

## **From conventional healthcare to e-health: Social and spatial transformation. Using a comparison between HK and mainland China**

Carine Milcent\*

\*Corresponding author

Carine Milcent

*French National Centre for Scientific Research, Paris School of Economics, Paris, France*

---

Handling editor:

Michal Heger

*Department of Pharmaceutics, Utrecht University, the Netherlands*

*Department of Pharmaceutics, Jiaxing University Medical College, Zhejiang, China*

Review timeline:

Received: 13 March, 2021  
Editorial decision: 13 March, 2021  
Revision received: 12 April, 2021  
Editorial decision: 27 April, 2021  
Revision received: 26 May, 2021  
Editorial decision: 22 June, 2021  
Revision received: 12 July, 2021  
Editorial decision: 12 July, 2021  
Revision received: 28 July, 2021  
Editorial decision: 30 July, 2021  
Published online: 29 September, 2021

---

1<sup>st</sup> Editorial decision  
13-Mar-2021

Ref.: Ms. No. JCTRes-D-21-00037

From conventional healthcare to e-health: Social and Spatial Transformation Using a comparison between HK and Mainland China  
Journal of Clinical and Translational Research

Dear Prof. milcent,

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 submit the revised manuscript. Also, please ensure that the track changes function is switched on when implementing the revisions. This enables the reviewers to rapidly verify all changes made.

Your revision is due by Apr 12, 2021.

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

Yours sincerely

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

Reviewers' comments:

Bonjour Dr. Milcent,

Thank you for submitting your manuscript to JCTR.

I have perused over the paper and have the following remarks that I wish you to address before we give your paper a shot in a peer review procedure.

1) Almost all of the references are outdated and much of the data you report are 3-5 years old. China is rapidly developing (I know because I live there and our managing editor, Dr. Yao Liu, is from China) that the data you present no longer reflect the status quo in mainland China. I kindly ask you to update your data sets to the most recent statistics.

2) Mainland China is not a proper classification for the Chinese public healthcare systems. The public hospitals in first-tier cities are quantitatively and qualitatively different from those in lower-tier cities. Your work essentially generalizes a "Chinese health care system" and disregards inter-city differences and even inter-province differences (Zhejiang province, for example, is completely different from the provinces in the western part of China). This generalization is hence invalid.

3) Many of the statements that you make regarding health care provision in mainland China are not corroborated by any appropriate sources, while they certainly do warrant to be referenced. Please ensure robust referencing of those statements that need substantiation.

4) Your studies should include relevant features from the 2021-2025 five year plan as well as the vision 2035 agenda (<https://www.bbc.com/news/world-asia-china-54626091>) when providing a future outlook.

5) Please ensure that the written part conforms to academic level English. The paper is replete with Frenchismic verbiage and inappropriate syntax.

Thanks you and kindest regards,

Michal Heger  
Editor

---

2nd Editorial decision  
27-Apr-2021

ef.: Ms. No. JCTRes-D-21-00037R1  
From conventional healthcare to e-health:  
Social and Spatial Transformation  
Using a comparison between HK and Mainland China  
Journal of Clinical and Translational Research

Dear Prof. milcent,

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 submit the revised manuscript. Also, please ensure that the track changes function is switched on when implementing the revisions. This enables the reviewers to rapidly verify all changes made.

Your revision is due by May 27, 2021.

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

Yours sincerely

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

Reviewers' comments:

Reviewer #1: The authors mention that the paper presents information about the healthcare systems of Hong Kong and Mainland and the role of e-health. There are several important issues that the authors should consider to address.

State clearly the objectives of the paper.

State clearly the significance of the paper. Why do we care about the paper?

Based on the title, I expect to see more in-depth findings and discussion about transformation between conventional healthcare and e-health. It is weak in the current manuscript.

What is "spatial dimension"?

The paper presented quotes derived from a qualitative study. Details of the qualitative study should be presented; currently they are missing.

In section "Introduction," consider saying this: "A branch of papers investigate the adoption

and efficiency of the Electronic Medical Record Systems that have been implemented for information sharing between the public and private sectors in Hong Kong. Then also cite these papers and some other relevant papers:

- Private primary care physicians' perspectives on factors affecting the adoption of electronic medical records: A qualitative pre-implementation study (<https://content.iospress.com/articles/work/wor01808>)
- Exploring Factors Affecting Voluntary Adoption of Electronic Medical Records Among Physicians and Clinical Assistants of Small or Solo Private General Practice Clinics (<https://link.springer.com/article/10.1007/s10916-018-0971-0>)
- Pre-Implementation Case Studies Evaluating Workflow and Informatics Challenges in Private Primary Care Clinics for Electronic Medical Record Implementation (<https://www.igi-global.com/article/pre-implementation-case-studies-evaluating-workflow-and-informatics-challenges-in-private-primary-care-clinics-for-electronic-medical-record-implementation/149247>)

In section "The Electronic Medical Record," the authors stated "Compared to Hong-Kong, in largest Chinese city , the way to cure patient is switching from ..." Please consider to say something like this if it is appropriate: In both Hong Kong and some largest cities in Mainland, the way for patients to receive care include inpatient ... and ... increasingly from home, using digital tools (something like that). Then provide citations for such statement, such as (1) "Improving Self-Care in Patients With Coexisting Type 2 Diabetes and Hypertension by Technological Surrogate Nursing: Randomized Controlled Trial" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7148548/>) and some other relevant papers.

Remove the hyphen for "Hong-Kong"

There are some grammatical errors. Please fix them.

The paper can be useful as it provides a summary describing the healthcare systems in Hong Kong and the Mainland. Some useful information about electronic health has been presented.

---

Authors' response

## **From conventional healthcare to e-health: Social and Spatial Transformation *Using a comparison between HK and Mainland China***

Response to the reviewer

Reviewer #1: The authors mention that the paper presents information about the healthcare systems of Hong Kong and Mainland and the role of e-health. There are several important issues that the authors should consider to address.

State clearly the objectives of the paper.

*The present study aims to scrutinize pre-implementation of a generalized online healthcare in China not only for primary care but also for secondary care, taking advantage of the comparison between Hong Kong and some largest cities in Mainland in order to address the following questions: 1) what is the role of the financial healthcare burden in the e-health development; and 2) In a dynamic perspective, how does the implementation of a generalized healthcare information system change the need of a strong and tight web of healthcare services.*

*I performed field observations and interviews to understand why online healthcare providers can be preferred to offline healthcare providers. Taking advantage of the comparison between Hong Kong and some largest cities in Mainland allows me to compare context where public hospital's admission is a financial burden (as in Mainland China) with context where public hospital's admission is free of charge (as in Hong Kong).*

State clearly the significance of the paper. Why do we care about the paper?

*I assess how e-health has transformed the notion of healthcare access and what spatial dimension of healthcare today means and in the near future in China. I also consider a dynamic perspective to propose keys to anticipate upcoming changes. Then, a forward-looking approach suggests that the e-healthcare is becoming the entrance door for healthcare for the large part of the population.*

*This study informs the policy makers about coming changes and then contributes to understand and anticipate modifications of the healthcare system.*

Based on the title, I expect to see more in-depth findings and discussion about transformation between conventional healthcare and e-health. It is weak in the current manuscript.

Following this remark, I added the following paragraphs

### ***Integrated model of online-offline healthcare***

*Moving beyond the traditional scheme offering on one side primary care and on the other side in-hospital care, China's internet giants are preparing to offer a complete healthcare services where patient care will be provided remotely, where offline service will be a link in the patient pathways, and where most of the time, the patient will be treated from her/his home.*

*Alibaba Group is one of China's Internet giants, initially specializing in online retail, as Amazon in the United States. The group launched the "Future Hospital" programme in 2014. This programme aimed to consult online doctor and order drugs (prescribed drugs as well as over-the-counter drugs) via the internet. In spite of regulatory back and forth regarding over the counter drug sales, online pharmacies are now growing quickly. Health unit of JD.com Inc. and Health unit of alibaba are today amongs of the leaders of this market.*

*AI is now a key component of the coming Integrated model of online-offline healthcare. Alibaba introduced recently an AI software that help interpret CT scans. An A.I. medical lab help doctors make diagnoses. Tencent deployed Miying, that helps doctors detect early signs of cancer, that now is used in Chinese hospitals of some largest cities in Mainland China. The search engine company Baidu scrapped its internet health care service, taht allowed patients to book doctor appointments through an app, in a bid to focus solely on A.I.*

*Lee and Seong (2021) indicate that major hospitals are, at present, using AI-enabled systems to augment medical staff in patient diagnosis and treatment activities for a wide range of diseases. Going further, IA associated to e-cloud and the whole set of e-health can lead to transform the entire care service (Figure 3).*

Figure 3: A coming integrated model of online-offline healthcare

| China's online healthcare services |           |                |               |          |
|------------------------------------|-----------|----------------|---------------|----------|
|                                    | JD Health | Alibaba Health | PingAn Health | WeDoctor |
| Online appointment booking         | ✓         | ✓              | ✓             | ✓        |
| Online consulting                  | ✓         | ✓              | ✓             | ✓        |
| Online pharmaceutical retail       |           | ✓              | ✓             | ✓        |
| Offline-to-online retail service   | ✓         | ✓              |               |          |
| Medicine cold chain                | ✓         |                |               |          |
| Internet hospital network          | ✓         | ✓              | ✓             | ✓        |
| In-house doctors                   | ✓         |                | ✓             |          |
| Family doctor service              | ✓         |                | ✓             |          |
| Medical health insurance           |           |                | ✓             | ✓        |
| As of Dec. 18, 2020.               |           |                |               |          |
| Source: Company statements         |           |                |               |          |

Source: <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/china-s-big-tech-to-continue-disruption-of-healthcare-sector-despite-crackdown-61610882>]

What is "spatial dimension"?

*The spatial dimension is how strong and tight is the offline web of healthcare services. So far, a strong and tight offline web of healthcare services was a key (not the only one) for an efficient healthcare system. Today, owing to the e-health, online healthcare providers transform the need of a strong and tight offline web of healthcare services.*

*This paragraph has been added to the Introduction part.*

*[The spatial dimension is how strong and tight is the offline web of healthcare services. So far, a strong and tight offline web of healthcare services was a key (not the only one) for an efficient healthcare system. Today, owing to the e-health, online healthcare providers transform the need of a strong and tight offline web of healthcare services.]*

The paper presented quotes derived from a qualitative study. Details of the qualitative study should be presented; currently they are missing.

*As suggested by the reviewer, the following paragraph has been added in the introduction.*

*[A qualitative study was conducted using a series of semi-structured, face to face interviews to evaluate experiences, expectations, and opinions of patients regarding the healthcare access and financial burden associated. Interview transcripts were content analyzed to identify key factors.]*

In section "Introduction," consider saying this: "A branch of papers investigate the adoption and efficiency of the Electronic Medical Record Systems that have been implemented for information sharing between the public and private sectors in Hong Kong. Then also cite these papers and some other relevant papers:

*As suggested by the reviewer, the following paragraph has been added in the introduction.*

*[To get information on hospital activity, there is a unified medical information system. Electronic Medical Record (EMR) System have been implemented for information sharing between the public and private sectors in Hong Kong. A branch of papers investigate the adoption and efficiency of the EMR System that is in now used in all Hong Kong public hospital (Or et al., 2014, Or, 2015; Or et al., 2018; Ting et al., 2011; Lau et al., 2009). These papers assessed how the information is spread over the health professional and the efficiency of such an information technology into medical practice. In this paper, the EMR is presented to illustrate the opposition between developed healthcare information system implemented in Hong Kong and the offline healthcare provided to the population compared to the online healthcare provided in Mainland China with a weaker healthcare information system.]*

*As suggested by the reviewer, the following papers have been added in the introduction.*

- Private primary care physicians' perspectives on factors affecting the adoption of electronic medical records: A qualitative pre-implementation study (<https://content.iospress.com/articles/work/wor01808>)

- Exploring Factors Affecting Voluntary Adoption of Electronic Medical Records Among Physicians and Clinical Assistants of Small or Solo Private General Practice Clinics (<https://link.springer.com/article/10.1007/s10916-018-0971-0>)

- Pre-Implementation Case Studies Evaluating Workflow and Informatics Challenges in Private Primary Care Clinics for Electronic Medical Record Implementation (<https://www.igi-global.com/article/pre-implementation-case-studies-evaluating-workflow-and-informatics-challenges-in-private-primary-care-clinics-for-electronic-medical-record-implementation/149247>)

In section "The Electronic Medical Record," the authors stated "Compared to Hong-Kong, in largest Chinese city , the way to cure patient is switching from ..." Please consider to say something like this if it is appropriate: In both Hong Kong and some largest cities in Mainland, the way for patients to receive care include inpatient ... and ... increasingly from home, using digital tools (something like that). Then provide citations for such statement, such as (1) "Improving Self-Care in Patients With Coexisting Type 2 Diabetes and Hypertension by Technological Surrogate Nursing: Randomized Controlled Trial" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7148548/>) and some other relevant papers.

*Following the suggestion of the reviewer, this paragraph has been changed as*

*[In both Hong Kong and some largest cities in Mainland, the way for patients to receive care include inpatient admitted in hospital centres and outpatient with supervision from home, using digital tools as support. One example can be found with Type 2 Diabetes and Hypertension patients where nurse-caregiver substitutes can be created by technology to support chronic disease self-care. However, the medical staff-caregiver substitutes go much further in Mainland China where the accessibility to a qualified doctor is on stake. The "soft" medical part of conventional in-hospital care can then be done remotely.]*

Remove the hyphen for "Hong-Kong"

*It has been done as suggested by the reviewer.*

There are some grammatical errors. Please fix them.

*Grammatical errors should be fixed.*

The paper can be useful as it provides a summary describing the healthcare systems in Hong Kong and the Mainland. Some useful information about electronic health has been presented.

---

3<sup>rd</sup> Editorial decision  
22-Jun-2021

Ref.: Ms. No. JCTRes-D-21-00037R2  
From conventional healthcare to e-health:  
Social and Spatial Transformation  
Using a comparison between HK and Mainland China  
Journal of Clinical and Translational Research

Dear author(s),

Reviewers have submitted their critical appraisal of your paper. The reviewers' comments are appended below. Based on their comments and evaluation by the editorial board, your work was FOUND SUITABLE FOR PUBLICATION AFTER MINOR REVISION.

If you decide to revise the work, please itemize the reviewers' comments and provide a point-by-point response to every comment. An exemplary rebuttal letter can be found on at <http://www.jctres.com/en/author-guidelines/> under "Manuscript preparation." Also, please use the track changes function in the original document so that the reviewers can easily verify your responses.

Your revision is due by Jul 22, 2021.

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

Yours sincerely,

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

Reviewers' comments:

Reviewer #1: Thanks for the revision. The current version is much improved. However, I have found some irrelevant information in it, e.g., "[pourquoi cet endroit ? cela cr e de la confusion]", not sure what that is. Please go through the manuscript again for errors and typos.

---

4th Editorial decision  
30-Jun-2021

Ref.: Ms. No. JCTRes-D-21-00037R4  
From conventional healthcare to e-health:  
Social and Spatial Transformation  
Using a comparison between HK and Mainland China  
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: