

# Review of: "Building a digital republic to reduce health disparities and improve population health in the United States"

Ulrich Mansmann<sup>1</sup>

<sup>1</sup> Ludwig-Maximilians-Universität München

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Building a digital republic to reduce health disparities and improve population health in the US.

The paper discusses the issue to provide to all Americans with a digital identity across multiple datasets. They argue, this would imply that it not only becomes possible for all Americans to simplify their lives but for welfare services to work for the most vulnerable, as they are intended. The authors hypnotize that a reason for the failure of social programs is that they are simply too difficult for the neediest to access. They claim that finding those in need for services, targeting services to those with specific needs based on individual characteristics, and then enrolling them in services could be solved by the creation of a digital republic. The second chapter explains or hints examples of what the authors call "digital republic". They explain how "digital identities" help to fade economic and health disparities. Digital identities underpin a digital republic.

The authors address the issue of secure digital identities. Unfortunately, I do not overlook all privacy and security issues to judge its pros and cons. There is the issue that the state as trusty of the data and possible linkages is always benevolent towards its citizens. This is implicitly granted by the authors. I'm not sure that the sentence "digital identities can increase privacy by returning control of one's identity and personal data back to the user" is simply true and can be transformed in an easy to use technology. The authors give some examples: Estonia (population of 4 million), Sweden (small countries of 12 million people with a high trust between their citizens and into their government). But, they also point to China where a digital identity puts more control on the society. How would an administration like the Trump administration use such a system? This is shortly mentioned later in the paper.

The authors quote some security standards. What is the implementation of such a standard requesting from users? How much data competencies are needed, how much education and intelligence in order to put such a standard into work. Are the needy persons addressed in their paper able to understand and handle such standards? The authors also mention to decentralize data to make administration more save. I'm not an expert to judge possibility and feasibility of such complex IT-infrastructures in a complex and large society.

The authors overcome this problem by writing: "The effort required to achieve a digital republic in the US would be immense, but so too would be the health and economic benefits that might arise from such an effort." This is very theoretical and optimistic.

The chapter "How a digital republic might benefit population health" provides many arguments to make this change real.

They write: A digital republic potentially revs down the human engine by removing the daily stress associated with navigating modern complex societies; less time is spent on automated phone systems and more time working and playing. This is not clear to me. My experience in Germany with the attempts to build a digital administration are inconsistent and not always convincing. A human interface between the system and its user is always needed. What are the thoughts of the authors on this issue? They mention it without discussing implications and without giving it deeper considerations.

The authors dedicate one chapter to “precision welfare” and address the issue of a structured electronic health record. There is a big discussion on its implementation, the quality of the documented data, and its use to derive information on the health care system. There is the vision of the data based learning health care system and its potential to bring added value for the individual patient (<https://learninghealthcareproject.org/background/learning-healthcare-system/>). Is it straightforward to compare precision medicine with precision welfare? How is precision welfare related to subjects of justice? I do miss careful and critical thoughts in these directions: “Precision medicine and precision welfare could also serve as a form of precision public health, easing the social risk factors that drive premature aging and harmful environmental exposures thereby improving the health and well-being of the American public.”

In the section “Limitations” the authors discuss some of the issues I do also address: A human – system interface (walk-in centers); Who is a member of the society and thus eligible for a digital identity? The authors address the issue of immigrants. What about persons with multiple nationalities and their eligibility for government benefits? Are there cases with difficulties by putting them into place within the legal system? Is Estonia the role model for the US? Is the system in Estonia perfect? What are experiences with digital identity in other countries (India is trying to implement a digital identity). How critical is the appraisal of Estonia’s system by the authors? There is only a little mention of cellphones and their appropriateness as an entry point into such a system. Being a German, my attitude to privacy protection is different from what Americans think about it. The paper does not reflect the privacy protection issues in a critical way.

This paper makes an important point and is a good incentive to go deeper into this discussion. But, the issues which come up following the road to implement an “digital identity” and using it to build on it a welfare and public health system, needs to discuss many critical points. I’m afraid that the paper does not add to this discussion.