

What exactly is social media?

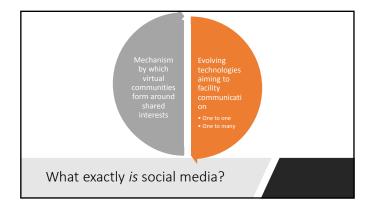
Why should you care about it?

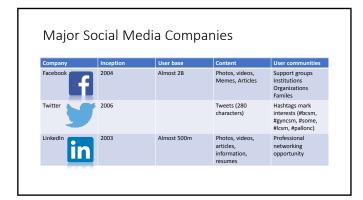
What can be gained from exploring it?

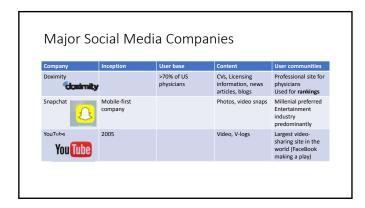
How do I do it?

The digital age is upon us!
Conversations about cancer are going online beyond traditional borders – with or without you
Social media represents an opportunity to listen, learn, and engage

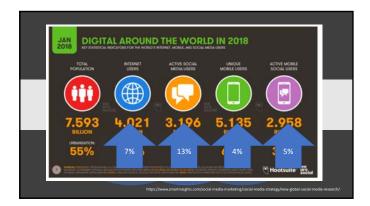
Take-Home Points

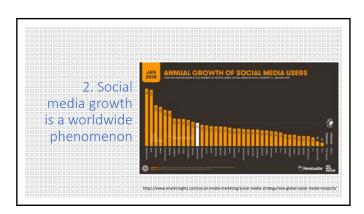


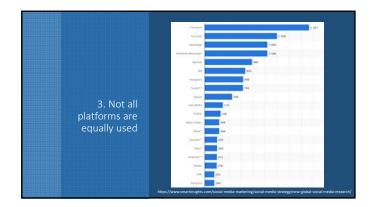


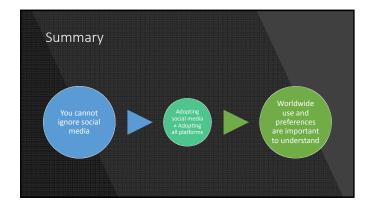




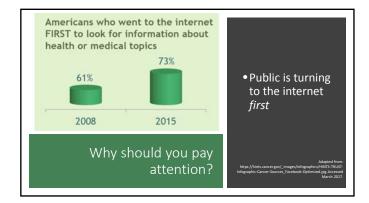


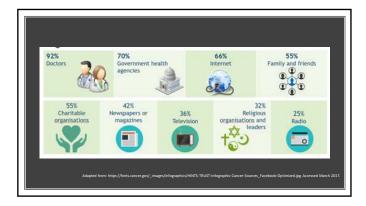


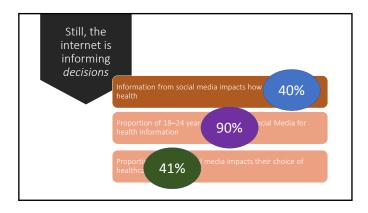




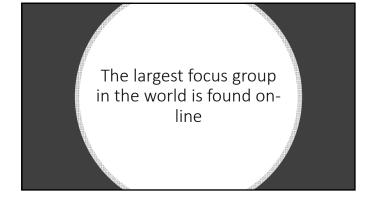








Bottom Line Your patients are online Two very simple You are online as well reasons: (even if you aren't) Social media and the researcher • Unfiltered look at the cancer experience • Perspectives not limited by locality • Communities to inform questions Needs Assessments • Background for grant applications Advocacy and Fundraising



Needs Assessment Using Twitter Hagan (2018): What are the survivorship needs for women treated for ovarian cancer?

Method: Tweetchat in partnership with #gyncsm: Re-envisioning ovarian cancer survivorship

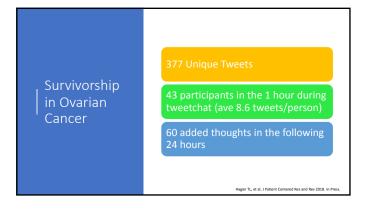
Recruitment: Collaboration with partners: OCRFA, SGO, FWC, NOCC

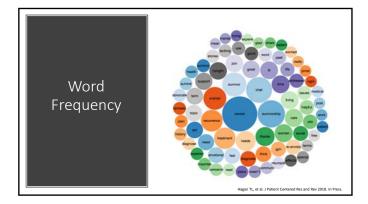
Hagan TL, et al. J Patient Centered Res and Rev 2018. In Press.

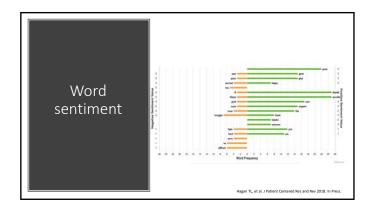
Tweetchat Focus Group (Hagan, 2018)

- T1 A. What does survivorship mean to you? What is it to be an ovarian cancer survivor?
 - B. Do you use the term survivor? If not, what term do you prefer
- T2 What needs and concerns did you have when you were first diagnosed and treated? How were they addressed? What was lacking?
- T3 How was the topic of recurrence addressed with you? Did you find it helpful or
- T4 A. What issues physical, emotional or other currently give you the most
 - B. What are your needs and concerns now? (After recurrence or As you live past
 diagnosis and initial treatment of oversing cancer).
- T5 What actions have you taken in living past your ovarian cancer diagnosis and treatment? Were you given a Survivorship Care Plan?

Hagan TL, et al. J Patient Centered Res and Rev 2018. In Pre







| | There is a lack of support during transitions |
|-------------|--|
| | Physical and emotional needs were unmet by clinicians |
| What did we | Patients navigated independently |
| earn? | Survivors want us to be proactive |
| | Provide resources |
| | Care plans not appropriate for women who face a high recurrence risk |
| | Care plans should address needs of women after recurrence |
| | Hagan TL, et al. J Patient Centered Res and Rev 2018. In Press |

Social media
research
opportunities

• RO1: Innovative approaches to studying cancer communication in the new media environment
• https://grants.nih.gov/grants/grule/pa-files/PAR-16-249.html
• R21:
Exploratory/Developmental Research grant
• https://grants.nih.gov/grants/grule/pa-files/PAR-16-248.html

Tweets are grounded in an experience:

• User → Specific location, specific time of post

• Tweet → Language, Context

• Typically, tweets are not isolated events

Paul and Dredze: What public health information can be learned from Twitter?

Paul MJ and Dredze MASON for the Advancement of Al Conference on Weblogs and Social Models, July 2011 (Burctions)

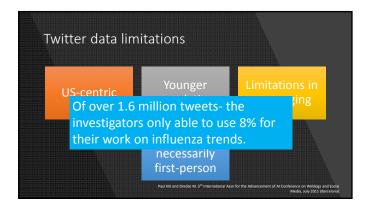
| Alignment Top | | Model = A | model of th | ie licer's evnr | occion of ill | | |
|---------------|--|--|---|---|--|--|--|
| or each healt | | | | | | ness and aili | ment in Twe |
| | h-related | tweet the | re is a laten | t ailment (eg | cancer) | | |
| | | | | c dilitione (eg, | currecty | | |
| ach ailment = | e distribut | ion over w | ords | | | | |
| | | | | | | | |
| Ailment | Allergies Allergies | Depression Anxiety | Aches/Pains Back Pain | Breast Cancer | Obesity Diabetes | Flu | Oral Health |
| Frequency | 6.4% | 5.8% | 10.8% | 8,0% | 2.3% | 8.1% | 4.6% |
| General Words | allergies | help | body | cancer | blood | flu | meds |
| General Words | | | | | | | |
| General Words | stop | dont | head | pray | doctor | "swine flu" | killers |
| General Words | stop eyes | dont body | need | mom | doctor high | "swine flu" "flu shot" | killers dentist |
| Symptoms | stop | dont | | | doctor | "swine flu" | killers |
| | stop eyes allergic sneezing cold | dont body depression pain anxiety | need hurts pain aches | mom shes pain sad | doctor high meds pressure "high blood | "swine flu" "flu shot" dont fever cold | killers dentist teeth pain toothache |
| Symptoms | stop eyes allergic sneezing cold coughing | dont body depression pain anxiety stomach | need hurts pain aches stomach | mom shes pain sad "breast cancer" | doctor high meds pressure "high blood pressure" | "swine flu" "flu shot" dont fever cold "sore throat" | killers dentist teeth pain toothache sore |
| | stop eyes allergic sneezing cold | dont body depression pain anxiety | need hurts pain aches | mom shes pain sad | doctor high meds pressure "high blood | "swine flu" "flu shot" dont fever cold | killers dentist teeth pain toothache |

| atments | more | correctly | align w | vith an ai | lment, |
|---------|-------|--------------|---------|------------|--------|
| | | | | | |
| | | | | | |
| Model | Total | Correct | MRR | Correct | MRR |
| | | (S) | (S) | (T) | (T) |
| | | overed Ailm | | rticles | |
| ATAM | 12 | 2 | 0.33 | 4 | 0.51 |
| ALAM | | | 0.42 | 6 | 0.63 |
| ATAM+ | 13 | 3 | 0.42 | U | |
| | | les to Disco | | | 0.00 |
| | | | | | 0.36 |

| | | Corre | ation | |
|----------------------|--------------|--------|--------|--|
| Risk Factor | Ailments | ATAM+ | ATAM | |
| Asthma | Allergies | 0.241 | 0.195 | Extracted |
| Diabetes | Obesity | 0.073 | 0.203 | geographically link |
| Exercise | All ailments | -0.352 | -0.394 | health statistics |
| Exercise | Exercise | 0.140 | - | |
| Exercise | Obesity | -0.201 | -0.248 | Able to general |
| Health Care Coverage | All ailments | -0.253 | -0.319 | state in 12% of |
| Heart attack | Obesity | 0.244 | 0.341 | tweets (n= 196 |
| Heart attack | Cancer | 0.613 | 0.291 | Generated guestice |
| Obesity | Obesity | 0.280 | 0.203 | using the Behavio |
| Obesity | Exercise | -0.267 | - | |
| Tobacco use | Cancer | 0.648 | 0.320 | Risk Factor Surveil System (CDC, 350) |
| Geograph | nic beha | | l risk | adults, collected in 2009) |

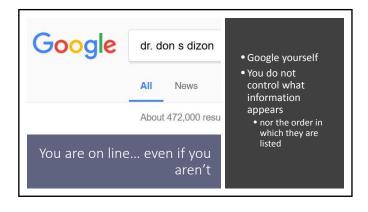
| | Word | Ent. | Most Common Ailments | |
|---|-----------|------|---|--|
| | vomiting | 2.19 | Flu (23%), Aches (16%), Insomnia (12%) | |
| | burn | 2.02 | Skin (36%), Aches (17%), Headache (2%) | |
| | chill | 1.95 | Headache (28%), Insomnia (18%), Flu (12%) | |
| | fever | 1.46 | Flu (50%), Cold (24%), Infection (11%) | |
| | pimples | 0.72 | Skin (84%), Depression (5%) | |
| | fractured | 0.69 | Physical injuries (82%), Cancer (12%) | |
| | toothache | 0.61 | Dental (83%), Insomnia (9%), Aches (6%) | |
| | headache | 0.56 | Headache (75%), Insomnia (25%) | |
| | tumor | 0.22 | Cancer (96%) | |
| | mood | 0.20 | Depression (96%), Obesity (4%) | |
| U | sing Tw | itte | er to analyze symptoms | |

| Word | | Ent. | Most Common Ailments |
|-----------|----------|------|---------------------------------------|
| Pain Reli | - 14 | | Most Common Admicuts |
| tylenol | 1807 | 1.57 | HA (39%), IN (30%), Cold (9%) |
| ibuprofen | 1125 | 1.54 | HA (37%), DN (21%), Aches (17%) |
| advil | 1093 | 1.08 | HA (61%), Cold (6%), DN (5%) |
| aspirin | 885 | 1.04 | HA (69%), IN (10%), Aches (10%) |
| vicodin | 505 | 1.33 | DN (61%), Injuries (11%), HA (10%) |
| codeine | 406 | 1.94 | Cold (25%), DN (19%), HA (17%) |
| morphine | 206 | 1.17 | DN (59%), Infection (22%), Aches (99 |
| aleve | 183 | 1.10 | HA (62%), IN (15%), DN (14%) |
| Allergy N | dedicati | on | |
| benadryl | 871 | 1.24 | Allergies (64%), Skin (13%), IN (12%) |
| claritin | 417 | 0.54 | Allergies (88%), HA (5%) |
| zyrtec | 386 | 0.49 | Allergies (90%) |
| sudafed | 298 | 1.61 | Allergies (39%), Cold (21%), HA (20% |









Protecting your privacy

Adopt Dual Citizenship

- Grow your professional connections
- Maintain online privacy
- Examples:
- Twitter use for professional activities
- Facebook as a means to connect personally
- AMA Opinion 9.124: Separation of the personal and professional
- NOTE: All social media posts must be considered public

Social media tenets for the clinician

| Be Thoughtful | Posts represent you and your institution |
|---------------------|---|
| Be Transparent | Disclose your conflicts of interest |
| Be Clear | Speak for yourself (vs. speaking on behalf of your institution) |
| Be Smart | Don't post anything that you might regret later |
| Maintain Boundaries | Don't friend or follow your own patients |

| | | e | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | | | |
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There are no HIPAA compliant social media spaces

Professionals have been sanctioned for social media activity

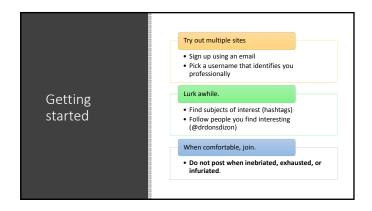
- 2017: 70% of US state boards have disciplined providers
- Major breaches: misinformation, breach of confidentiality, inappropriate communication with patients

If communication with a patient on social media: all disclosures should be initiated by that patient

Greysen S, et al. JAMA. 2012;307:1141-2; Greysen S, et al. Ann Intern Med. 2013;158:124-30.



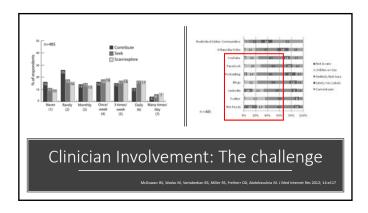


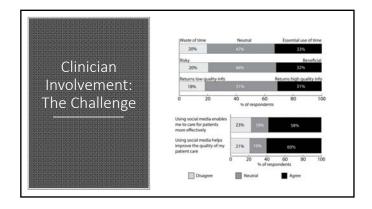


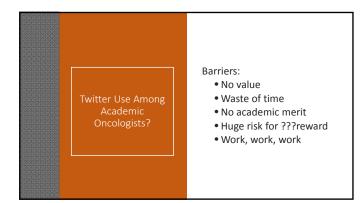




Have I convinced you?







How do we engage our peers?

Provide evidence that it will be of professional benefit?

Foster altruism

Engage reciprocally

Nurture collectivism







What has COSMO done

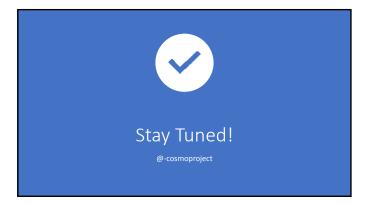
- Katz MS, Utengen A, Anderson PF, Thompson MA, Attal DJ, Johnston C, Dizon DS. Disease-Specific Hashtags for Online Communication About Cancer Care. JAMA Oncol. 2016 Mar;2(3):392-4: PMID: 26539640
- unexe-operactishmags for Online Communication Above Cancer Care. JAMA.
 Onco. 2015 Mer2(3):392.4, PMID: 28:593640

 Carlled Reviews for oncologists and hematologists.
 Atta D. Aidena Care. James Care.

What has COSMO done

Qualitative Research

TL Hagan, K Nauth-Shelley, MA Thompson, DJ Attai, MS Katz, D Graham, D Sparacio, C Lizaso, A Utengen, DS Dizon. The needs of women treated for ovarian cancer: Results from a #Gyncsm Twitter chat. J Patient-Centered Res and Rev 2017



Social media has changed the patient-provider interaction Patients want our voices on line Capacity for change is huge In an era of "fake news", we can point towards reliable sources Social media = Big data Learn what's important from folks impacted Re-learn how to talk to patients Inform your research Generate new questions

