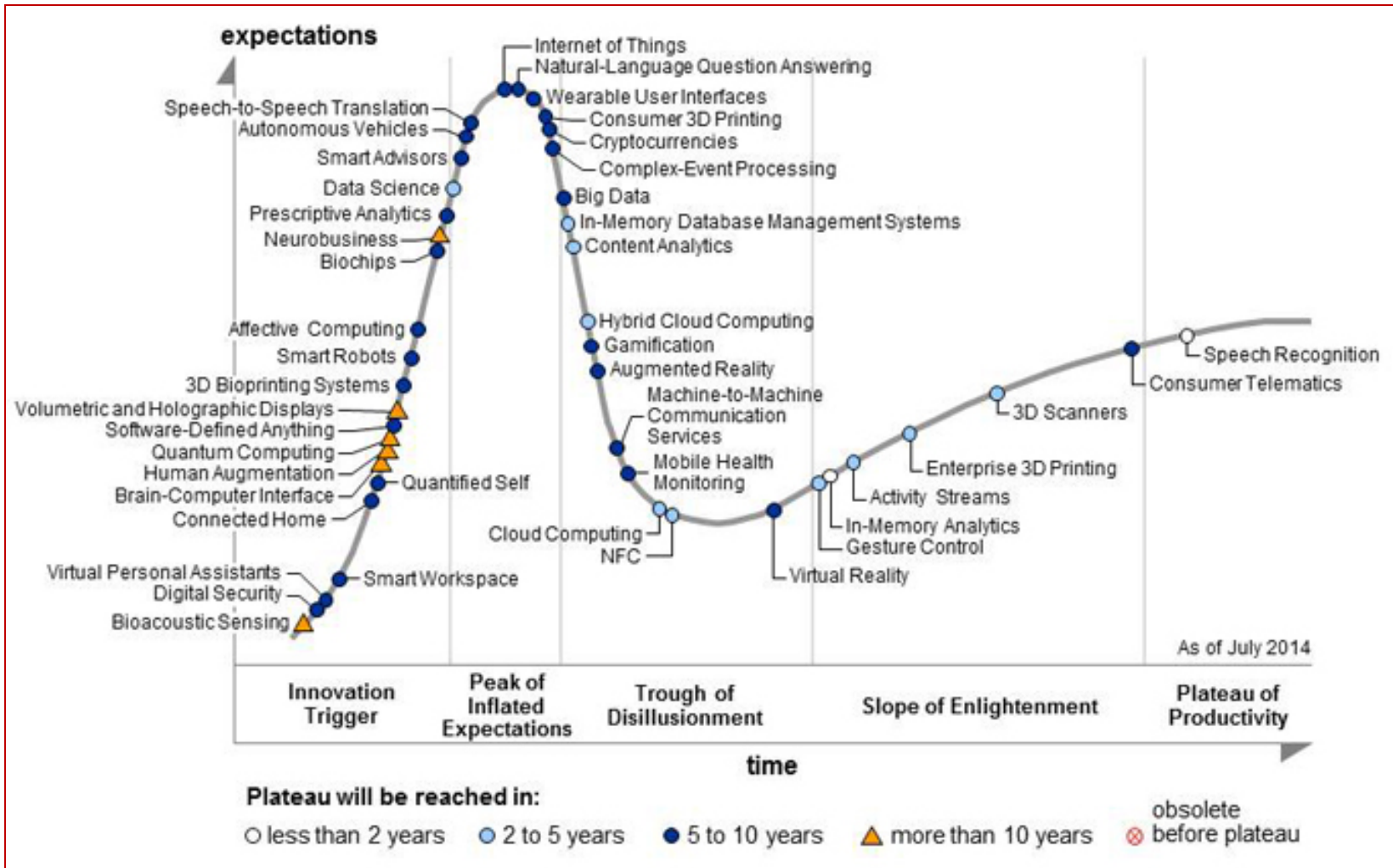


Mobile Health Tech in Med Education

- Training programs and med schools should integrate technologies into curricula
- Apps and devices should NOT replace, but AUGMENT acquisition of clinical skills



Hype Cycle – Emerging Tech 2014



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Gartner, August 2014. Found at: <http://www.gartner.com/newsroom/id/2819918>

How to evaluate apps



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<http://www.imedicalapps.com/>

<http://www.happtique.com/>



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Summary

- Effective Use of Technology
 - “*as adjunct to*”
 - NOT “*in place of*”
- Tech has potential to increase engagement
- Use tech to advocate and meet learners where they are
- #meded Twitter chat: Thurs 9-10 pm EST

