

# Testing Readiness for Introducing Crowdsourcing Services in Secondary Healthcare Institutions

Miroslav Kendrišić, Tamara ĐorĐević and Dušan Višnjić

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# TESTING READINESS FOR THE INTRODUCTION OF CROWDSOURCING SERVICES IN SECONDARY HEALTHCARE INSTITUTIONS

Miroslav Kendrišić<sup>1</sup>, Tamara Đorđević<sup>\*1</sup>, Dušan Višnjić<sup>1</sup> <sup>1</sup>Faculty of Organisational Sciences \*Corresponding author, e-mail: djordjevic.tamara2@gmail.com

## OBJECTIVE

The subject of this research is examining the readiness for introducing crowdsourcing services in secondary healthcare institutions. The focus of the research is on the analysis, definition, and implementation of different models of crowdsourcing to improve the quality of the current healthcare system. Surveying patients in secondary health institutions, the results will provide a full picture of readiness for implementing crowdsourcing models like crowd wisdom, crowdfunding, crowd voting and crowdsensing in secondary healthcare institutions.

Crowd wisdom aggregates collective intelligence and collaboration among medical experts to collaboratively solve medical cases. For example, CrowdMed platform uses the crowd wisdom model for collaboration among an interdisciplinary team of medical experts with an aim to provide knowledge and skills for saving lives (Krafft, 2014).

Crowdfunding is the practice of funding a project or enterprise by collecting small amounts of money from numerous people, typically via online platforms. In universal healthcare systems, medical crowdfunding is a viable option to finance alternative, complementary, experimental and scientifically poorly supported therapies not financed by the health insurance fund. Further analysis of the most common diseases and disorders listed in crowdfunding campaigns might provide guidance for national health insurance funds in extending their list of funded medical interventions (Lublóy, 2020).

Crowd voting allows stakeholders to express their opinion and desire through an online platform, too. This helps medical institutions to gain insight into the opinion of many people in an easy and efficient way. Delegating the right to participate in the solution of minor local problems, authorities make strategic decisions on their own, without relying on the resources of a "smart crowd". This simulation allows the government to reduce citizens' dissatisfaction and increase the loyalty of citizens to the municipal authorities, as a whole, particularly their activities (Arkhipova & Starshinova, 2021).

Crowdsensing has numerous applications in healthcare, from wearable sensors to remote monitoring of the elderly, medical device networking, and in creating a healthcare network infrastructure. Combined with many metrics that can be recorded it will provide a better picture of your health status which in turn will allow doctors to make a better diagnosis (Sayrafian et al., 2021).

### METHODOLOGY

The research methodology used in this paper includes various scientific methods. The general scientific one used is data collection by surveying patients in secondary healthcare institutions. The questionnaire is testing readiness for the adoption of crowdsourcing systems in secondary healthcare institutions. The obtained results will be analyzed using statistical methods to draw objective conclusions about what crowdsource



models - crowd wisdom, crowdsensing, crowd voting, or crowdfunding should be implemented in secondary healthcare institutions.

### RESULTS

In this research we examined the patients' readiness to use crowdsourcing services in secondary healthcare institutions. In the context of crowdfunding, we tested if patients are ready to donate money for necessary equipment such as various appliances, beds and other needed resources. Crowd voting, a democratic way of making important decisions, is one of the possibilities that would help patients to express their needs and to participate in initiatives for improving healthcare services. Furthermore, we tried to examine patients' readiness to share their health data collected over the phone and other wearable devices with doctors, and get a professional opinion. This will be implemented through a crowdsensing services.

#### CONCLUSION

Through this research, we examined readiness for implementing crowdsourcing services in secondary healthcare institutions. The main survey was conducted at secondary healthcare institutions, where the respondents were patients of all age groups. Crowdsourcing is rapid, low cost, and can collect a huge amount of information from a large number of people. What may pose a risk in this solution is that the existing healthcare system needs to be adapted and changed in order to be compatible with the new crowdsourcing system.

Keywords: healthcare, crowd wisdom, crowdfunding, crowd voting, crowdsensing

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