

Digital Citizenship and Online Identity for Healthcare Professionals and Researchers



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I believe that social media is an incredible opportunity to meet, connect, converse, disseminate, and collaborate in ways we never thought possible, and [that the biggest risk of social media in health care is not using it at all](#). I write this guide from the perspective of a physician and researcher, but I think that the learnings generalize to a much larger group of individuals across the healthcare and research enterprise.

This resource began as a [guide for the social media training that I conducted at the 2014 Robert Wood Johnson Foundation Clinical Scholars Program National Meeting](#). I have updated and expanded the content to include the important concept of digital citizenship, which was inspired by a [lecture I gave to third year medical students at Michigan Medicine](#). I will iteratively update and add more topics and content to the guide with time.

Life as a Digital Citizen

We are all digital citizens and we don't really have a choice in the matter.

Do you carry a cellphone? Do you use the internet? Do you use Google for search or gmail for email? Do you have a Facebook account? If you answered yes to any of these questions, you are a digital citizen. You may ask, what is a digital citizen? According to [Wikipedia](#):

"a digital citizen refers to a person utilizing information technology (IT) in order to engage in society, politics, and government participation. K. Mossberger, et al. define digital citizens as "those who use the Internet regularly and effectively"

The bottom line is that technology is intimately linked to our existence as human beings. Therefore, it's critical that we own up to that fact, and acknowledge the importance of understanding how to use it in a safe, ethical, and legal manner. And if you can learn how to leverage technology, you have an incredible opportunity to connect and collaborate within a global network. One critical skill for a digital citizen is to learn about how to use and participate in social media.

Misconceptions about Social Media

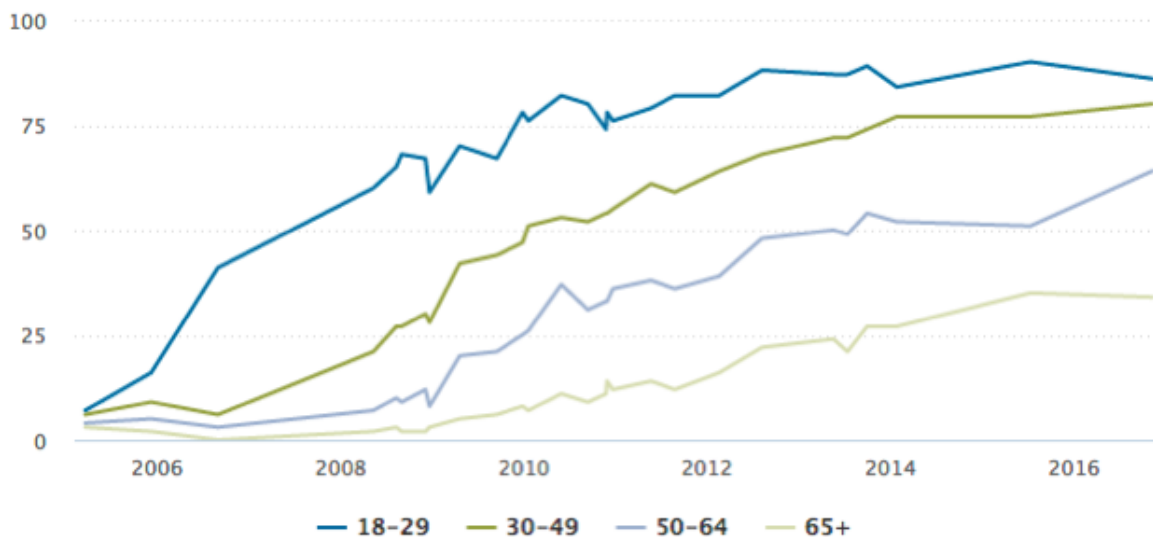
A False Dichotomy: Social Media vs. Your Career?

I once submitted a survey question to medical colleagues about the use of social media in research. Here was the question: "Are there any other uses of social media in clinical medicine or research that you want to learn about?" This was one of the responses to that question:

"No. This is a complete waste of time. This is not real research. The fad will die out soon."

I am pretty sure that it's not a fad. According to the Pew Internet Survey, social media use has been increasing over the last decade, with 69% of US adults reporting that they use some type of social media. [This graph shows the breakdown of social media use by age.](#)

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



Social media use is increasing across all age groups, and is clearly on its way to becoming nearly universal for younger cohorts.

However, there clearly is a lot of skepticism about social media among healthcare professionals and researchers.

Did you see the article in the Guardian written by an anonymous PhD student who shared his/her perspective on social media? The article was titled: "[I'm a serious academic, not a professional Instagrammer.](#)"

Or have you ever heard of a "[Science Kardashian](#)"? It's a definition that was invented by a paper that mapped total citations against the number of Twitter followers for a sample of research scientists on Twitter. The author labeled individuals who had a higher number of followers relative to the number of citations as Science Kardashians, stating: "if your K-index gets above 5, then it's time to get off Twitter and write those papers". The quality of the paper was questionable (the author selected "a randomish selection of 40 scientists"), and unfortunately the author set up a false dichotomy be-

tween scholarly work and social media. Participation in science and in social media is NOT a zero sum game. And it's becoming clear that in this current political climate, ["We Need Scientists On Social Media, Now More Than Ever"](#)

So what's a healthcare provider and/or scientist to do? Do you put your head in the sand and reminisce about the good old days?



Or do you dip your toes in the water? The issue is that you really don't have a choice.

The New Reality for Healthcare Providers

You have a Public Presence Whether You Like it or Not

Download Bryan Vartabedian's book, [The Public Physician](#). It's a great introduction to social media and he intelligently articulates the reality of being a physician in this networked age.

"In many ways, being a doctor used to be much easier. How we were seen by patients was limited to a fifteen-minute encounter under the glare of fluorescent lights. We kept our healthy therapeutic distance from those we treated. Our white coat hid most everything.

Beyond the walls of the clinic, the AMA and the public affairs office of our institution decided how the world would see us. Our pictures and our quotes were carefully chosen to make us look a certain way. The media played a role in shaping how we were seen.

But something happened on the way to the clinic. The Internet appeared."

And so did social media!

He asked the question:

Is it possible not to be a public physician?

And the answer is:

Probably not... Our public presence is inevitable...You don't have to say anything or do anything in order to be a public physician. The patients will do it for you. The moment you treat someone, it's likely you'll become part of the public dialogue.

Have you heard about [the doctors whose services were rated just like restaurants on Yelp](#)? Accept the fact that if you don't shape your narrative, your public profile will be created for you.

Reasons for Healthcare Providers to Participate in Social Media

Why would a physician or researcher ever [want to be on social media](#)?

- You can receive real-time information about topics relevant to your clinical field and research endeavors, disseminate your work, and network as a professional.
- [You can use social media to flip the clinic visit](#) and start the conversation in a different place like @SeattleMamaDoc
- [You can stamp out misperceptions about vaccines](#) like @DoctorNatasha
- [You can share health information through the Health Education Channel](#) called YouTube
- You can witness how [social media has been indispensable to physicians in Syria](#), who are able to consult a global community of specialists and experienced physicians through an application called [Figure 1](#), and who use Skype and SMS to provide [real-time medical training through covert medical networks](#)
- **You can lurk, listen, and learn from the patients and caregivers because that is where they are congregating online.** It's the place where patients are creating [novel mobile health innovations](#), helping to [diagnose and identify communities of rare disease patients](#), and [finding the peer support that is](#)

[critical for survival](#). All medical trainees should as part of their education read the blog of @AdamsLisa, who bravely [shared her story of metastatic breast cancer online through social media](#), and read about the [Kellergate](#) controversy, which was best summarized by [this tweet from Ken Jennings](#).

How Scientists Use Social Media

What Social Networks and for What Purpose?

In the research world, influential journals like Nature are [conducting surveys about use of social media among scientists](#) who “regularly visit” social media sites. Check out the bottom 3 figures of [this interesting graph](#). Here are some takeaways:

- Individuals did NOT use Facebook for professional reasons
- Individuals used LinkedIn in case they needed to be contacted; It’s like a directory!
- Individuals used Twitter to post work content, share links to authored content, actively discuss and comment on research and follow discussion; It’s a conversation space!

The Value of Communicating about Your Research Online



The Other Social Media Donut

Scientists want their work to have impact, and the traditional measure of impact is the scientific citation. The more cited the work, the greater its importance. But there is another set of metrics called [Altmetrics](#), that journals are starting to measure and report. If a work is truly thought to be influential, the premise is that a wider audience of individuals will be discussing its implications across multiple dimensions of the internet, besides the official scientific journals. Many journals therefore now display another social media donut, the Altmetrics donut, for their published journal articles.

Altmetrics is an alternative metric for scholarly work that [accounts for the following](#):

- **Attention:** *This class of metrics can indicate how many people have been exposed to and engaged with a scholarly output. Examples of this include mentions in the news, blogs, and on Twitter; article pageviews and downloads; GitHub repository watchers.*
- **Dissemination:** *These metrics (and the underlying mentions) can help you understand where and why a piece of research is being discussed and shared, both among other scholars and in the public sphere. Examples of this would include coverage in the news; social sharing and blog features.*
- **Influence and Impact:** *Some of the data gathered via altmetrics can signal that research is changing a field of study, the public's health, or having any other number of tangible effects upon larger society. Examples of this include references in public policy documents; or commentary from experts and practitioners.*

Here is [a complete list of the data sources](#) that Altmetrics has historically tracked over the years.

Harnessing Social Media for Research

Social Media as a Research Tool

Finally, social media not only holds promise as a tool for dissemination of research, but also as a tool for doing research. Read our article "[Harnessing Social Media for Child Health Research Pediatric Research 2.0](#)" to contemplate how social media can be used more broadly in research.

The How To Get Started Guide

First accept that your identity is already defined by the Internet

What's the first thing you do before or after meeting someone? You google them, right? Your first impression of them is created by the internet, NOT the first conversation or face-to-face meeting. Recognize that this applies to you as well. Individuals are forming their impression of you through the internet. When you google yourself, what do you see? Do you want to be defined by the scattered pieces of you that exist all over the internet (i.e. your high school prom photos, or the photo your friend tagged you in on Facebook, or your [one misdeed as a person](#))? Will you shape your identity or will you let someone else do it for you?

Don't be overwhelmed by social media

People assume that social media is an all or nothing phenomenon, but it's not! Have you heard of [Forrester Research's social media ladder](#)? It starts with establishing an online presence and listening and lurking. You can then determine how far you want to go up the ladder. Some individuals may never reach the level of content creation,

and that's okay. Decide at what level you wish to participate; you can go up and down the ladder anytime.

You Can't Separate your Private and Public Self as a Physician, so Use your Social Media Etiquette

When you say something on social media, remember HIPAA and the Mayo Clinic 12 word social media policy: [Don't Lie, Don't Pry, Don't Cheat, Can't Delete, Don't Steal, Don't Reveal](#). When you say anything on social media assume that you are broadcasting it to the world on a megaphone.

Read the JAMA Viewpoint titled [Social Media and Physicians' Online Identity Crisis](#) by DeCamp, Koenig, and Chisholm. Many physician bodies have recommended that doctors "separate their professional and personal identities", but they describe how this is "operationally impossible, lacking in agreement among active physician social media users, inconsistent with the concept of professional identity, and potentially harmful to physicians and patients." Basically, you can't separate out the public and private you; they are pretty much one and the same.

They therefore conclude with this simple advice:

"When a physician asks, "Should I post this on social media?" the answer does not depend on whether the content is professional or personal but instead depends on whether it is appropriate for a physician in a public space."

Listen to this [podcast about what happened to Lindsay Stone](#), to understand that you have no control over what happens to you on the internet. I strongly suggest that you use social media as a **professional tool** first and foremost.

Create Your Initial Online Presence

Unless you establish your presence online, it's debatable whether you exist. Make your mark on the internet. It may seem daunting, but you can take two simple steps to start the process:

1. **Create a LinkedIn profile.** LinkedIn is the new age business card/curriculum vita and can provide the internet with your initial online professional identity.
2. **Join Twitter.** Rates of adoption for Twitter (24%) are not as high as for Facebook (79%), but Twitter is a place where a lot of professionals participate in real-time communication and debate, including academics, researchers, healthcare providers, journalists, and of course, politicians.

Here are some extra links providing more information about the ROI of LinkedIn for physicians and researchers:

- [Why I recommend LinkedIn to physicians](#), Kevin Pho, MD
- [Why Doctors Should Use LinkedIn](#), Bryan Vartabedian, MD

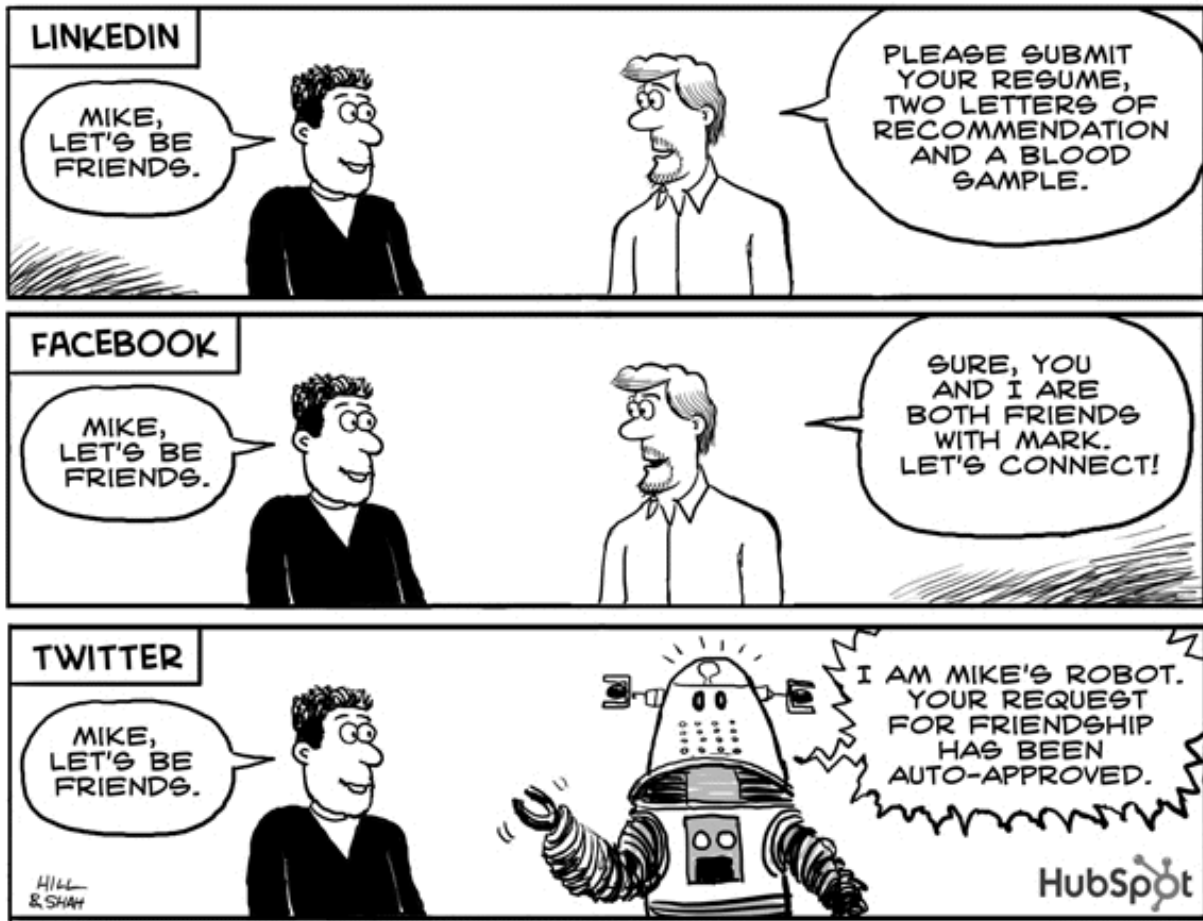
Use the Appropriate Language of Social Media in your Communications.

This is a great distillation of how the language of social media differs across the social media platforms [from Douglas Wray](#):



This cartoon nails it as well:

MAKING FRIENDS IN SOCIAL MEDIA



Just as there are rules for creating a curriculum vitae or a research biosketch, there are some guidelines for developing your online profile for the different platforms. LinkedIn is a more professional and formal network for communication about professional milestones and job skills. Here are some useful and practical tips for healthcare providers and scientists:

- [LinkedIn tips for scientists](#), Nature
- [How to write the best linked headline](#)

Twitter is a far more creative medium as to relates to your bio.

- Read this article: [Are you really a ninja? How to rock your twitter bio as hard as Hillary Clinton.](#)
- Upload a picture of yourself so that [you aren't a troll](#)
- Be yourself, and be professional. Go beyond the profile on your institution's website and reveal what you are passionate about, and why people might want to connect with you.
- Include hashtags and/or Twitter handles for relevant organizations you are affiliated with.
- However, recognize that you can take this a little too far: @robdelaney's profile reads: "Mother. Wife. Sister. Human. Warrior. Falcon. Yardstick. Turban. Cabbage"
- Use the link for your LinkedIn account on your Twitter profile, or your personal website like if you have one, so that others can learn more about you.
- For more information about communication across other networks read Gary Vaynerchuk's book [Jab, Jab, Jab, Right Hook: How to Tell Your Story in a Noisy Social World](#)

More about Twitter

Twitter Is A Tool, Not A Lifestyle

Ok, it's a lifestyle for me, but not for the rest of you. People assume that social media is an all or nothing phenomenon, but it's not! Don't give up on Twitter before you can even begin to understand its possibilities. The ROI on Twitter is long and you have to be patient. It takes time to get engaged and see the benefits. Drop in, and drop out, and then drop in again. Open an account, follow some interesting people, listen, and watch. Do not listen to the naysayers.

The Social Media Ladder

There are multiple levels of participation with social media. Have you heard of [Forrester Research's social media ladder](#)? There are the inactives, the spectators, the joiners, the collectors, the critics, the conversationalists, and finally the creators. You can start as an inactive and try to listen, and then see if how far you want to go up the ladder. Some individuals may never reach the level of content creation, and that's okay. Don't bypass social media altogether, start small and listen to what's happening in the world. Then decide at what level you wish to participate. You can go up and down the ladder anytime; it's all in your hands! Don't see it as a chore, see it as an opportunity!

Dos and Don'ts on Twitter

Dos: Be yourself. Listen. Participate in a conversation. It's about connecting, not broadcasting or bragging. Don'ts: When you say something on Twitter you are broadcasting it to the world so be discreet. Remember HIPAA and the [Mayo 12 word social media policy](#): Don't Lie, Don't Pry, Don't Cheat, Can't Delete, Don't Steal, Don't Reveal.

The Basic Mechanics of Tweeting

What can you do on Twitter?

- [Post](#) your first tweet.
- [Post](#) a photo in a tweet.
- [Post a link](#) to an interesting article in a tweet.
- Use a [hashtag](#) in a tweet.

Read More about the Hashtag

Read about [how the hashtag was born](#), to "[improve contextualization, content filtering and exploratory serendipity](#)" or put more simply, to improve the "eavesdropping" experience on Twitter. Hashtags can have [multiple meanings](#): topics, groups, events, and even humor. [@susanorlean](#) explains the "[semiology and phenomenology of hashtag-gery](#)" and it's also been called "[a fledgling art form](#)." Hashtags are user-generated, so you don't ask for permission to use one. Just create one, and see if it catches on. However if you want to tap into health communities of interest related to your research,

check out [the Healthcare Hashtag Project](#). There you will find hashtags, tweetchats, and influencers on health topics. [#hscsm](#) is a popular hashtag which stands for health-care social media.

Interact with others on Twitter

-The more connected you are, the better the experience on Twitter. [Follow](#) other individuals; once you do this you will be able to see all of their tweets on your feed. If you follow someone, they may follow you back. Following in Twitter is asymmetric so someone that you follow doesn't have to follow you back and vice versa. @SteveButtry has [nice tips on how to build followers](#). Just remember, "Give more than you ask for."

- [Retweet](#) someone else's tweet.

- [Reply to](#) someone else's tweet.

- [Mention](#) someone in a tweet using their twitter handle and they will see it.

- Give a H/T ([hat tip](#)) to acknowledge someone as a source when you tweet something of interest.

- [Direct message](#) someone, which is a private messaging channel that others won't see.

- [Like](#) a tweet; it's like a form of bookmarking. Is a like or a retweet an endorsement? The answer seems to be [yes for organizations like NPR and AP](#), but not at NY-Times. The [FDA concurs and is cracking down on companies that "like" or tweet uses of medications that are not FDA-approved](#).

More Advanced Twitter

-Create a [Twitter List](#) which is a curated group of Twitter accounts, which allows you to follow tweets from specific individuals more easily. You can snoop in people's Twitter lists to see who they follow; it's sort of like the new age rolodex!

-If you want to become a Twitter ninja you some additional tools! Some of my favorite ones include:

-The Buffer [Chrome extension](#) for tweeting from multiple accounts and autoscheduling tweets

-To help with workflow, use [Bulk Buffer](#) to bulk upload your tweets in one fell swoop to Buffer.

-Have you heard of [tweetstorming](#)? It's a controversial practice. If you want to try it, you should use this amazing tool from [@davewiner](#) called [Little Porkchop](#) which will divide paragraphs of text into a series of numbered tweets & can add hashtags and links!

-I use [Tweetdeck](#) because a great dashboard for viewing multiple Twitter feeds of people you follow, lists, and hashtags.

-On my iPhone I use [Echofon](#) and [Linky](#) to tweet.

Advanced Twitter

-Understand the Twitter Iceberg. [Twitter is way more than 140 characters](#); @craigmod explains why much of the data associated with a tweet lies under the surface like an iceberg.

-Be aware of the very important topic of algorithmic filtering. This post by @zeynep, [What Happens to #Ferguson Affects Ferguson](#), is a #mustread about the consequences of algorithmic filtering. At the time that this article was written, Twitter placed posts in chronologic order, but it now also uses algorithmic filtering to determine what to show on your timeline.

More to come!

Yours Truly,

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