

## **Social media as a tool to monitor adherence to HIV antiretroviral therapy**

David Bychkov, Sean Young

*Corresponding author:*

*Sean D. Young*

*Department of Family Medicine, University of California, Los Angeles, United States*

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Handling editor:

Martijn van Oijen

*Academic Medical Center, University of Amsterdam*

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Social Media as a Tool to Monitor Medication Adherence to Antiretroviral Therapy

Journal of Clinical and Translational Research

Dear authors,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you resubmit your work.

Your revision is due by Aug 22, 2017.

To submit a revision, go to <http://jctres.edmgr.com/> and log in as an Author. You will see a menu item called Submission Needing Revision. You will find your submission record there.

Yours sincerely,

Martijn van Oijen

Editorial Board Member  
Journal of Clinical and Translational Research

Reviewers' comments:

Editor in chief:

Dear authors,

An expert in the field has now critically appraised your paper. The reviewer is advising that you implement major revisions in your manuscript, mainly aimed at identifying and explicitly stating the direction and clear description of the proposed tool. The editorial board supports the reviewer's view that an overview should be provided (e.g., in a table or figure) of the social media approaches to improve similar health care issues as a backdrop, which then converges into your specific niche (HIV). That will give the readers a better idea of the spectrum of possibilities that could be implemented. An improvement in structure and logic would further benefit the paper.

Thank you, also on behalf of the guest editors Dr. Martijn van Oijen and Dr. Joost Huiskens,

Michal Heger

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Reviewer #1: The authors have written a view point on the potential application of social media in care for individuals with HIV. They rightfully state that there are many opportunities for this in current care where most hospitals are working with electronic systems. I have however some majors comments on this paper.

In general, the review / view point lacks a background section providing overview of available studies that show feasibility or experiences with social media data to target personalized health care interventions. Also it should become clear if this is about public data sources (that can never be redirected to a single patient but can be used for design of more general intervention) or patient centered approaches in which patients consent for usage of data, and the application of social media in routine care.

Insight in compliance issues as well as factors involved in compliance, such as stigma related issues, may help professionals to guide patients. Given the issues with privacy, it must be made clear how the authors see the usage of public social media data. See for instance the p.3 second alinea (lines 31-47): I assume this relates to the usage of aggregated data, that brought back to a single patient.

p.5 "The monitoring system we propose.." It is unclear what monitoring system the authors exactly have in mind. This should be clearly explained.

Two issues are mixed-up. Public social media data that are used in an aggregated form to inform hospitals / care takers to adjust care at group level. And something else is the formal consent by a patient to use social media to communicate about health issues, medication use etcetera. It should be made clear what authors have in mind. As an example:

Lines 22 page 6: legally you would not be able to link social media data to patient records, unless patient consent for that.

Finally, a point that should be taken into account is that the merit of public social media data is that people communicate with a low barrier and share potentially valuable information. As soon as we will be working with a form of consented use of social media, it can be expected that people share less information.

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

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Authors' rebuttal

August 10, 2017

Michal Heger, Editor-in-Chief  
*Journal of Clinical and Translational Research*  
Department of Experimental Surgery  
Academic Medical Center  
University of Amsterdam  
Amsterdam, Netherlands  
Dear Dr. Heger,

Thank you for the opportunity to revise our article, "Social Media as a Tool to Monitor Adherence to HIV Antiretroviral Therapy" (ID# JCTRes-D-17-00006). We appreciate you and the referees' comments and have done our best to address the issues raised in the review. We have pasted the referees' comments below along with our responses in italic text.

1. Provide a more detailed overview of available studies that show feasibility or experiences with social media data to target personalized health care interventions."

*Thank you for this comment. We have added a number of additional references to studies related to this area of social media and public health monitoring (page 3, paragraph 1).*

2. "Also it should become clear if this is about public data sources (that can never be redirected to a single patient but can be used for design of more general intervention) or patient centered approaches in which patients consent for usage of data, and the application of social media in routine care."

*This paper is about both public data sources and patient-centered approaches. We can use both public large scale data to look at populations of people (Young et al., 2014) as well as personalized studies where we consent and follow individuals (Liu et al., 2017). These papers are referenced on page 2, paragraph 2 and page 3, paragraph 1. Thank you for this comment to improve clarity for the reader.*

3. "Insight in compliance issues as well as factors involved in compliance, such as stigma related issues, may help professionals to

guide patients. Given the issues with privacy, it must be made clear how the authors see the usage of public social media data. See for instance the p.3 second alinea (lines 31-47): I assume this relates to the usage of aggregated data, that brought back to a single patient.”

*As suggested, we have described the role that stigma plays in adherence to HIV medications, as well as how social media might inform this issue and improve adherence (page 2 paragraph 2).*

4. Clarify whether you’re talking about following individuals or groups.

*As suggested, we have provided additional information to help the reader understand the purpose of the manuscript (page 2, paragraph 2 and page 3, paragraph 1).*

5. A point that should be taken into account is that the merit of public social media data is that people communicate with a low barrier.

*We have added this benefit of social media into the manuscript (page 2, paragraph 3. Thank you for this suggestion.*

Thank you again for the opportunity to revise our manuscript. Please let me know if you have any questions or need any further clarification. I can be reached by email at [sdyoung@mednet.ucla.edu](mailto:sdyoung@mednet.ucla.edu) or by phone +1 (310) 794-8530.

Sincerely,  
Sean Young, PhD, MS  
Department of Family Medicine  
University of California, Los Angeles (UCLA)  
10880 Wilshire Blvd, Suite 1800  
Los Angeles, CA 90024  
United States of America

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2<sup>nd</sup> editorial decision:

Date: 09-Feb-2018

Ref.: Ms. No. JCTRes-D-17-00006R1  
Social Media as a Tool to Monitor Medication Adherence to Antiretroviral Therapy  
Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Comments from the editors and reviewers: