

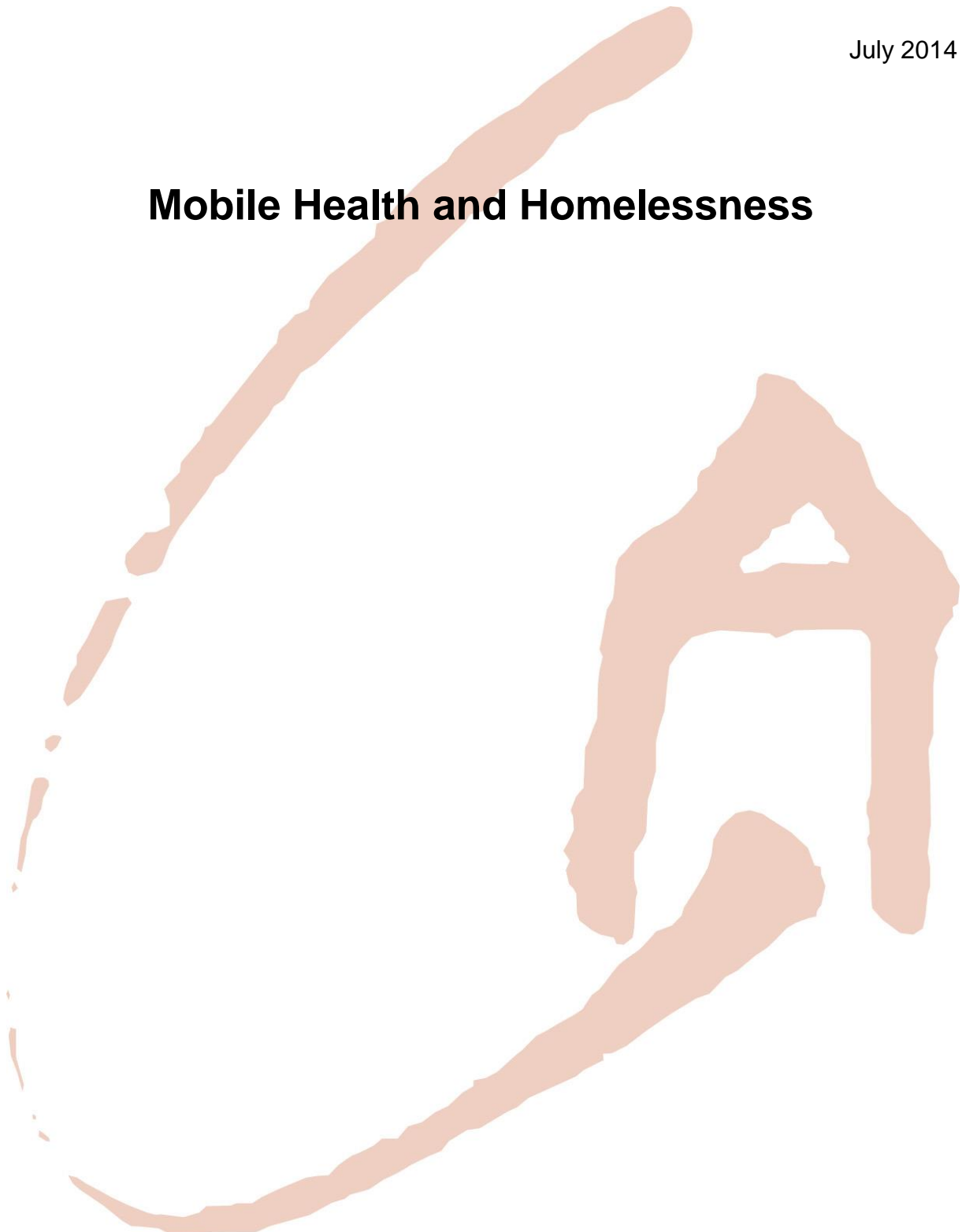


FEANTSA

Mobile Health and Homelessness

July 2014

## Mobile Health and Homelessness



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## **mHealth**

The use of mobile technology for health (mHealth) is a rapidly growing field which attracts a lot of promises and enthusiasm from across the globe. This paper looks whether it has the potential to play a part in improving healthcare for homeless people.

Mobile health (mHealth) covers 'medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants and other wireless devices.'<sup>1</sup> It also includes applications (apps) as well as medication reminders by sms and wireless computers.

## **Health and Homelessness**

Homeless people have many unmet health needs and they face a number of barriers in accessing healthcare. Some of these barriers are financial and administrative, but they are also rooted in fear of being stigmatised and made to feel unwelcome by health professionals.<sup>2</sup> Homelessness, therefore, is an important health issue and is an extreme example of health inequalities. Compared to the general population, homeless people experience higher levels of physical and mental ill health and die on average twenty years earlier than the rest of the population.

As making access to information and communications technology available to homeless people is crucial for their social and economic integration<sup>3</sup>, mHealth has the potential to transcend some of the existing barriers in access to healthcare and to contribute to reducing the health inequalities affecting the homeless population.

## **What mHealth Can Do**

Across the European Union (EU), healthcare systems are in need of reform and policy-makers are looking to foster innovation and efficiency in healthcare delivery. mHealth has the potential to respond to some of the challenges facing health systems by increasing access to healthcare and health information to all, including hard to reach groups, by increasing efficiency and lowering the cost of healthcare services, and by improving prevention.<sup>4</sup>

mHealth can improve access and efficiency in healthcare. For instance, it can help homeless patients and those with mental health problems overcome their reluctance



to seek help because of stigma or shame. mHealth can be more engaging and interactive and has the potential to renegotiate the strained relationship between health professionals and homeless patients. By allowing patients to be more empowered by being involved in their own healthcare, mHealth solutions can increase treatment compliance and lead to improved health outcomes.

### **Examples of Successful Use of mHealth**

The following example shows the potential of mHealth-based outreach work for the homeless population. A pilot study in the US provided homeless patients with co-occurring substance use and psychiatric disorders with mobile phones. An automated telephone system was programmed to call participants daily for 30 days to ask if they had taken their medication. While psychiatric patients in general have poor medication adherence, the situation is worse among homeless psychiatric patients, where homelessness further complicates the usual causes of non-adherence. This pilot, however, showed that it is possible to reach homeless psychiatric ill patients on mobile phones over an extended period and that all of the participants reported that they had taken their medication as prescribed. A number of studies have also shown that patients are more likely to report deviant behaviour to a computer than to their clinician. Moreover, participants reported that they felt cared for and as a result, they made even more efforts to maintain their treatment. <sup>5</sup>

mHealth solutions could also increase the general wellbeing and self-motivation of homeless people. One example of this is of a study of homeless drug users in the UK who took part in a computer-assisted substance abuse therapy project, called Breaking Free Online. The project evaluation concluded that the assessment of treatment success should not focus exclusively on measuring reduced drug use or abstinence, but also on other recovery indicators. In this project for instance, participants had set a wide range of personal, psychological, educational and social goals when starting the programme and were often achieving them.<sup>6</sup>

### **Efficient and Cost-Effective Discharge Practices**

mHealth tools can be very useful in following up patients after their discharge from hospital. It has been noted in many studies that patients are often distracted when being discharged and have difficulties to focus on the information they are told by the clinicians. For homeless people, discharge from hospital, if inadequately planned as is often the case, leads to living on the street or unstable housing and is therefore a particularly distressing time. mHealth tools can be used to follow up with patients, for example by sending medication or appointment reminders and by providing further information on health management. Being connected to patients can help prevent



relapses and repeated visits to the emergency department. While obviously providing homeless people with access to mHealth solutions and tools have costs, there are potential cost-savings (e.g. reduced numbers of emergency room visits or less frequent relapses) that are associated with the implementation of mHealth programmes.

### **Coordination**

Due to the fragmentation of health services, homeless patients do not always receive the appropriate treatment in the different care settings and are often shunted from service to service, being treated only for the most acute problems. Through coordination of all the different parts of the healthcare system through mHealth solutions, GPs, hospitals, mental health care, drug and alcohol programmes could be provided with a more accurate and holistic picture of the patients' illnesses and behaviours. mHealth solutions could also allow easier and better coordination of care between the health and social care sector and also move towards a service model that places the individual at the centre of services. This would be particularly important since one of the key challenges for providing services for homeless people is the lack of coordination between sectors.

### **Prevention and Health Promotion**

Multilevel prevention is considered to be key to a well-functioning health system. Homelessness demands a range of health promotion strategies, from primary prevention (life style risks and behaviours) to secondary (find and treat the disease as early as possible). mHealth solutions can be appropriate for health promotion if they are developed with the possible health literacy problems many people face in mind and therefore making information accessible to all. One such primary health promotion mHealth initiative is the text4baby programme started in the US with the aim of increasing knowledge and awareness related to maternal-infant health. All young pregnant homeless women targeted by the programme enrolled and stayed in the programme and read and saved the text messages. They found the health information received interesting and helpful and acted upon them. <sup>2</sup>

### **EU Context**

At EU level, growing attention is being given to both mHealth and Health Inequalities. In 2009, the European Commission adopted a Communication on 'Solidarity in health: reducing health inequalities in the EU', which aims to help reduce health

inequalities by supporting action by Member States and stakeholders and through EU policies. The importance of addressing health inequalities is also highlighted in the EU health programme. mHealth is an integral part of the eHealth Action Plan 2012-2020, which sets out a vision for eHealth in Europe, in line with the objectives of the Europe 2020 Strategy and the Digital Agenda for Europe. It describes the EU's role in promoting the opportunities that eHealth can offer and encourages Member States and stakeholders to work together. The economic crisis has reinforced the role of the EU in influencing Member States' health systems through issuing country-specific recommendations on the healthcare reforms contained in the European Semester process. One of the key documents in the Social Investment Package calls for 'Investing in health' and provides guidance for Member States on using their health budget more efficiently and effectively. This policy context shows that the EU is gaining considerable power in influencing the health systems of Member States and can have a key impact on health policies at the national level.

## **Recommendations**

The challenges outlined above and the examples given of mHealth solutions, suggest that mHealth could have a role in facilitating access to healthcare and improving health and treatment management in the homeless population. They also show that homeless people can use mHealth solutions in an efficient and empowering way. For mHealth solutions to work, however, healthcare professionals need to understand better the problem of homelessness and the health needs of homeless people. It is also necessary to gain a deeper understanding of how information technologies by some of the most vulnerable members of society can change engagement with services, treatment adherence and health behaviours.

The EU needs to better link its eHealth agenda to its other policy objectives such as reducing health inequalities and poverty. As a follow up to the recently published Green Paper on mobile health, the European Commission needs to take steps in order to support mHealth solutions with the objective to use mHealth to contribute to reducing health inequalities. The emphasis should be on how mHealth can be integrated into the healthcare system in such a way that everyone, including the most vulnerable, can benefit from it.

EU funding should be available for the development of mHealth tools and for research in order to increase evidence on how mHealth works and to explore how it can improve health in society.

The EU should encourage transnational multi-stakeholder co-operation between national and regional authorities, healthcare and social care professionals, industry, patients, service providers, researchers and EU Institutions so that they may work closely together to ensure support for wider use of mHealth tools in healthcare. To



achieve this, it is essential to increase awareness among Member States of the importance of making eHealth an integral part of their health systems.

## References

- 1World Health Organisation definition [www.who.org](http://www.who.org)
- 2For more: Health and wellbeing for all, FEANTSA policy paper, 2013
- 3Using Information and Communication Technology in Addressing Homelessness, FEANTSA policy paper, 2013
- 4Barriers and Gaps Affecting mHealth in Low and Middle income countries, Columbia University, 2010
- 5Medication adherence among homeless patients: A pilot study of cell phone effectiveness, by Charon Burda and Ana C. Duarte In: Journal of Academy of Nurse Practitioners, 2012
- 6The use of computer-assisted therapy by homeless drug users living in hostels: an explorative qualitative study, by Joanne Neale and Caral Stevenson, In: Drugs: education, prevention and policy, 2013
- 7Implementation of mHealth program within a homeless population of young mothers, by Maureen Brynes, spring 2014



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This publication is supported by the European Union Programme for Employment and Social Solidarity - PROGRESS (2007-2013). This programme is implemented by the European Commission. It was established to financially support the implementation of the objectives of the European Union in the employment, social affairs and equal opportunities area, and thereby contribute to the achievement of the Europe 2020 Strategy goals in these fields.

The seven-year Programme targets all stakeholders who can help shape the development of appropriate and effective employment and social legislation and policies, across the EU-27, EFTA-EEA and EU candidate and pre-candidate countries.

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FEANTSA works with the European Commission, the contracting authority for the four-year partnership agreement under which this publication has received funding.