

# Getting the Word Out: Developing a Multichannel Social Media Strategy for Publication-Based Initiatives



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## Abstract

### OBJECTIVE

The development and implementation of a multifaceted social media strategy that incorporates a variety of outlets to promote publication awareness and evidence dissemination.

### RESEARCH DESIGN AND METHODS

Of 40 journals initially contacted, only 3 would approve the use of a banner advertisement to raise publication awareness, underscoring the need for a novel approach to enhance publication recognition. An evaluation of publication activities disseminated through multiple channels including Facebook, Twitter, LinkedIn, and a variety of healthcare social media outlets was undertaken, utilizing a customized social media "listening" platform.

### RESULTS

Activities specific to diabetes and women's health increased awareness (>0.5% change) of total yearly discussion when authors and sponsors facilitated discussion through social media channels. Greatest awareness was driven through Twitter, followed by Facebook and LinkedIn (>10% variance over baseline). Preliminary analysis of other therapeutic areas including cardiovascular disease, rheumatology and pain, neurology, and psychiatry suggest a similar impact of social media in generating publication awareness.

### CONCLUSIONS

Increasing consumer dependence upon social media to learn about disease states, treatment options, and healthcare decisions requires industry stakeholders to adapt by collaborating and communicating through multiple social networks. This layered approach of disseminating information across social networks reveals a positive correlation between publication promotion through social media channels and relative awareness.

## Background

- Traditional data dissemination strategies in healthcare rely upon consumers of health information pulling relevant knowledge from the current literature base, often at considerable cost or time
- Conventional strategies for data dissemination include journal articles, conference abstracts, textbooks, and product guides
- Though these sources are searchable, locating the correct information is contingent upon the knowledge or research skills of dedicated, informed, and savvy researchers<sup>1</sup>
- The expansion of social media utilization in the healthcare industry allows for novel approaches by which medical publications are readily available to consumers via a variety of social media networks
- Some journals, including the *New England Journal of Medicine*, *BMJ*, *JAMA*, and *Journal of Clinical Oncology*, maintain their own social media outlets. These outlets may be official blogs or Facebook pages that serve to disseminate the journals' publications to a wider, more passive audience<sup>2</sup>
- However, many journals and academic centers do not maintain a social media presence, despite strong evidence to suggest that doing so would broaden the dissemination and impact of their publications<sup>2</sup>
- Of 40 journals interviewed, only 3 (7.5%) would permit the use of sponsored banner advertisements to draw attention to selected publications, underscoring a wide variability between venues with a social media voice and those without
- A 2012 study on interactive journals found that only 9% of those surveyed with an impact factor >4.0 maintained a blog, demonstrating the lack of social media being used in medical publications and variability between therapeutic areas (Table 1)<sup>3</sup>

**Table 1. The Use of Blogs, Commenting, and Sharing Features Among General Internal Medicine and Internal Medicine Subspecialty Journals**

Specialty	Number of Journals With Impact Factor ≥4.0	Blogs (%)	Commenting Feature (%)	Sharing Feature (%)
Internal Medicine	30	43.3	30.0	96.7
Hematology/Oncology	47	2.0	4.2	91.4
Cardiology	28	3.5	21.4	96.4
Gastroenterology	14	14.2	0.0	85.7
Nephrology	7	14.0	0.0	100.0
Rheumatology/Immunology/Allergy	26	3.8	7.6	96.0
Endocrinology	20	0.0	0.0	100.0
Pulmonary/Critical Care	9	0.0	11.0	100.0
Infectious Diseases	18	11.1	11.1	94.4

Adapted from Nair V, Khan S, Jhaveri KD. Interactive journals and the future of medical publications. *Am J Med.* 2012;125(10):1038–1042.

- Traditional metrics for quantifying a publication's impact and relative citation frequency may be ill suited to a dynamic social media sphere
- Citation frequency—the number of times an article is cited in peer-reviewed outlets—is a metric used by PubMed and other citation generators; however, this is a lagging indicator of publication impact, as citations can take up to 2 years to accumulate to a noteworthy level while articles that refer an original work move to print<sup>4</sup>
- The use of citations as a metric of relative impact also relies almost exclusively on peer-reviewed journal articles catalogued through an established database system, which may marginalize relevant datasets, book chapters, clinical guidelines, case reports, and articles in lesser-known journals
- Furthermore, the rapid increase in the number of journals currently published in the last decade does not correlate to an increase in the average time scientists or clinicians spend reading. The increase in journal options makes the difficult task of drawing the audience's attention to a particular publication in a crowded scientific forum especially challenging<sup>5</sup>

## Purpose

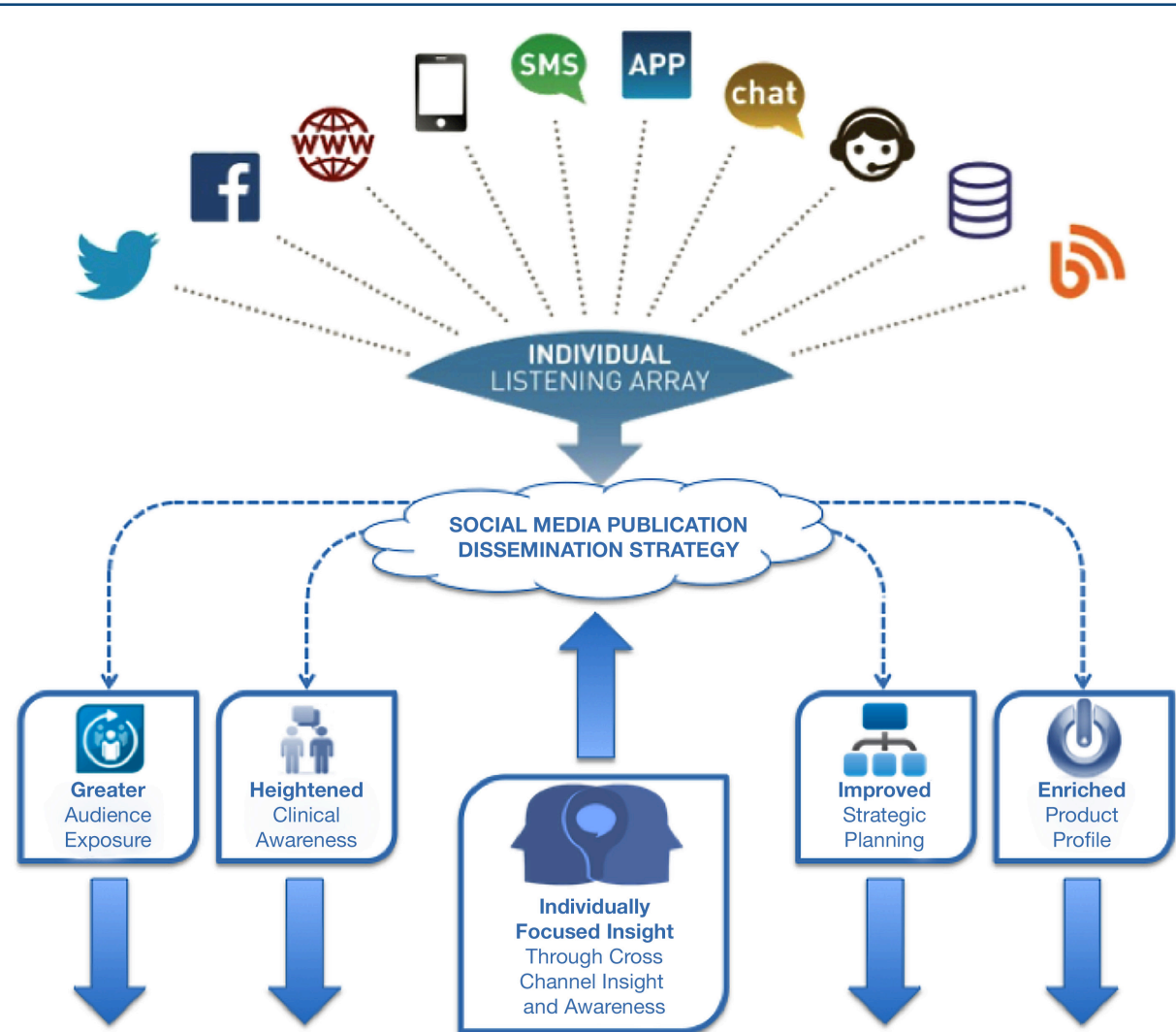
- The Medicine Group sought to combine practices employed by medical communication agencies, public relations firms, medical journals and societies, and pharmaceutical and biotechnology companies in order to develop a novel, multilayered approach to disseminating medical publications across a variety of social media outlets
- A multilayered social media search strategy incorporating Twitter, Facebook, LinkedIn, and blogging sites was designed and implemented with the support of a company-wide standard operating procedure, with the stated aim of increasing the awareness of new medical publications across a variety of therapeutic areas
- To be successful and impactful, the social media strategy must employ controls or feedback mechanisms to quantify the success of the initiative
- The Medicine Group sought to determine the most accurate metrics for measuring the uptake of new publications

## Strategic Approach

The Medicine Group has created a multilayered strategic approach for the development of a social media plan to assist in the awareness of specific publication plan activities (Figure 1).

- Utilize a social media blitz surrounding specific publications across a variety of channels, starting with Twitter and followed by posts on Facebook, LinkedIn, and smaller social media sites tailored specifically to patients or physicians
- The social media posts link to the publication hosted on the journal's Web site and to supplementary Web pages that complement the activity, including video interviews, blogs, and other salient publications
- Author interviews on YouTube, Vimeo, or posted on the journal's Web site allow researchers to discuss the rationale, methods, and findings of their research quickly and in context
- All social media outlets are interlinked, a feature available on most services that allows a Facebook post to appear simultaneously on Twitter and LinkedIn. This interlinking enables maximal exposure of single publication activities
- Blog posts offer another venue for publication engagement and allow results to be summarized quickly and in accessible language
- This plan is contingent upon precise tracking of publications by the agency. Data suggest<sup>2</sup> an increase in the number of Twitter mentions even before an article is released; this should be exploited to raise awareness of upcoming publications and requires detailed information on when the article will first appear online

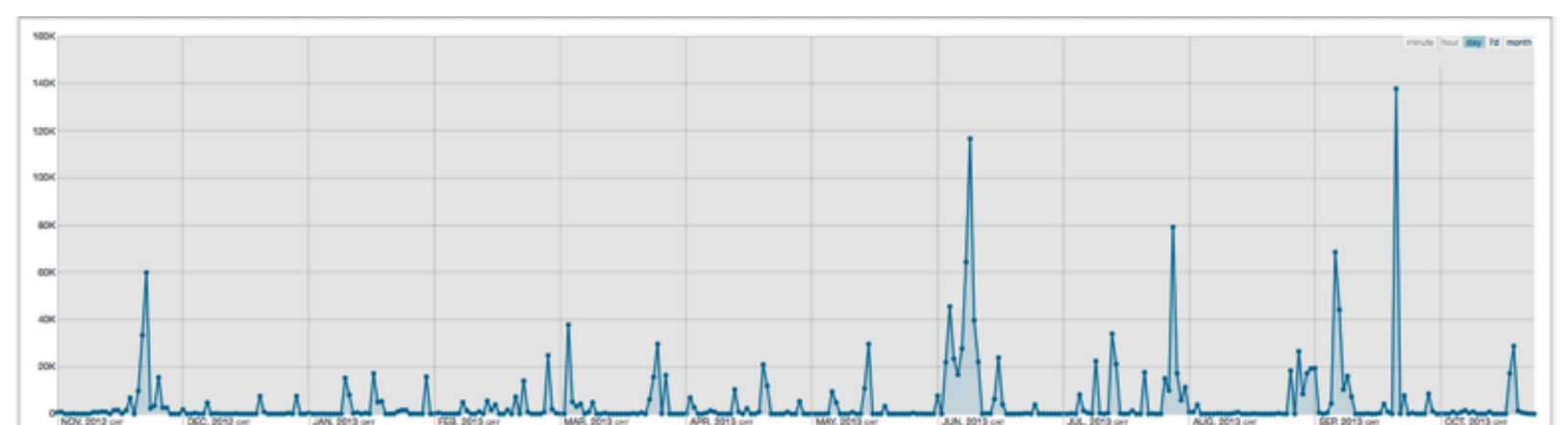
**Figure 1. Multilayered Social Media Publication Dissemination Strategy**



## Outcomes

- Traditional measures of publication dissemination, including numbers of citations or impact factors of journals in which articles are published, do not report on the social media impact of articles<sup>1</sup>
- Novel measurements such as altmetrics and social media tracking software are increasingly useful in quantifying the impact of social media activity on publication visibility<sup>6</sup>
- However, these metrics may be flawed; the relationship between traditional and new measures has been difficult to elucidate, and there is no clear relationship between traditional metrics (citation counts) and social media measures<sup>1</sup>
- The Medicine Group uses twin-linked metrics to determine the success of a social media strategy surrounding a specific article
  - The first measure is the number of HTML page views, a measure of how many people follow the original link to the journal's Web site as directed from Twitter, Facebook, or LinkedIn
  - The second is a measure of article downloads, which is a count of how many people downloaded the article from the journal's Web site
- Metrics on social media sites or social media trackers are useful, including numbers of re-tweets, likes, or shares on media sites and hashtag measures provided by social media trackers (Figure 2)
  - Re-tweets and comments are considered the most robust forms of content engagement on social media sites and reflect the likelihood of reading a post rather than just glancing at it<sup>1</sup>

**Figure 2. Social Media Impact Assessment**



## Limitations

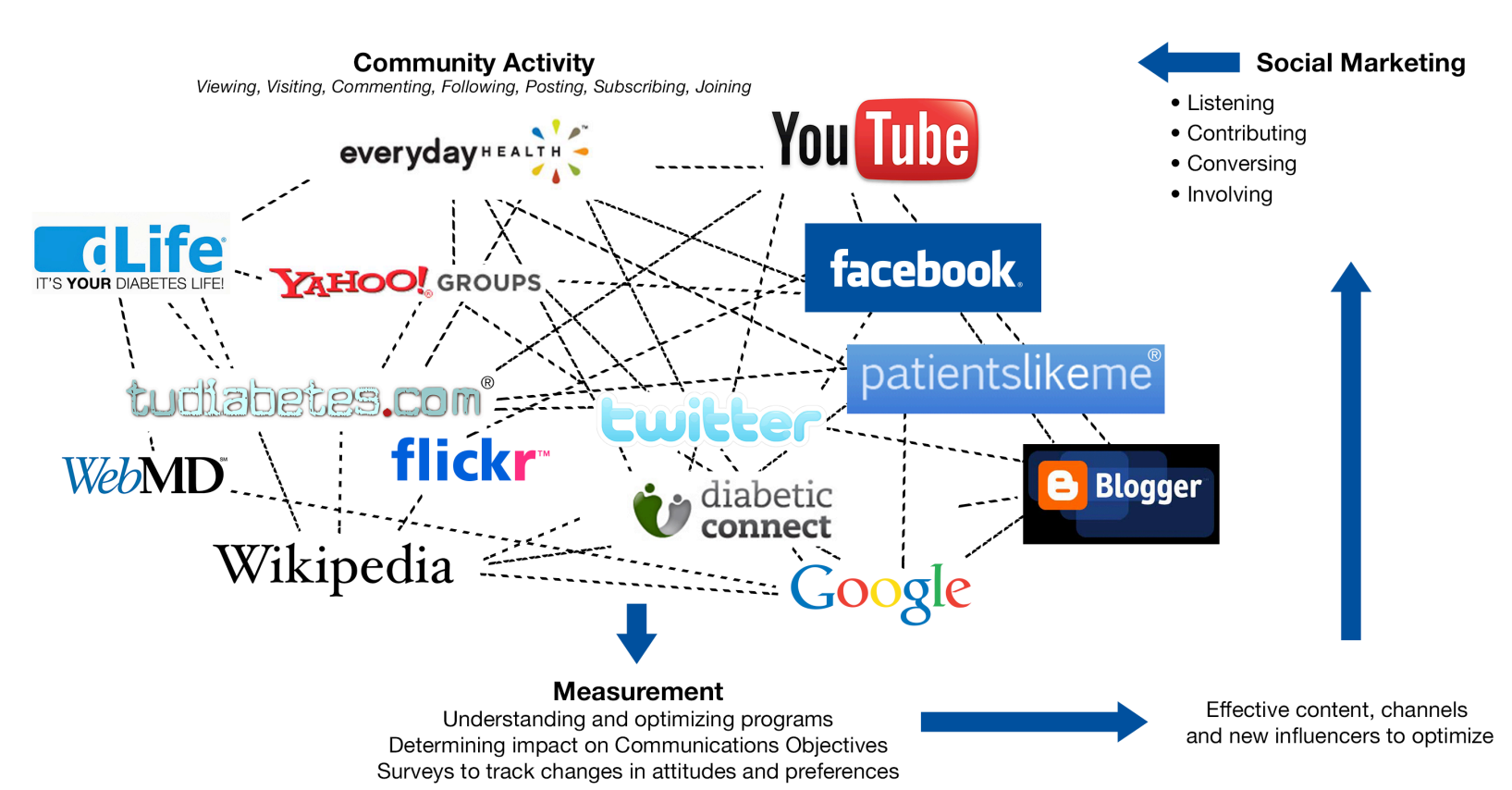
There are potential limitations to utilizing a social media strategy that must be addressed before implementation.

- Despite increasing uptake, many journals, medical societies, authors, and other stakeholders do not employ a social media strategy and may be unaware of the overall goals and objectives
- The relationship between traditional publication metrics and newer measures of social media engagement remains unclear
- Social media tracking software is still a relatively new phenomenon that has not been fully validated with the vigor that is typical in medical publications
- Social media reach does not automatically imply social media impact
- Page views and article downloads are objective measures of site visits but do not reveal the number of times an article has been read by interested parties. These measures reveal the breadth of a publication's reach but do not offer insights regarding the depth of publication engagement
- There is no way to determine if the number of article downloads correlates with increased readership; this only assumes that a physician or patient who downloaded an article likely did so with the intention of reading it
- The regulatory environment surrounding social media in medical publications remains fluid and may be subject to substantial changes in the future

## Key Points

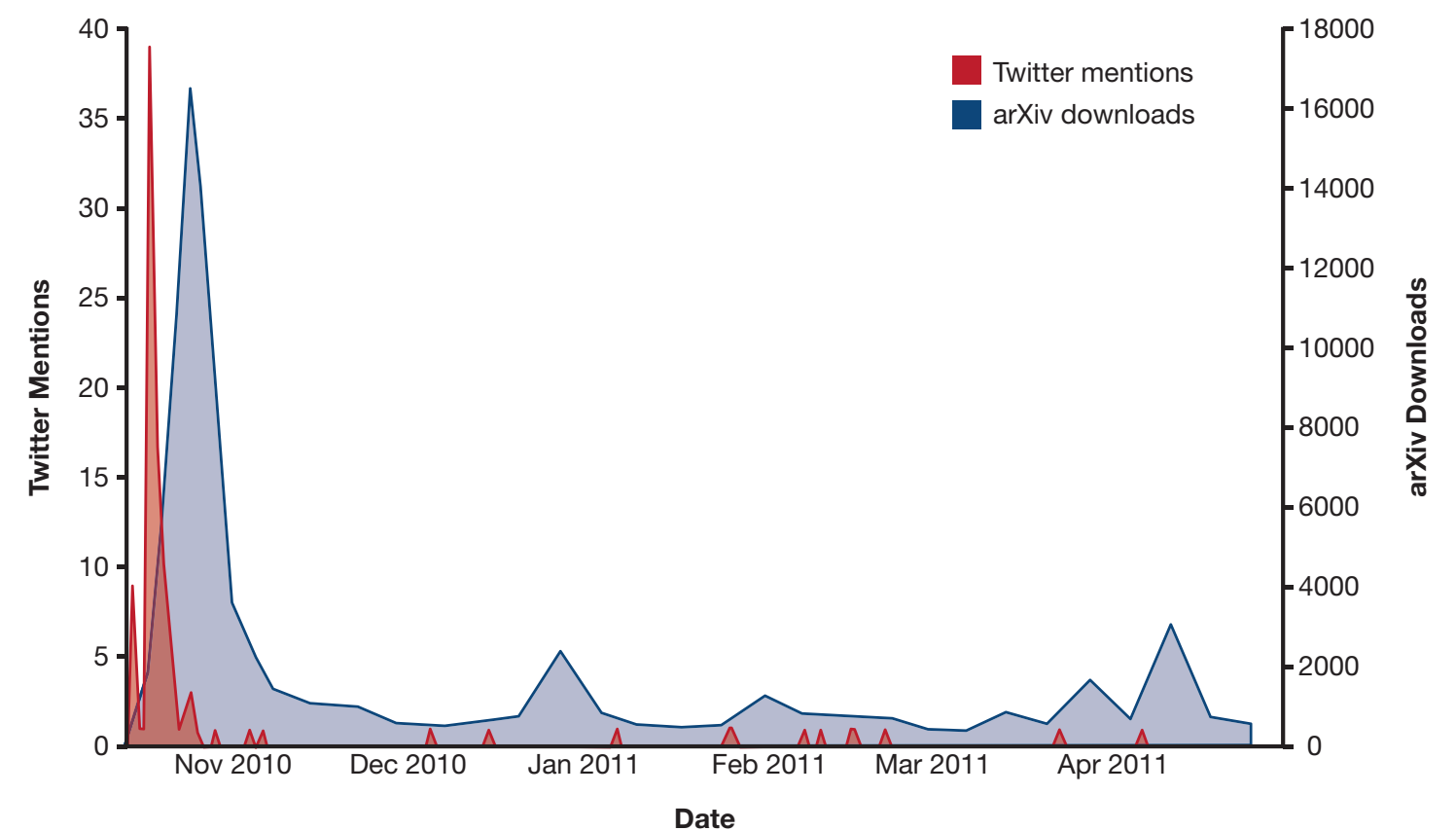
- Putting new health information before industry stakeholders is not sufficient; they need to communicate and engage with the content via specific actions on social media sites such as "liking" and "sharing" on Facebook, re-tweeting the activity on Twitter,<sup>1</sup> or posting on personal blog sites (Figure 3)

**Figure 3. Social Media Publication Awareness Architecture Map**



- Twitter is an especially useful tool immediately after a publication is released.<sup>7</sup> A response dynamics study (Figure 4) demonstrates that the number of Twitter mentions surges immediately after submission and publication, then drops precipitously after 4–6 weeks<sup>2</sup>
- Data suggest a "strong tie between social media interest, article downloads, and even early citations," though the results are preliminary and drawn from an array of scientific disciplines beyond clinical medicine<sup>2</sup>
- This information dovetails with a 2011 study that elucidates the correlation between the number of tweets an article receives in its first days of circulation with the number of times that article is cited<sup>7</sup>

**Figure 4. Response Dynamics Graph Showing Twitter Mention Spikes and Article Downloads Shortly After Submission and Publication**



Adapted from Shuai X, Pepe A, Bollen J. How the scientific community reacts to newly submitted preprints: article downloads, Twitter mentions, and citations. *PLoS ONE.* 2012;7(11):e47523.

## Conclusions

- Effective social media strategies represent an effective and quantifiable means of disseminating medical information to a wider audience
- Research suggests that a multilayered approach focused on the publication is the most effective method of increasing the profile of a new publication
- Successful social media strategies in medical publications employ a constellation of platforms including Twitter, LinkedIn, Facebook, and blogging sites in order to reach the largest possible audience
- Controls to quantify the effectiveness of social media on medical publications are still evolving and represent an area for further research as consumers, physicians, and external stakeholders increasingly rely on social media to identify new health information

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