ARTICLE INFORMATION

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Editor's Note

Twitter and Cardiovascular Disease
Useful Chirps or Noisy Chatter?

Mintu P. Turakhia, MD, MAS; Robert A. Harrington, MD

As modern society continues to organize around a digital, connected way of life, information from our daily interactions and exposures are now measured, recorded, and memorialized in ways previously unimaginable. This tapestry of information includes data from social media or electronic tools, such as websites and applications, that enable users to create, share, and exchange content.[1] Twitter is one such social networking service whose 310 million active users post short public messages known as Tweets.

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In this issue of *JAMA Cardiology*, Sinnenberg and colleagues[2] explore the characteristics of Twitter users and Tweets associated with cardiovascular disease. They found a large volume of Tweets (4.9 million) on cardiovascular disease and were able to characterize tone, style, and perspective of these Tweets, as well as some basic demographics of the users posting them. Most notably, Sinnenberg and colleagues found that Tweet volume and content were temporally associated with news events that were thematically connected with cardiovascular disease.

This brief report differs from much of the original investigation in *JAMA Cardiology*. We accepted it because it highlights the potential for using these emerging data sources such as Twitter for cardiovascular research, in this case to evaluate public communication about cardiovascular medicine in a manner not previously possible on such a scale. Furthermore, application programming interfaces allow persons with basic coding skills to mine these data as well as data from other social media platforms, which are often publicly accessible, thereby adding to the mix of open data and potentially engaging investigators and data scientists outside the traditional venues of cardiovascular research. Other uses of social media in areas related to clinical care or research are rapidly being ex-

plored, including drug safety surveillance by the US Food and Drug Administration,[3] monitoring of prescription medication abuse, recruitment and conduct of clinical trials, and as an intervention to improve caregiver and peer support for, education in, and management of chronic diseases.[4]

Still, the use of Twitter and other social media platforms for cardiovascular research is in an early, proof-of-concept stage. Many important questions remain: Is there signal in the noise? Are these data or results (social media-enriched clinical trials) from the "Twitterverse" generalizable to a broader population? What are the methodological standards for analysis? Are there ethical issues in linking these data with medical or clinical information?

Although digital health, broadly defined, is in its infancy, the evidence development for digital health is a major priority for *JAMA Cardiology*. We encourage our readers to submit relevant and timely original investigations and viewpoints on this topic.

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Additional Information: Drs Turakhia and Harrington can be reached on Twitter at @leftbundle and @HeartBobH, respectively. Follow *JAMA Cardiology* on Twitter at @jamacardio.

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