

# Poll

- Hover your camera over the QR code which should prompt you to open page at the top of your screen
  - Or go to [SOCRATIVE.COM](https://socrative.com) and then click Log In then Student
- Enter Room name: BRRH

A screenshot of the Socrative website's student login page. At the top is the Socrative logo, which consists of a blue hexagonal icon with a white dot inside, followed by the word "socrative" in a blue sans-serif font. Below the logo is a light blue rectangular box containing the text "Student Login". Inside this box, there is a label "Room Name" above a white text input field. The input field contains the text "BRRH" in a bold, blue, sans-serif font. Below the input field is a solid orange rectangular button with the word "JOIN" in white, uppercase, sans-serif font. At the bottom right of the page, there is a small icon of the United States flag followed by the text "English" and a downward-pointing chevron.

# Medicine in the Age of Social Media

Lisa C. Martinez, MD FACP  
Assistant Professor of Medicine

# Disclosures

- I have no financial disclosures to report
- I am not an expert participant of social media or a social media influencer

# Objectives

- Describe the dangers of using social media as a physician from a patient privacy perspective and from a professionalism perspective
- Discuss the benefits of using social media in lifelong learning
- Explore ways to address patients consultation with social media and other internet search engines

# Social Media

- Merriam Webster:
  - Forms of electronic communication (websites, social networking, microblogging) through which users create online communities to share information, ideas, personal messages and other content

# Social Media



Instagram



Medscape



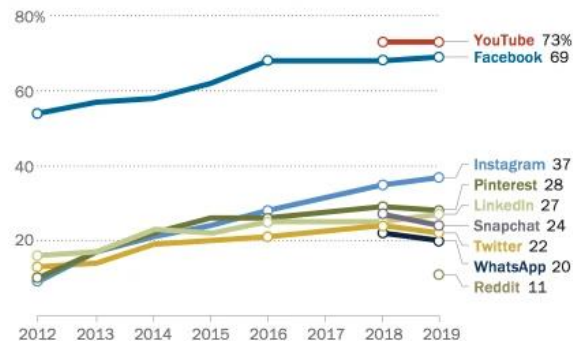
WhatsApp



# Social Media

## Facebook, YouTube continue to be the most widely used online platforms among U.S. adults

% of U.S. adults who say they ever use the following online platforms or messaging apps online or on their cellphone



Note: Pre-2018 telephone poll data is not available for YouTube, Snapchat and WhatsApp. Comparable trend data is not available for Reddit.  
Source: Survey conducted Jan. 8-Feb. 7, 2019.

PEW RESEARCH CENTER

## Roughly three-quarters of Facebook users visit the site on a daily basis

Among U.S. adults who say they use \_\_\_, % who use each site ...

	Several times a day	About once a day	Less often	NET Daily
Facebook	51%	23%	26%	74%
Instagram	42	21	37	63
Snapchat	46	15	39	61
YouTube	32	19	49	51
Twitter	25	17	58	42

Note: Respondents who did not give an answer are not shown. "Less often" category includes users who visit these sites a few times a week, every few weeks or less often.  
Source: Survey conducted Jan. 8-Feb. 7, 2019.

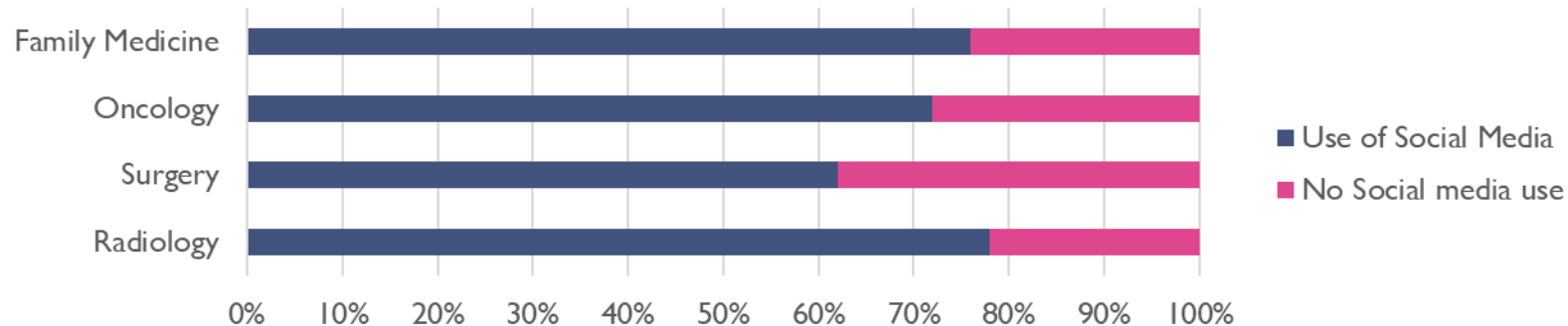
PEW RESEARCH CENTER

# Social Media Use and Healthcare providers

**Table 3 Statistical comparison on the use of social media between physicians and nurses**

#	Item description	RN (n = 152) (%)	MD (n = 69) (%)
1	Use of social media	88	88
2	Do you contribute to medical forums online?	3.3	10.4
3	Do you think information on social media is correct?	47.5	37.9
4	Do you recommend your patients to search about their illness online?	56.8	61.5
5	Are you aware of your social media policy?	72.2	38.2

\*  $p$  values < 0.05





# Usage by students

- 75% of medical students reported using social media frequently
  - 14% and 18% reported posting profanity or depiction of intoxication of themselves



# Who is looking?

- 42-85% of patient would like to “follow” their healthcare professional on social media
  - Most do this out of curiosity or to obtain information about the physician/hospital
- 43% believe it is appropriate to message physicians via social media
- >90% feel it is important for doctors/hospital to have online presence

# Potential pitfalls

- Impact on professional identity
- Institutional impact
- Patient confidentiality violation

**Social Media doesn't cause  
unprofessional behavior, just makes it  
easier for everybody else to see!**

# Potential pitfalls

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# Professional vs Personal Identity





# Would this reflect poorly on your professional identity?

- You are just finishing up for the day and are excited to go out with colleagues to Happy Hour. You are wearing your scrubs, and don't have time to change
- You take a picture of all of you drinking with bottles in hand and post to your social media account







# Professional identity

- Many different professionals have been suspended or fired for posting things that “violate societal expectations”
- Physicians have also been fired or disciplined for similar posts



# Other Cases

## Nurse fired after post on Facebook.

According to the Sacramento Bee, a nurse working in the labor and delivery unit at Kaiser Permanente was fired after posting a comment on Facebook. After Faith Linthicum, RN posted that an unarmed black man shot by police “deserved it,” Kaiser Permanente decided to part ways with the nurse. What are your staff posting on social media?

## Doctor resigns after backlash from Facebook post

CU School of Medicine plans to cut ties with a Denver Health anesthesiologist who posted racist comments about First Lady Michelle Obama on Facebook.



**Michelle Herren**

Monkey face and poor ebonic English!!! There! I feel better and am still not racist!!!! Just calling it like it is!



**Michelle Herren**

Doesn't seem to be speaking too eloquently here, thank god we cant hear her! Harvard??? That's a place for "entitled" folks said all the liberals!



Like · Reply · More · Yesterday at 10:24pm

# What about medical students and residents?

- Medical students that have been reported to Student Affairs Deans for social media content:
  - ~50% had profanity or discriminatory language
  - 39% had depiction of intoxication
  - 38% had sexually suggestive material
  - 13% had violations of patient privacy
  - 7% with violations were dismissed
- Review of Surgery residents accounts
  - Over 70% had no concerns on their account
  - 14% had potentially unprofessional conduct
  - 12% had unprofessional content (such as HIPAA violations)
  - In Urology residents history of unprofessional posts predicted future unprofessional posts

# Potential pitfalls

- Personal impact on professional identity
- **Institutional impact**
- Patient confidentiality violation



# How might you interpret this post

- Hospitalist posts on their social media account: “Why can’t [insert specialty] just handle simple medical issues?!? So frustrating!”
  - From the perspective of the hospitalist
  - From the perspective of the other physicians
  - From the perspective of patients

# How about this situation

- You are the Emergency room doctor in a trauma center. You just saw another case of a patient being injured by the Brightline train.
- You post:
  - “Hey PSA for the day – it’s not smart to try to beat a train” and post a picture of an x-ray with no patient identifier



# Real case



NEWS

## 'New York Med' nurse fired for 'insensitive' Instagram shot

By David K. Li

July 8, 2014 | 10:04pm

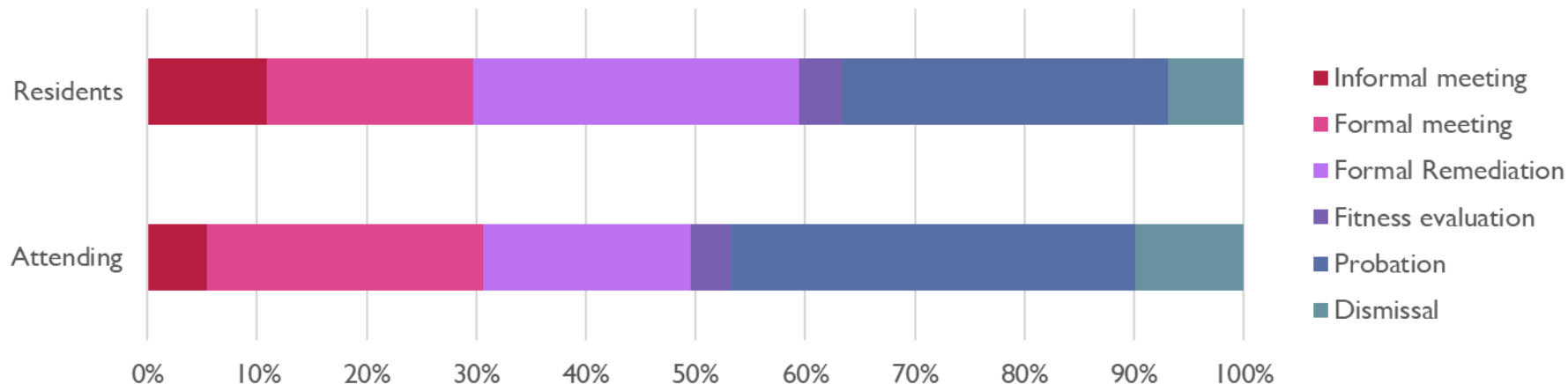




# Perception in GME

## Case scenario 5:

While out of the office at a meeting, the medical director of the microbiology lab learns from a Facebook post by one of the residents on the microbiology service that her laboratory has just identified a, very rare, positive case of *Francisella tularensis*. The medical director sees that several other residents and laboratory employees have also seen the post and commented on it, including several posts related to "lawn mower disease" and "road kill" that contain graphic images of dead animals. The resident also responded on Facebook with insensitive comments that further describes the index patient and the involved hospital.



# Potential pitfalls

- Personal impact on professional identity
- Institutional impact
- Patient confidentiality violation

# Violation of Patient confidentiality?

- You are a resident interested in pursuing endocrinology fellowship and you see a patient with uncontrolled diabetes who turned out to have acromegaly, and diagnosis was considered because of facial features
- You obtain consent from the patient to present the case as research at a national conference
- You take a picture in front of your poster which contains the picture of the patient and post to social media



# HIPAA



# Violation of Patient confidentiality?

- You are excited that you recently saw a case today of tetanus and decide you want to share to spark interest in your field
- You post:
  - “I love being able see new things everyday – learning about #tetanus #BRRH – what an amazing case of lockjaw today!”

# HIPAA and Social Media

## What is (PHI) Protected Health Information?

US Department of Health and Human Services defines protected health information (PHI) as individually identifiable information that falls into the following 18 types of identifiers:



Here are the **18 PHI identifiers**:

1. Name
2. Region (smaller than a state)
3. Date
4. Phone #
5. Fax #
6. Email address
7. Social Security #
8. Medical record #
9. Health insurance beneficiary #
10. Account #
11. Certificate/license #
12. Vehicle identifier/license plate #
13. Device ID & serial #
14. Web URL
15. IP address
16. Finger print
17. Full face photo
18. Any other unique ID # or characteristic that could reasonably be associated with the individual

# HIPAA and Social Media

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# Patient confidentiality issues?

A Rhode Island Doctor was fired after posting enough about a patient (not their name or picture) but a community member as able to identify who the patient was

Doctor was sued for \$1.5 million after posting pictures of an ED patient that was intoxicated

Miami Doctor is fired after posting insulting comments about patients as well as genitals

The New York Times

*Florida Surgeon Resigns Over  
Instagram Photos of  
Transgender Patients' Genitals*



# Licensing issues

**Table 2. Online Professionalism Vignettes and Likelihood of Board Investigation**

Description	Rate of Respondents Indicating That Investigation Was "Likely" or "Very Likely," % (n/N)
<b>High consensus*</b>	
Misinformation on physician practice Web site	
Misleading claims of treatment outcomes	81 (39/48)
Misrepresentation of board certification	77 (37/48)
Patient confidentiality (online images)	
Images of patient posted to Web site without explicit consent	79 (38/48)
Inappropriate communication with patients	
Use of online dating site (SNS) to "chat" with patient	77 (37/48)

## Moderate consensus†

Depicted alcohol intoxication online	
Image of physician intoxicated with alcohol posted to SNS	73 (35/48)
Patient confidentiality (narrative descriptions online)	
Narrative (blog) of patient encounter with potential identifiers	65 (31/48)
Discriminatory speech online	
Narrative expressing discrimination posted to SNS	60 (29/48)

## Low consensus‡

Derogatory speech online	
Narrative (blog) expressing disrespect for patients	46 (22/48)
Depicted use of alcohol without intoxication online	
Image of physicians holding alcoholic beverages posted to SNS	40 (19/48)
Patient confidentiality (narrative descriptions online)	
Narrative (blog) of patient encounter with no identifiers	16 (7/48)

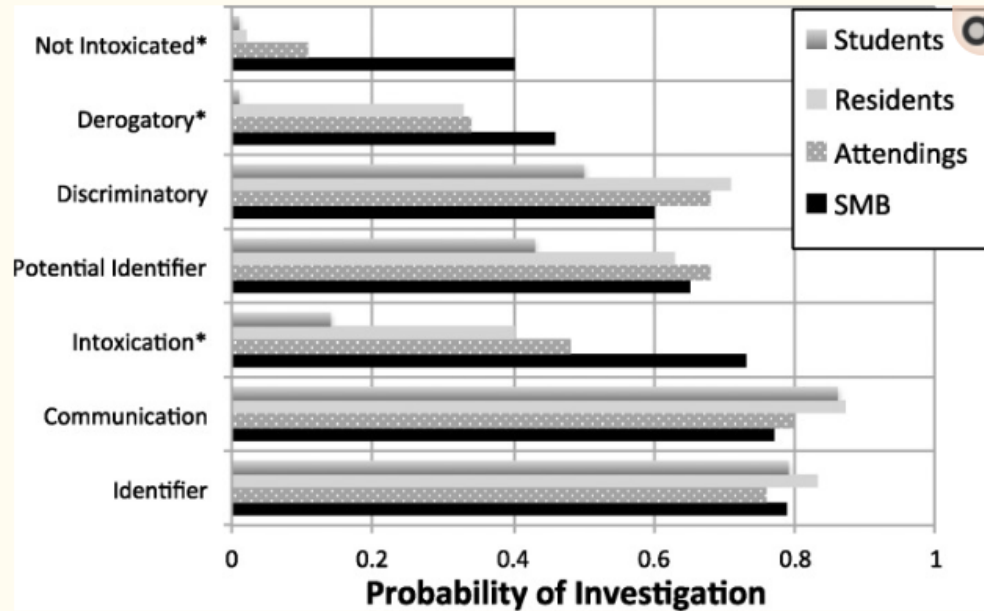
SNS = social networking site (for example, Facebook, Myspace, Match.com).

\* >75% of respondents indicated that investigation was "likely" or "very likely."

† 50%–75% of respondents indicated that investigation was "likely" or "very likely."

‡ <50% of respondents indicated that investigation was "likely" or "very likely."

# Perception of Licensing Issues



Figure

Probability of Investigation by State Medical Board Directors, Medical Students, Residents, and Attending Physicians for Social Media Behavior Themes

Abbreviation: SMB, State Medical Board.

# How to avoid problems

- Maintain separate professional and personal accounts
  - Despite which account you are posting to, always make sure it is not unprofessional
- Use privacy settings
- Avoid “friending” patients or their families
  - If you do interact with patient, maintain appropriate boundaries
- Be cognizant of patient privacy
- Help colleagues identify if they post something inapp
- If you have a conflict of interest, disclose it



# Know your institutions Policies

- BRRH has social media policy that can be accessed through intranet
  - You should know that you can be disciplined (up to or including termination) by Boca Raton Regional Hospital for off-duty conduct in violation of this policy.
  - You can also be held personally liable for commentary that is untrue, obscene, proprietary, or libelous by any offended party, not just Boca Raton Regional Hospital
- There are also social media policies at FAU

# Social Media is not all bad!

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How to use social media to help you

# Benefits of Social media

- Lifelong Learning
- Practice and Professional Promotion
- Professional Networking
- Public Health

# CME and life long learning

GRAND ROUNDS

## Sepsis



ACP | Internal Medicine  
Meeting



**JN Learning™**



# Social Media for lifelong learning

- “FOAMed” or Free Open Access Medical education
  - One of the most common reasons physicians use Social media is for Continuing Medical Education
  - Benefits:
    - Rapid dissemination of information with “editorial”
    - Connection to other communities perspectives
  - Downsides
    - No “editorial” oversight as with peer reviewed journals

# Quality of blogs and podcasts

**Table 1.** The ALiEM's AIR scoring instrument.

Score	BEEM Rater Scale	Content Accuracy	Educational Utility	Evidence-Based Medicine	Referencing
	Assuming that the results of this article are valid, how much does it affect emergency medicine clinical practice?	Do you have any concerns about the accuracy of the data presented or conclusions of this article?	Are there useful educational pearls in this article for residents?	Does this article reflect EBM and thus lack bias?	Are the authors and literature clearly cited?
1	Useless information	Yes, many concerns from many inaccuracies	Low value; no valuable pearls	Not EBM based; only expert opinion	No
2	Not really interesting, not really new, changes nothing	—	—	—	—
3	Interesting and new but does not change practice	Yes, a major concern about few inaccuracies	Yes, but there are only a few (1–2) valuable or multiple ( $\geq 3$ ) less-valuable educational pearls	Minimally EBM based	—
4	Interesting and new; has the potential to change practice	—	—	—	Yes, authors and general references are listed (but no online references)
5	New and important: this would probably change practice for some emergency physicians	Minimal concerns over minor inaccuracies	Yes, there are several ( $\geq 3$ ) valuable educational pearls, or a few (1–2) key educational pearls that every resident should know before graduating	Mostly EBM based	—
6	New and important: this would change practice for most emergency physicians	—	—	—	—
7	This is a “must know” for emergency physicians	No concerns over inaccuracies	Yes, there are multiple key educational pearls that residents should know before graduating	Yes, exclusively EBM based (unbiased)	Yes, authors and online references are provided

BEEM, Best Evidence in Emergency Medicine; EBM, evidence-based medicine.

# Use of social media to teach or share

Show this thread

**Tony Breu** @tony\_breu · 1d  
1/16  
Why does prerenal acute kidney injury lead to an elevated BUN/Cr ratio?

I always assumed the kidney increased urea reabsorption but never gave much thought as to where or how or why?

It's far more interesting than I'd expected...

NC(=O)N

Source: <https://en.wikipedia.org/wiki/File:Urea-2D.png>

24 415 1,038

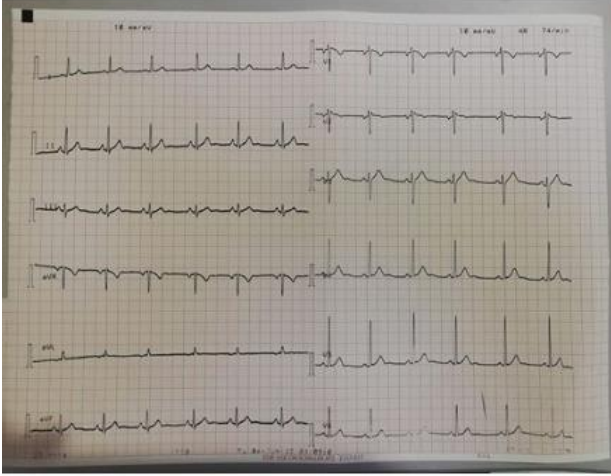
Show this thread

**Tony Breu** @tony\_breu · 1d

Yesterday at 4:55 AM

A 32yr old male with no significant past medical history, visited with signs and symptoms of URTI. He insisted for an ECG.

What do you think about his ECG below?




36 47 Comments 2 Shares

Home

Elizabeth Gundersen liked

**Brooke Gabster** @BGabster · 1d  
Osteosarcoma has challenged my faith, optimism, and resilience. It has also filled me with love, gratitude, and a deeper determination to improve cancer care. Here's my reflection, published today in [@JAMA\\_current](#):

 Resident Report—What a Physician With Cancer N...  
[jamanetwork.com](http://jamanetwork.com)

21 85 231

Esther Choo Retweeted

**bobby\_choo** @bobby\_choo · 6h

# Tips for using social media for learning

- **Twitter:**

- “Follow” people or things you find interesting or helpful
  - follow journals for updates when articles are posted, i.e. @theLancet, @NEJM

- **Facebook:**

- Join groups like ECG club or others to learn from a community with similar interests

- **Doximity:**

- Provides CME for reading articles

- **Follow podcasts**

- Many like JAMA, Consult guys, white coat investor, etc

- **Many Others**

**Remember that many of these venues are not necessarily peer-reviewed, so do not blindly follow recommendations, and critically appraise!**

# Social Media and public health

- Social Media is a rapid form of communication that reaches far and wide in emergencies and public health issues
  - Boston Marathon Bombing
- Be aware that a lot of the misinformation exists, i.e. anti-vax movement has been propagated on Social Media
  - Attacks on doctors that are pro-vaccine

Holy [REDACTED] Explosion!

← Reply ↻ Retweet ★ Favorite ⋮ More

1  
RETWEET

1  
FAVORITE



2:50 PM - 15 Apr 13

I have no clue what's going on. It's chaos. People are crying. No idea if ppl are hurt. [#bostonmarathon](#)

4/15/13, 2:55 PM



# Social Media for Marketing



- Mayo Clinical started a campaign on Social Media which led to 1 million referrals to their website, 95 million Facebook and 4.5 million on YouTube in 3 months
  - This led to a 139% increase in patient appointments
- MGH targeted patients and healthcare professionals on SM on lung cancer screening, increasing their website hits by 1500%
  - Following this campaign, there was an increase by 52% in scheduled screenings

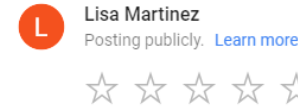
# Professional promotion

- Use Twitter to “tweet” your scholarly work
  - The more it is shared, the more readership it has, the more likely it is to be cited
- Create “microBlogs” and “tweetorials”
  - As you share your expertise you garner more followers → more opportunity for scholarly collaboration
  - Be sure what you share is accurate!
- Academic promotions are starting to take “digital presence” into account
  - You can get national notoriety rather quickly

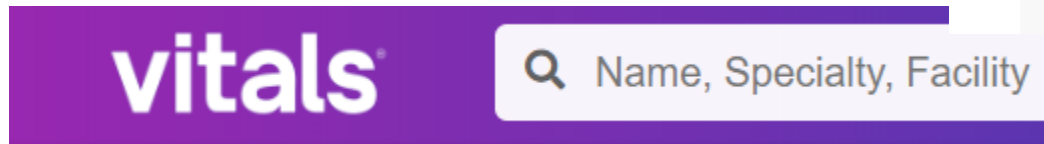
# Patient Ratings

- Spine surgeons with active social media accounts had more patient ratings, although didn't correlate with better ratings
  - However, google ratings were associated with better ratings if had active online presence
  - Age of physician was also a negative predictor for scores

Dr. Leonard Berkowitz, D.O.



Share details of your own experience at this place





# Social media for patient support

- Using twitter as a breast cancer support tool, showed decrease in anxiety from 28% to 9%
  - Only 5% of participants felt that the forum did not provide a safe and welcoming environment
- Using social media for chronic conditions resulted in benefit for patients in 48%

	Stroke	CLRTI	Cancer	Depression	Obesity	Diabetes	HD	
Support				2	1			Facebook
			2	2	1			Twitter
			1		1			YouTube
			4	1	4			Blogs
Patient Education		1	3	2		1	2	Wiki(s)
			2					YouTube
			1		1	1		Blogs
Diagnosis	1			4				Facebook
Disease Management	1			2		1	1	Facebook
								Twitter
Disease Modification			1	1	2			Facebook
					1			Twitter
						1		Blogs

# Patients use of Internet for medical purposes

- 80% of adults use the internet and social media specifically for finding health information
  - 1 in 15 searches is health related on Google
- 60% of patient who use internet for medical information felt the information was as good if not better than their doctors
- 71% of patient who take internet information to their doctor want their *opinion*, not necessarily a specific intervention



# Social Media on Doctor patient-relationship



- Increased patient's knowledge and confidence to be more active in discussion
- Patients are likely to switch doctors that don't support their use of online resources such as Social Media, as it makes them feel less empowered

# How to address “Dr. Google” search

Most patients will not get adequate education in a 15 minute visit

This is why they go to the internet

We are not their sole source of medical information



# Open ended and Open minded



## Remember patients are coming to you for **YOUR** opinion

- “Why do you feel you have xyz?”
- “What resource did you use and how did you conclude this diagnosis is valid?”
- Validate their search but put it in context of what is scientifically sound
- Create an open space for questions

# Opportunity for Guiding and Education

- Have handouts in office for common conditions
- Provide your patients with reputable sites to go to
  - Preferrable .edu sites or hospital sites
  - Make sure it is vetted and overseen by physicians
- Create your own Blog or Social Media site that addresses common concerns
  - You may become a social media influencer!
- Note; older patients are also using internet for healthcare but are embarrassed to discuss – so ask, it may empower them and help guide a richer discussion

# Other issues with SM and medicine

- Mental Health issues and increased risk of depression, increased “normalization” of alcohol or drug use
- Ease of sharing misinformation
  - Approximately 5 million shares/month of fake news stories on twitter in 2018
- Research is limited due to issues with ethics and confidentiality/informed consent
  -

# Take home points

- Be wary of posts that may be seen as unprofessional or may violate patient privacy even in personal pages
- Know your organizations social media policy
- Critically appraise the information you find on social media
- Use social media for self promotion as well as continuing education
- Empower your patients to know about their diagnoses/symptoms by validating their need for more information and creating content online!



# Thank you!

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## Questions?

 @lmartinezUM

# Lets go back to our survey