#SoMe and @Twitter in Oncology #supportivecare
Disclosures

• Honoraria for advisory boards –
  – Merck, MSD, Janssen
• Speakers fees
  – MSD, Roche
• Consultancy in a research project - MSD
• Most funding comes from the Australian Federal Government via Medicare
Supportive care: making the cancer journey easier.
Which bridge would you rather cross?

@CancerCareMASCC
#ASCO18 #MASCC18 #supponc #supportivecare #GeriOnc
masccmeeting.org/2018/Pages/def...
A new cancer care dilemma: Patients want immunotherapy even when evidence is lacking
A topic to be covered at the #MASCC18 meeting in 4 days
Watch for tweets #prognostication #financialtoxicity #communication #supponc #gerionc #pallonc @CancerCareMASCC

Cancer patients want immunotherapy even when evidence is lacking
Patients, citing television ads and media accounts of miraculous recoveries, are pushing hard to try immune therapies, even when there is little to no evidence the ...
Acknowledgements

@drdonsdizon

Don S Dizon
Oncologist, Editor, Blogger, FACP, FASCO. Director of Women’s Cancers, Lifespan Cancer Institute. Tweets are all me.

@drmarkham

Merry J Markham, MD
Gynecologic medical oncologist @UP, Associate Director for Medical Affairs @UFLHealthCancer, @JCO_ASCO SoMe Editor. Tweets = my views only.

@subatomicdoc

(((Matt Katz, MD)))
I’m a radiation doctor dedicated to improving health. Cofounder, radonjournal club, @Rad_Nation. Chair, @MassMedical Communications Committee. Neutral good.

@minasedrakmd

Mina S. Sedrak
Breast cancer oncologist and researcher @CityofHope. Tweets are my own opinions. RTs are not endorsements.
Acknowledgements.

@ASCO Social Media Working Group
What exactly *is* social media?

- Evolving technologies aiming to facilitate communication
  - One to one
  - One to many

Mechanism by which virtual communities form around shared interests
Connections

#ASCO17
@mdigitalLife
# Major Social Media Companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Inception</th>
<th>User base</th>
<th>Content</th>
<th>User communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>2004</td>
<td>Almost 2B</td>
<td>Photos, videos, Memes, Articles</td>
<td>Support groups Institutions Organizations Families</td>
</tr>
<tr>
<td>Twitter</td>
<td>2006</td>
<td>336m active users</td>
<td>Tweets (280 characters)</td>
<td>Hashtags mark interests (#bcsm, #gyncsm, #some, #lcsm, #pallonc)</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>2003</td>
<td>Almost 500m</td>
<td>Photos, videos, articles, information, resumes</td>
<td>Professional networking opportunity</td>
</tr>
</tbody>
</table>
Social media landscape 2018
Not all platforms are equally used
Social media adoption has increased over time

% of U.S. adults who use at least one social media site

Pew Research Center 2018
The number of social media users worldwide is projected to rise from 1 to 3 billion between 2010 to 2021.
Social media and medicine: Why you should care?

@drdonsdizon
Why should you pay attention?

• Public is turning to the internet *first*

BUT, they trust us more.


@drdonsdizon
Like it or not, you may already have a presence online...
Traditional Communication

View test results & health information
Send a message to your care team
Schedule or request appointments
Refill or request prescriptions
View account statements & pay bills

24/7 ACCESS
Pros & Cons of Physician-Patient Communication Online: Pros

- Provide education
  - Provide reliable information
  - Correct misinformation
- Advocacy/awareness raising
- Public showing of compassion, expertise, passion
- Increased understanding of patient experience
- Enhance trust in the profession
Pros & Cons of Physician-Patient Communication Online: Cons

- Potential violations of HIPAA
- Unprofessionalism
- Potential to be “always on”
- Blurring of physician-patient boundaries
Risks of Opting Out

- Patients find health misinformation online
- Others define your professional reputation
- Patients find providers more accessible online
- ? Malpractice risk for no public affirmation your quality
Dangers of Misinformation

- False news spreads farther, faster than the truth
- Online ads undercut patient confidence in treating oncologist

CCDF = fraction of rumors with certain # of cascades

Vosoughi et al, Science 2018
Abel et al, J Clin Oncol 2009
What do we know about the oncologists who are online?
Social Oncology Report 2017

Greg Matthews
@chimoose
@MDigitalLife

www.mascc.org/meeting

2018 VIENNA, AUSTRIA SUPPORTIVE CARE MAKES EXCELLENT CANCER CARE POSSIBLE

@drcbsteer
#MASCC18
Social Oncology Report 2017

1522 oncologists on @Twitter

Challenging the stereotypes of the online community.

- Young
- Male
- Centred around urban technology hubs

Fast internet and smart phones are now so ubiquitous....
....everyone is online.
NO GENDER GAP*
Female oncologists are almost exactly as likely as their male counterparts to be on social media.

**Offline Oncologists**
- 69% Male
- 31% Female

**Online Oncologists**
- 71% Male
- 29% Female

*US data

@chimoose
@drcbsteer
#MASCC18

Source: NPES Registry, MDigitalLife Online Health Ecosystem

N = Based on 20,624 US Oncologists, 1,502 of whom are on social media.
HOW WILL YOU KEEP THEM DOWN ON THE FARM?

79% of the “offline” oncologists live in close proximity to a major urban center. Slightly more - 85% - of online oncologists do so.

---

**Offline Oncologists**

---

**Online Oncologists**

---

**Percentage of Online Oncologists Compared to Overall Oncologists in the State**

- **Minnesota** 13.4% Online
- **Wisconsin** 12.9% Online
- **Utah** 11.4% Online

**Source:** CMS Physician Compare Database; MDigital.ri. Online Health Ecosystem database.

1% of the 2014 U.S. Oncologists, 1027 of whom were online, in this state.

@chimoose

@drcbsteer

#MASCC18
FOUNTAIN OF YOUTH
Social media usage is increasing rapidly - for both younger and older oncologists.

- Online Oncologists
- Offline Oncologists
- Overlap

54.1 MEDIAN AGE
48.0 MEDIAN AGE
18% of oncologists in their 30s are on Twitter
4.5% of oncologists in their 60s are on Twitter

Source: CMS Physician Compare Database, MDIGITALIFE Online Health Ecosystem database
N = 15,655 US Oncologists w/ Med Sch Grad yr: 1,346 of whom are on social media
Online oncologists just as likely to receive payments from industry but the quantum is x3 higher*

@chimoose

*US data

($14,133 vs. $5,558)

@drcbsteer

#MASCC18
Online oncologists are 2x more likely than offline peers to publish in ASCO journals.

45% of oncologists on social media have published in the Clinical Journal of Oncology or the Journal of Oncology Practice in the last 10 years; 20% of their offline peers have done so.

20% of offline Oncologists published at least 1 article.

45% of online Oncologists published at least 1 article.

Source: PubMed/MORightarrow's Internet and Social Media database.

N = Based on 22,834 US Oncologists, 3522 of whom are on social media.

@chimoose
@ASCO_JCO
@ASCO_JCOP
@drcbsteer
#MASCC18
Social Oncology Project 2017 - Conclusions

Survey of 1522 of tech savvy US oncologists (7%) Following this group “may not reveal the heart of medicine... but it gives powerful hints about the future of patient care”

future of medicine lies. Past versions of The Social Oncology Project have shown that physicians on social media are increasingly hubs in an online ecosystem that stretches to patients, advocates, industry and beyond. Given that degree of connection, it is not at all surprising that online oncologists appear more closely linked to pharmaceutical companies. They are more closely linked to everyone.

They are more closely linked to everyone.
Social Oncology Report 2018

@chimoose
@MDigitalLife

http://www.w2ogroup.com/the-social-oncology-report-2018/

#MASCC18
Hospital Ranking and Location

*US data

http://www.w2ogroup.com/the-social-oncology-report-2018

#MASCC18
Higher percentage of physicians on Twitter associated with higher hospital ranking*

http://www.w2ogroup.com/the-social-oncology-report-2018

#MASCC18
Part One: The Connection between Social Media & Physician Reputation Scores in the *U.S. News & World Report* Hospital Rankings

“Our data clearly show that the percentage of a cancer hospital’s affiliated doctors who are active on twitter has a positive, statistically significant correlation with that hospital facility’s physician reputation score from the *U.S. News & World Report* ‘Best Hospitals’ ranking for 2017-2018.”

Yash Gad, Ph.D.

http://www.w2ogroup.com/the-social-oncology-report-2018

#MASCC18
The higher the gender parity in the hospital, the higher the reputation score.

Closest to gender parity - University of North Carolina at 54%

Farthest - Cedars-Sinai 76%

http://www.w2ogroup.com/the-social-oncology-report-2018
What kind of conversations are happening on Twitter?
#SoMe connects Oncology communities

Network Visualization

- Doctor: 37.32%
- Hospital: 2.20%
- Non-MD HCP: 4.51%
- Patients: 5.61%
- Advocacy: 15.85%
- Media Outlets: 5.73%
- Journalists: 6.22%
- Industry: 22.56%

#ASCO17

Mention map: All #ASCO17 conversations from the MDigitalLife Health Ecosystem database 5/5/17 - 5/25/17

#MASCC18
#SoMe connects Oncology communities

Network Visualization

Mention map: All #ASCO17 conversations from the MDigitalLife Health Ecosystem database 5/5/17 – 5/25/17

#ASCO17

@chimoose

@drcbsteer

#MASCC18
Disease Specific Hashtags in Oncology
Cancer Tag Ontology

Facilitate targeted, streamlined communication

#supponc, #pallonc, #gerionc,

#supportivecare
Healthcare hashtags - #suppongnc
Last 28 days

The #suppongnc Influenza
Top 10 by Mentions
@IshvariaMD 127
@CancerCareMASCC 51
@drcbsteer 41
@JCO_ASCO 15
@DrRFreedman 13
@tomleblancMD 13
@DanaFarber 13
@edubru 12
@Reddysuppncare 9
@BTOGORG 9

The Numbers
744,133K Impressions
368 Tweets
135 Participants
1 Avg Tweets/Hour
3 Avg Tweets/Participant

Twitter data from the #suppongnc hashtag from Fri, May 25th 2018, 5:50PM to Sat, June 23rd 2018, 5:50PM (Australia/Sydney).
Healthcare hashtags - #supponc
Last 28 days

#supponc Participants

Data for #supponc can be up to 15 minutes delayed
Healthcare hashtags - #pallonc and #gerionc

Last 28 days

**The Numbers**

- **#PallOnc**
  - 5.355M Impressions
  - 2,034 Tweets
  - 652 Participants
  - Avg Tweets/Participant: 3
  - Avg Tweets/Hour: 3

- **#Gerionc**
  - 9.149M Impressions
  - 3,068 Tweets
  - 732 Participants
  - Avg Tweets/Participant: 4
  - Avg Tweets/Hour: 4


#ASCO18 tweet activity

The Numbers

- 535,796M Impressions
- 98,184 Tweets
- 20,919 Participants
- 146 Avg Tweets/Hour
- 5 Avg Tweets/Participant


https://www.symplur.com/healthcare-hashtags/ASCO18/analytics
#ASCO18 Featured Voices

@ASCO
#ASCO18

www.mascc.org/meeting
Social media and the researcher

Apart from professional communication... how can we use social media in supportive care?
The largest focus group in the world is found on-line
The Needs of Women Treated for Ovarian Cancer: Results From a #gyncsm Twitter Chat

Teresa Hagan Thomas
Karin Nauth-Shelley
Michael A. Thompson
Deanna J. Attai
Matthew S. Katz
David Graham
Dee Sparacio
Christina Lizaso
Audun Utengen
Don S. Dixon

Methods
To better understand the issues faced by women with ovarian cancer, we conducted a public Twitter chat in collaboration with gynecologic cancer social media (#gyncsm). Both quantitative and qualitative analyses were performed.

Conclusions
Themes derived from the Twitter chat revealed the unique experiences of individuals with ovarian cancer after treatment, including a heightened sense of vulnerability. Understanding these themes represents an opportunity for clinicians to better understand and address the needs of this patient community. (J Patient Cent Res Rev. 2018;5:149-157.)
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

(J Patient Cent Res Rev. 2018;5:149-157.)
<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1 A. What does survivorship mean to you? What is it to be an ovarian cancer survivor?</td>
</tr>
<tr>
<td>B. Do you use the term survivor? If not, what term do you prefer?</td>
</tr>
<tr>
<td>T2 What needs and concerns did you have when you were first diagnosed and treated? How were they addressed? What was lacking?</td>
</tr>
<tr>
<td>T3 How was the topic of recurrence addressed with you? Did you find it helpful or not helpful at the time - and now looking back?</td>
</tr>
<tr>
<td>T4 A. What issues - physical, emotional or other - currently give you the most difficulty?</td>
</tr>
<tr>
<td>B. What are your needs and concerns now? (After recurrence or As you live past diagnosis and initial treatment of ovarian cancer)</td>
</tr>
<tr>
<td>T5 What actions have you taken in living past your ovarian cancer diagnosis and treatment? Were you given a Survivorship Care Plan?</td>
</tr>
</tbody>
</table>

Tweetchat Focus Group (Hagan, 2018)
Survivorship in Ovarian Cancer

377 Unique Tweets

43 participants in the 1 hour during tweetchat (ave 8.6 tweets/person)

60 added thoughts in the following 24 hours

What did we learn?

There is a lack of support during transitions

Physical and emotional needs were unmet by clinicians

Patients navigated independently

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


@drdonsdizon
The Needs of Women Treated for Ovarian Cancer: Results From a #gyncsm Twitter Chat

Patient-Friendly Recap

- Due to high rates of recurrence, patients with ovarian cancer require long-term supportive health care.
- The authors recruited ovarian cancer survivors to participate in a moderated Twitter chat to discuss their experiences after treatment.
- Contrary to the Commission on Cancer’s recommendations, few survivors receive detailed care plans when their treatment ends.
- Survivors expressed a desire for health providers to proactively offer resources that could help address future emotional and physical needs.

(J Patient Cent Res Rev. 2018;5:149-157.)
Rare Cancers and Social Media: Analysis of Twitter Metrics in the First 2 Years of a Rare-Disease Community for Myeloproliferative Neoplasms on Social Media—#MPNSM

Naveen Pemmaraju¹ · Audun Utengen² · Vikas Gupta³ · Jean-Jacques Kiladjian⁴ · Ruben Mesa⁵ · Michael A. Thompson⁶

Table 1 Key Twitter metrics over the two study periods for #MPNSM

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Tweets</td>
<td>3462</td>
<td>5627</td>
</tr>
<tr>
<td>2 Users</td>
<td>442</td>
<td>604</td>
</tr>
<tr>
<td>3 Impressions</td>
<td>7,159,253</td>
<td>12,436,302</td>
</tr>
<tr>
<td>4 Hyperlinks included</td>
<td>1977</td>
<td>3537</td>
</tr>
<tr>
<td>5 Mentions</td>
<td>2693</td>
<td>4812</td>
</tr>
<tr>
<td>6 Photographs included</td>
<td>764</td>
<td>1014</td>
</tr>
<tr>
<td>7 Retweets</td>
<td>1989</td>
<td>3456</td>
</tr>
</tbody>
</table>

Table 2 Top ten most commonly tweeted terms using #MPNSM over two time periods

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mpn</td>
<td>613</td>
<td>1638</td>
</tr>
<tr>
<td>2 patients</td>
<td>384</td>
<td>1046</td>
</tr>
<tr>
<td>3 myelofibrosis</td>
<td>327</td>
<td>821</td>
</tr>
<tr>
<td>4 pts</td>
<td>248</td>
<td>582</td>
</tr>
<tr>
<td>5 myeloproliferative</td>
<td>245</td>
<td>536</td>
</tr>
<tr>
<td>6 jak</td>
<td>231</td>
<td>536</td>
</tr>
<tr>
<td>7 mpns</td>
<td>213</td>
<td>470</td>
</tr>
<tr>
<td>8 neoplasms</td>
<td>187</td>
<td>440</td>
</tr>
<tr>
<td>9 session</td>
<td>183</td>
<td>434</td>
</tr>
<tr>
<td>10 social</td>
<td>178</td>
<td>424</td>
</tr>
</tbody>
</table>
Rare Cancers and Social Media: Analysis of Twitter Metrics in the First 2 Years of a Rare-Disease Community for Myeloproliferative Neoplasms on Social Media—#MPNSM

Confirms the feasibility of growing and maintaining a twitter community for rare cancers
Patients are tweeting about their symptoms

Analysis of >146,000 tweets in 2014
Patients broadcast their feelings. Twitter can be used to gauge satisfaction and discover unmet needs.

Analysis of >146,000 tweets in 2014

**Table 2** - Computed average word happiness value ($h_{avg}$) for each cancer diagnosis and summary of major word shifts responsible for sentiment value.

<table>
<thead>
<tr>
<th>Cancer type</th>
<th>Tweetset (n)</th>
<th>$h_{avg}$</th>
<th>Increased frequency words</th>
<th>Decreased frequency words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thyroid</td>
<td>5673</td>
<td>6.1635</td>
<td>&quot;Blessed,&quot; &quot;thank,&quot; &quot;Christmas,&quot; &quot;love&quot;</td>
<td>Expletives, &quot;not,&quot; &quot;no,&quot; &quot;lost,&quot; &quot;die&quot;</td>
</tr>
<tr>
<td>Breast</td>
<td>72,528</td>
<td>6.1485</td>
<td>&quot;Happy,&quot; &quot;love,&quot; &quot;welcome&quot;</td>
<td>Expletives, &quot;hate,&quot; &quot;never&quot;</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>5143</td>
<td>6.0977</td>
<td>&quot;God,&quot; &quot;win,&quot; &quot;photo,&quot; &quot;proud,&quot; &quot;miss&quot;</td>
<td>Not, &quot;don,&quot; &quot;happy&quot;</td>
</tr>
<tr>
<td>Endometrial</td>
<td>4939</td>
<td>6.0913</td>
<td>&quot;Love,&quot; &quot;sorry,&quot; &quot;surgery,&quot; &quot;pain&quot;</td>
<td>Expletives, &quot;hate,&quot; &quot;don't&quot;</td>
</tr>
<tr>
<td>Bladder</td>
<td>1579</td>
<td>6.0843</td>
<td>&quot;Good,&quot; &quot;great,&quot; &quot;win&quot;</td>
<td>&quot;Love,&quot; &quot;don't,&quot; &quot;hate&quot;</td>
</tr>
<tr>
<td>Melanoma</td>
<td>13,418</td>
<td>6.0611</td>
<td>&quot;Love,&quot; &quot;bloody,&quot; &quot;hell&quot;</td>
<td>Happy, &quot;great,&quot; &quot;good&quot;</td>
</tr>
<tr>
<td>Prostate</td>
<td>16,361</td>
<td>6.0223</td>
<td>&quot;Good,&quot; &quot;great,&quot; &quot;nice,&quot; expletives</td>
<td>&quot;Love,&quot; &quot;happy&quot;</td>
</tr>
<tr>
<td>Colorectal</td>
<td>9682</td>
<td>6.0149</td>
<td>&quot;Lol,&quot; &quot;good,&quot; &quot;not,&quot; &quot;no,&quot; &quot;hell&quot;</td>
<td>Happy, &quot;love,&quot; &quot;beautiful,&quot; &quot;welcome&quot;</td>
</tr>
<tr>
<td>Leukemia</td>
<td>6042</td>
<td>5.9730</td>
<td>&quot;Smoke,&quot; &quot;hate,&quot; &quot;bored,&quot; &quot;haha&quot;</td>
<td>Happy, &quot;beautiful&quot;</td>
</tr>
<tr>
<td>Pancreas</td>
<td>5117</td>
<td>5.8766</td>
<td>Expletives, &quot;don't,&quot; &quot;bad&quot;</td>
<td>Happy, &quot;great,&quot; &quot;thanks&quot;</td>
</tr>
<tr>
<td>Lung</td>
<td>38,379</td>
<td>5.8733</td>
<td>Expletives, &quot;don't,&quot; &quot;hate,&quot; &quot;mean&quot;</td>
<td>&quot;Love,&quot; &quot;happy,&quot; &quot;great,&quot; &quot;thanks&quot;</td>
</tr>
<tr>
<td>Kidney</td>
<td>7245</td>
<td>5.8464</td>
<td>Expletives, &quot;don't,&quot; &quot;hospital,&quot; &quot;surgery&quot;</td>
<td>Happy, &quot;lol,&quot; &quot;thank&quot;</td>
</tr>
</tbody>
</table>

Positive sentiment words are displayed in bold, whereas negative sentiment words are displayed in italics. In general, as the $h_{avg}$ increases, the data set contains increased frequency of positive words and decreased frequency of negative words.

See supplemental information for word shift figures.
Yes

Patients with cancer use Twitter as a tool to share medical information.
Twitter and disease detection?

Investigators have developed a tool to detect influenza outbreaks in real time via analysis of twitter data.
Effective surveillance and predictive mapping of mosquito-borne diseases using social media

Vinay Kumar Jain*, Shishir Kumar
Department of Computer Science & Engineering, Jabalpur University of Engineering &Guna (M.P.), India

Fig. 7. Predicted surface using Kernel density estimation and Twitter features within India.

Fig. 11. Density plots of mosquito-borne disease symptoms.
Health-related social media activities is on the rise

Disease-Specific Hashtags for Online Communication About Cancer Care

Matthew S. Katz, MD; Audun Utengen, MBA; Patricia F. Anderson, MILS; Michael A. Thompson, MD, PhD; Deanna J. Attai, MD; Claire Johnston, BA; Don S. Dizon, MD

However, there remains a paucity of literature examining the value and direct application of social media in oncology.
Examples of gaps in knowledge

• How is the participative online environment affecting public health and clinical care as it relates to cancer?

• Can we leverage it to effectively exchange meaningful information about a subject as complex as cancer?

• Can we harness it to influence cancer-related health behaviors and clinical outcomes?
Potential to integrate big data to improve precision oncology

**Genetics**
- Germline
- Somatic
- Epigenetic

**Clinical**
- Demographics
- Pathology
- Stage
- Family History
- Labs/Imaging
- Treatments

**Wearable**
- Steps
- Sleep patterns
- Heart Rate
- Blood Pressure
- Biophysical sensors

**Social Media**
- Beliefs
- Attitudes
- Social norms
- Sentiment
- Engagement
- Risk factors
- Community

---

Sedrak MS ASCO Ed Book 2018
Should I start engaging in social media?
Social media isn’t worth your time unless

- It complements or improves your clinical practice of medicine
- Maintains or builds trust between you and your patients
Preparing talk for #MASCC18.
Welcome your thoughts and references for evidence of impact of twitter on cancer care / enhancing communication in #supportivemecare.
#supponc
masccmeeting.org/2018/Pages/default.aspx

MASCC/ISO0 2018
ANNUAL MEETING
VIENNA
28-30 JUNE 2018
Supportive Care Makes Excellent Cancer Care Possible #Mascc18

Top Navigation

Register today to save savings available until 18 June 2018
www.mascc.org/meeting

Richard Simcock @BreastDocUK · May 18
Relying to @dcbsteer @WilliamDale_MD and 7 others

Twitter is only useful in cancer care and communication if:
-You are interested in the patient voice
-You are interested in the wider world outside your clinic / specialty
-You are open to new ideas and views
-You are wary of fake news

CLL_Fighters @CLL_Fighters · May 21

Twitter empowers patients like myself who are locked into a local medical mindset

It’s massively encouraging to learn from some of the brightest minds fighting #cancer around the world 🌍
Richard Simcock @BreastDocUK · May 18

Replying to @drcbsteer @WilliamDale_MD and 7 others

Twitter is only useful in cancer care and communication if:
- You are interested in the patient voice
- You are interested in the wider world outside your clinic / specialty
- You are open to new ideas and views
- You are wary of fake news

1 2 11

CLL_Fighters 🏳️‍🌈 @CLL_Fighters · May 21

Twitter empowers patients like myself who are locked into a local medical mindset

It’s massively encouraging to learn from some of the brightest minds fighting cancer around the world 🌍
The Need for “Health Twitteracy” in a Postfactual World

Kristine Sørensen, PhD

![Tweet Activity on #healthliteracy](image)

Figure 1. Distribution of #healthliteracy tweets between April 1, 2011 and April 15, 2014. Created from data on Symplur.com.
In an era of global “Twiplomacy”....... 

“....health literacy, in particular, “Health Twitteracy” and eHealth literacy.....

....... defined as the ability to seek, find, understand and appraise health information from electronic sources and apply the knowledge gained to addressing or solving a health problem.....

......will be required sooner rather than later.
2019
21-23 June
SAN FRANCISCO
SUPPORTIVE CARE MAKES EXCELLENT CANCER CARE POSSIBLE

SAVE THE DATE

MASCC/ISOO
Annual Meeting on Supportive Care in Cancer
www.mascc.org/meeting

Follow us on Twitter: @CancerCareMASCC
#MASCC19