

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (<http://bmjopen.bmj.com/site/about/resources/checklist.pdf>) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

This paper was submitted to the JAMIA but declined for publication following peer review. The authors addressed the reviewers' comments and submitted the revised paper to BMJ Open. The paper was subsequently accepted for publication at BMJ Open.

## ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Patients' online access to their electronic health records and linked online services: a systematic interpretative review
<b>AUTHORS</b>	Mold, Freda; de Lusignan, Simon; Sheikh, Aziz; Majeed, Azeem; Wyatt, Jeremy; Quinn, Tom; Cavill, Mary; Gronlund, Toto Anne; Franco, Christina; Chauhan, Umesh; Blakey, Hannah; Kataria, Neha; Barker, Fiona; Ellis, Beverley; Koczan, Phil; Arvanitis, Theodoros; Mccarthy, Mary; Jones, Simon; Rafi, Imran

## VERSION 1 - REVIEW

<b>REVIEWER</b>	McKibbon, K. Ann
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<b>GENERAL COMMENTS</b>	<p>Title needs to distinguish this paper from the other one – perhaps mention that both qualitative and quantitative studies were included.</p> <p>Patients' online access to their electronic health records and linked online services Part 2: interpretative review</p> <p>Overall, this paper summarizes a large literature through a collaborative process in which a Working Group of the RCGP reviewed a large number of papers and settled on 143 to include in the analysis. This includes 17 papers that were also discussed separately in a different paper.</p> <p>Overall impressions: this paper attempts to summarize a large body of work, which is challenging. Unfortunately, the paper suffers from being disjointed, as if multiple authors contributed but there was not "one voice" to tie things together or clean up loose ends...</p> <p>For example, nowhere in the body of the paper (Methods or Results) does it say that a final set of 143 papers were included in the analysis, although this appears in the abstract and also in the Figure on page 28. It is not stated whether the 17 experimental studies discussed in the other paper (Part 1) are included or not, but looking at references, it is appears that they are. There are multiple mistakes in grammar, typos, and confusing statements throughout the manuscript. There are also statements that appear to be misleading based on the references, or having the wrong reference, raising doubts about the consistency with which the Workgroup members reviewed, summarized, and produced the written sections of the report, and whether there are other mistakes that need to be identified and corrected. It would be helpful to include a description of the Workgroup in the body of the manuscript, including how many</p>
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	<p>individuals and what domains of expertise are represented, in case the reader is unfamiliar with the Working Group 7.</p> <p>Below are some examples of errors that were noticed, although this is not a complete list:</p> <p>Page 7 Line 10: “may people” --&gt; many people</p> <p>Table starting on p33 is missing its Table Heading, and Title.</p> <p>P32 Line 17 “A further 17 paper” --&gt; papers</p> <p>P11 Line 44 has Ref 59 - - but this is not correct. The correct reference is 64.</p> <p>P23 Line 4, Ref 65 “Weingarta” --&gt; Weingart</p> <p>P14 Line 19 “Incorporating a fee for service appears to be highly effective in promoting clinician uptake of online services, in two US papers; particularly so when a fee for email transactions was offered in health services where telephone contact with patients is fee free. Ref 81 Ref 148”. It is unclear to what degree these two references support this statement. The refs are dated, out of synch with current practice, and do not generalize even in the US, or perhaps anywhere else. Stronger references are needed to support the statement, or a restatement such as “some have experimented with incorporating a fee, but this practice is not widespread, especially among large organizations having the most experience (such as Kaiser, VHA, and most health systems in the US and in Europe).”</p>
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<b>REVIEWER</b>	Wald, Jonathan
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## VERSION 1 – AUTHOR RESPONSE

### Reviewer 1

Comments from a senior member of the editorial team:  
Associate Editor

#### Comments to the Author:

See also comments on Part 1. The authors have done considerable work to review literature on a topic of significant interest. Unfortunately, the end-date of their search (September 2012) and, as detailed in the reviews, the lack of clarity in presentation of the results combine to make the paper unsuitable for publication in JAMIA.

- Line 541-543. Response - We have included an additional sentence in to the discussion section, in the Strengths and Limitation subsection to say, ‘Like all systematic reviews, evidence has been gathered from various resources from a specific time period. As such there may be new papers recently published that has not been included in this review.’

#### Reviewer(s)' Comments to Author:

##### Reviewer 2

#### Comments to the Author

Again, a great body of work that can easily be made stronger.

1. List limitation of the searching being 18 plus months old and new information is now available.
  - Line 541-543. Response – As above.
  
2. More study details so that a reader can easily identify what the studies and projects were designed to do and be very specific on details of the PHR interventions and their features or services.
  - Line 395, 428, 475, 500. Response – The Evidence Tables (number 1-4) details each studies projects aims, findings/ outcomes and implications. These tables can be accessible online only (as these tables are very detailed). These tables should be sufficient to enable the reader to understand each papers main purpose/ intervention. The main text of the manuscript aims to bring this wide body of evidence together to answer our four specific research questions.
  
3. Feature the published protocol early in the manuscript and make the protocol more visible in your write up.
  - Line 314-316. Response – We have clarified the early paragraph where we note the protocols publication. We have said here, ‘The protocol for this review has already been published, including details of the key research questions and inclusion and exclusion criteria.’
  
4. Figure and Table titles could be more explanative. Also can you please put in the reference numbers for the Evidence Tables?
  - Line n/a. Response – We have as yet, not included the reference number to the Evidence Tables. This can be done, very easily, if you feel this would facilitate the clarity. We did not originally do this as we had grouped evidence by research question (Number 1-4), so thought it would be confusing for the reader if the numbers on the Evidence Tables were not sequential. We will be guided by your recommendation.
  
5. Do you need to describe the risk of bias stage in this paper as it is in the first paper and you do not include information on it in this second paper?
  - Line 341-348. Response – The RoB assessment was re-phrased to be in context to the data extraction form (DEF). It was necessary to discuss the details of the DEF, in order to highlight the comprehensive and rigorous extraction of information from each paper/ evidence. We therefore said, ‘We also developed a data extraction form (DEF) which was used to extract the salient points from each paper. DEF training was provided to our group members in order to facilitate their review of evidence. The DEF also included a risk of bias (RoB) form for each paper, which aimed to look at limitations in study design. The RoB form was included with the intention of applying the **Grading of Recommendations Assessment, Development and Evaluation (GRADE)** tool to assess the strength of evidence as a collective for each research question. The RoB form was grouped into six domains; sequence generation, allocation concealment, blinding, incomplete outcome data, selective reporting and other bias.’
  - This explanation also enables us to signpost readers to our earlier paper (recently accepted by the BJGP) where we provide a detailed summary of trial and RoB analysis. (Ref 20)
  
6. Results. Please start with included studies—included studies are more important than excluded. This included studies information seems to be in the abstract but not easily available in the results section (i.e., 143 articles).
  - Line 373. Response – Excluded studies was commented early in the Results section in order to set the scene about the large set of studies not considered relevant to the review. Excluded papers have now been moved to a supplementary file, where readers can access these tables via an online link.

### Comments to the Author

Title needs to distinguish this paper from the other one – perhaps mention that both qualitative and quantitative studies were included. Patients’ online access to their electronic health records and linked online services Part 2: interpretative review

- Line 1-2, 195-196, 233-234. Response – The titles has now been slightly changed in order to distinguish between our two papers (paper one, which focuses on trial evidence, and paper two; a systematic interpretative review). The revised title is now, ‘Patients’ online access to their electronic health records and linked online services: a systematic interpretative review’.

Overall, this paper summarizes a large literature through a collaborative process in which a Working Group of the RCGP reviewed a large number of papers and settled on 143 to include in the analysis. This includes 17 papers that were also discussed separately in a different paper.

Overall impressions: this paper attempts to summarize a large body of work, which is challenging. Unfortunately, the paper suffers from being disjointed, as if multiple authors contributed but there was not “one voice” to tie things together or clean up loose ends...

For example, nowhere in the body of the paper (Methods or Results) does it say that a final set of 143 papers were included in the analysis, although this appears in the abstract and also in the Figure on page 28. It is not stated whether the 17 experimental studies discussed in the other paper (Part 1) are included or not, but looking at references, it appears that they are.

- Line - n/a. Response – We have reviewed the paper several times since the original JAMIA manuscript submissions. At each time we have attempted to amend this disjointed narrative and bring together the text so it appears to be one voice.
- Where possible clarifying statements have been included throughout the manuscript, such as Line 362, by additionally stating, ‘The final synthesis of the data was undertaken at a meeting where data was presented and discussed at a group level.’ These statements aim to add clarity to the analysis section and better guide the reader to understand the methods used.

There are multiple mistakes in grammar, typos, and confusing statements throughout the manuscript.

- Line - n/a. Response – We have attempted to identify and correct the grammar and typos throughout the manuscript.

There are also statements that appear to be misleading based on the references, or having the wrong reference, raising doubts about the consistency with which the Workgroup members reviewed, summarized, and produced the written sections of the report, and whether there are other mistakes that need to be identified and corrected. It would be helpful to include a description of the Workgroup in the body of the manuscript, including how many individuals and what domains of expertise are represented, in case the reader is unfamiliar with the Working Group 7.

- Line 537-541. Response – We have included a short paragraph about the expertise of those within the Working group.
- Two paragraphs have been clarified to highlight the role of the working group in extracting the data (Line 335-337, 342-343) and also the potential limitations from using a range of experts (Line 537-541).
- We have reviewed the paper and resolved any referencing issues.

Below are some examples of errors that were noticed, although this is not a complete list:

Page 7 Line 10: “may people” --> many people

- Line 238. Response – We have amended this typo

Table starting on p33 is missing its Table Heading, and Title.

- Page 30, 32. Response – These tables have two headings. One says, ‘Supplementary Table 1: Excluded studies (available on request only)’ and the subtitle is ‘Potentially relevant studies.’ The tables listed on page 33 onwards belong to the above headings.

P32 Line 17 “A further 17 paper” --> papers

- Page 32, Line 3. Response – We have corrected this typo.

P11 Line 44 has Ref 59 -- but this is not correct. The correct reference is 64.

- Line 403. Response – This reference has been checked and corrected.

P23 Line 4, Ref 65 “Weingarta” --> Weingart

- Page 65. Response – This reference has been amended.

P14 Line 19 “Incorporating a fee for service appears to be highly effective in promoting clinician uptake of online services, in two US papers; particularly so when a fee for email transactions was offered in health services where telephone contact with patients is fee free. Ref 81 Ref 148”. It is unclear to what degree these two references support this statement. The refs are dated, out of synch with current practice, and do not generalize even in the US, or perhaps anywhere else. Stronger

references are needed to support the statement, or a restatement such as “some have experimented with incorporating a fee, but this practice is not widespread, especially among large organizations having the most experience (such as Kaiser, VHA, and most health systems in the US and in Europe).”

- Line 495-498. Response – We have taken the comments on board and have clarified the paragraph to now say, ‘Incorporating a fee for service appears to be highly effective in promoting clinician uptake of online services, some organizations have experimented with incorporating a fee, but this practice is not widespread, especially among large organizations having the most experience (such as Kaiser, VHA, and most health systems in the US and in Europe).’