Summary

Some 70% of hospital beds in Europe are occupied by people with chronic long term conditions. Such people currently consume a similar amount of Europe’s health resources, primarily because care is not joined up.

Clearly there is a potential opportunity here, spotted by the partners in CONNECARE, to reduce costs and improve patient outcomes by improving the integration of long term care for those chronically sick with more than one long term condition. The CONNECARE consortium will co-design with patients, develop, implement, and evaluate a novel smart-adaptive integrated care system to achieve this. The consortium contains all the necessary partners to ensure success.

Based on the concept of 4P medicine (Predictive, Personalized, Preventive and Participatory), CONNECARE will provide decision support for the adaptive management of personalised clinical pathways and will deliver tools to monitor patients’ activities and status, thus empowering them and providing them with recommendations to self-manage their condition, resulting in substantial improvements in their quality of life.

The three dimensions underpinning the required proposed paradigm shift are:

1. Organisational: making health and social care systems interoperable, promoting collaboration, becoming proactive;

2. Care and social services: improving predictive risk analysis from i) screening, ii) risk stratification, iii) mapping, iv) intervention, and v) surveillance.

3. Technological: delivering a system that offers smart Adaptive Case Management, self-management and 3-level monitoring features, fully integrated with Health information systems in place.

Objectives

1. To implement and evaluate a new organisational model for Integrated Care;

2. To co-design, develop and field test ICT tools for the adaptive case management of personalised clinical pathways;

3. To implement a proactive and preventive care approach;

4. To co-design, develop and field test an integrated solution to connect patients, carers and care professionals;

5. To empower patients to take care of themselves, through a self-management approach;

6. To co-design & develop an automatic alerting system based on the remote monitoring of patients;

7. To distil and disseminate evidence, guidelines and best practices from clinical trials.
Case Study: Carlos

Carlos is 76. He lives in a village 50 kilometres from his nearest hospital. Carlos has a range of long term conditions including COPD, congestive heart failure, early stage dementia, partial hearing loss, and arthritis.

As a result, he used to spend many hours travelling to and from the hospital by public transport. Because there was no way of coordinating his appointments, he had to travel for each individual appointment. Further, as none of the clinicians in the hospital knew what treatments others had prescribed, he often had problems with conflicting medications that required yet further trips to the hospital.

A additional problem was that his local doctor knew nothing, so when emergencies arose, apart from administe-ring simple remedies, his doctor was unable to treat him so always had to send Carlos, by ambulance, to the hospital.

Co-ordination with local social services was absent too. As a result, the way Carlos was treated had a substantial adverse impact on his physical health and state of mind.

Now, following the introduction of Connecare into his locality, Carlos is a changed person! When he does go to the hospital, his consultants coordinate their appointments so he only has to go occasionally, and when he does, each of them knows what treatments the others have prescribed, so there are no conflicts. He also gets advice on how to look after himself from the Connecare app on his smartphone, so he is able to take some of the responsibility for his own health.

Equally importantly, his local doctor knows what treatments Carlos is receiving so, when problems arise, his local doctor is able to respond effectively, and if he needs to consult with experts, he knows who to contact in the hospital for help.

Communications with social services and with his carers are far better too so that, for example, when he returns from a hospital stay, his home is ready for him, and there is always a network of people looking after his health & wellbeing.

The result is that Carlos’s health is much better looked after. As important though is that all the clinicians looking after Carlos are also able to work more effectively & efficiently.

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