

MJ -  
Decision  
on  
Manuscript  
ID  
BMJ.2017.  
038003

**Body:** 16-May-2017

Dear Mr. Kinross

# BMJ.2017.038003 entitled "CYBER SECURITY AND HEALTHCARE: HOW SAFE ARE WE?"

Thank you for sending us your article, which was read by myself, Navjoyt Ladher, Prashant Jha, Kamran Abbasi, and two external reviewers (you will find their reviews at the end of this email).

Your article is clearly topical and we are keen to move forward with it quickly. With that in mind, here are the actions points for a revision we hope you might be able to produce in short order.

1. Update the story in light of recent events
2. Propose more real world solutions to the cybersecurity problems you describe, particularly if you can offer solutions for which there is an evidence base and aren't too technical for our readership - there are some suggestions from peer-review
3. Given recent events, do you still feel that cyber crime will cause the public to lose trust in the system? Perhaps in an abstract sense this is true, but realistically, aren't we so embedded in these systems (computers, credit cards, etc.) that even when cyber security or identity theft occurs, we feel victimized but keep on using the systems?

I apologize it took so much time to render a decision. Unfortunately it took me much longer than normal to find reviewers. But I hope you will be able to turn around a quick resubmission so we can publish soon.

Please note that resubmitting your manuscript does not guarantee eventual acceptance, and that your resubmission may be sent again for review (although I anticipate additional external review being unlikely in this case).

The reviewers' comments are at the end of this letter.

Please don't hesitate to contact me if you wish to discuss this further.

When submitting your revised manuscript please summarize the changes in the covering letter. Ordinarily we ask for point by point responses to our comments and those of any reviewers, but if this would cause you to delay your submission, then there is no need for it this time.

Once you have revised your manuscript, go to <https://mc.manuscriptcentral.com/bmj> and login to your Author Center. Click on "Manuscripts with Decisions," and then click on "Create a Resubmission" located next to the manuscript number. Then, follow the steps for resubmitting your manuscript.

You may also click the below link to start the resubmission process (or continue the process if you have already started your revision) for your manuscript. If you use the below link you will not be required to login to ScholarOne Manuscripts.

Please note that resubmitting your manuscript does not guarantee eventual acceptance, and that your resubmission may be sent again for review. \*\*All accepted Analysis articles are published on [thebmj.com](http://thebmj.com), the canonical version of the journal. Please note that only a proportion of accepted Analysis articles will also be published in print. \*\*

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IMPORTANT: Your original files are available to you when you upload your revised manuscript. Please delete any redundant files before completing the submission.

I hope you will find the comments useful, and please feel free to reach out to me if you wish to discuss anything.

Yours sincerely

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**\*\*IMPORTANT INFORMATION TO INCLUDE IN A RESUBMISSION\*\***

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## Reviewer(s)' Comments to Author:

Reviewer: 1

Recommendation:

Comments:

General Comments

Thank you for the opportunity to review this manuscript. This Analysis article evaluates the threats to health care organizations from cyberattacks and outlines some opportunities for improvement and solutions. Although an Analysis article, the tone is sometimes overly colloquial and the prose could be tightened in several places. The article is clear in its arguments, and does a strong job outlining the challenge and cost of cyberattacks, with well cited examples. However, it does fall somewhat flat with respect to potential solutions. As such, it may not be particularly engaging for Journal readers, especially those that follow the news closely. That being said, an in-depth discussion of solutions may be too technical and not of sufficient interest to the readers of this Journal.

Specific Comments

Page 1 lines 14-22 - Please provide citations or references to support your statements

Page 3 line 36 - Why is there no detailed discussion of the "Integrity" component of the proposed CIA framework

Page 4 line 7 - remove "mere"

Page 4 line 9 - remove "got their hospital back." This reads as too colloquial. Please describe what actually happened

Page 4 line 33 - Start paragraph with "Although"

Page 4 line 50-54 - The last sentence in this paragraph is speculative

Page 5 line 13 - Please provide a reference or citation for this statement

Page 5 line 37 - Please provide a reference or citation for this statement

Page 5 line 42 - Please provide a reference or citation for this statement

Page 6 line 33-38 - This is an interesting point. Are there any surveys or qualitative research you could point to in

order to better characterize the level of mistrust and the impact on data sharing and research?

Additional Questions:

Please enter your name: Brian Powers

Job Title: MD-MBA Candidate

Institution: Harvard Medical School-Harvard Business School

Reimbursement for attending a symposium?: No

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Reviewer: 2

Recommendation:

Comments:

The authors attempt to address a topic of extreme importance and urgency. Many of the points are valid although many are not novel and have already been well covered in the peer reviewed literature dating back to 2014 and before. (please see below).

In addition, while the threats are reasonably well covered the emerging controls, standards and resilience methodologies are not covered in this writing but have been covered elsewhere. Utilization of these sources would greatly improve the crispness and utility of the recommendations.

Lastly, most of the references cited appear to draw more from the lay and trade press versus the peer-reviewed literature that is more common for BMJ articles.

In light of the major cyber-attack happening in the UK as I complete this review, I suggest that this piece be considered after a major revision considering the points I have listed above.

I will happily be of service in any useful way if helpful.

Best regards, Eric D Perakslis

Cybersecurity in health care.  
Perakslis ED.

N Engl J Med. 2014 Jul 31;371(5):395-7. doi:  
10.1056/NEJMp1404358. No abstract available.  
PMID: 25075831

N Engl J Med. 2014 Jul 31;371(5):393-5. doi:  
10.1056/NEJMp1407326.

When 'hacktivists' target your hospital.

Nigrin DJ1.

Additional Questions:

Please enter your name: Eric D Perakslis PhD

Job Title: SVP Data Science

Institution: Takeda R&D and Harvard Medical School

Reimbursement for attending a symposium?: No

A fee for speaking?: No

A fee for organising education?: No

Funds for research?: No

Funds for a member of staff?: No

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**Date Sent:** 16-May-2017