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Conference Abstract

## From integrated care towards DIY Health – Combining person-centered health care delivery, mobile technology and entrepreneurship

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## Abstract

**Introduction and objectives:** To achieve the level of impact necessary to reverse current trends of rising incidence and costs of multimorbidity and enabling healthy ageing will require new health care policy and practices. Notwithstanding integrated care receiving worldwide attention in improving healthcare delivery, the value of data driven and mobile technology for integration of health and care services remains unclear. Nevertheless, person-centered and data driven mobile health (mHealth) has the potential to evolve integrated care from business process re-design towards a new digital health ecosystem that is truly centered around a person facing health challenges. The objective of our study was to identify the opportunities and barriers of mHealth to do this.

**Highlights:** MHealth applications attack the underlying causes of the multimorbidity and ageing challenge in various ways. First, mHealth lifestyle apps promise to help in the prevention of chronic disease and multimorbidity by attacking high risk conditions such as obesity and diabetes. Secondly, personalised care promised by participative mHealth apps will reduce reliance on expensive, institutionalised care by augmenting the effectiveness of treatments. Finally, mHealth apps could empower patients by facilitating remote care, self-medication, independent living and more.

One of the major developments in mHealth for integrated care is that (new) entrants in the mHealth market focus more on patients and consumers than on medical professionals. This development has several benefits: First the emphasis on intuitive user interfaces, usability and immediate feedback by these parties seems more effective in nudging people to change towards desired behaviors than traditional (preventive) healthcare interventions. Furthermore, mHealth applications encourage self-monitoring and self-diagnosis, potentially reducing the number of hospital visits for purposes of monitoring and simple diagnoses.

However, we see certain challenges. First and foremost, attention should be paid to manage sensitivity of health information by allowing more control over data-driven solutions by end-users and other stakeholders. Secure and dedicated data platforms for the health sector should govern the secure interconnection of health data components. Secondly, to create an effective learning ecosystem, new cross-disciplinary and collaborative research and innovation approaches are needed. These will help tackle technological, behavioral and institutional challenges. Finally, to stimulate the emergence and participation of mHealth entrepreneurs, any health data exchange initiative will need to prioritize access by startups and SMEs to fast track the required fundamental innovations in a traditional health sector.

**Conclusions:** Our analysis shows that new, consumer-focused entrants have a high potential to stimulate person-centered coordinated care. Nevertheless, research and policy should find solutions for potential ‘showstoppers’, such as challenges in privacy, accountability and security. A learning ecosystem, which has to include new research and innovation models, may facilitate this. Another important aspect is to find ways to grant new entrants, in particular start-ups and SMEs, access to core health infrastructure and key data-sets.

## **Keywords**

**health care innovation; entrepreneurship; people-centered coordinated care; mobile health; business models**

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