



### Transforming the patient experience with telehealth in Europe

United4Health will "validate and strengthen the evidence for chronic disease management by telehealth solutions, especially on effectiveness, cost-efficiency, and transferability of the implementation of the services" by focusing on those indicators which, in the framework of the Renewing Health project, have proven valuable for evaluating these aspects.

### Objectives of the project

The demands for healthcare services faced by the European countries and regions are changing dramatically. To meet this challenge, health policy must ensure that full use is made of all resource-saving approaches, including telemedicine. This implies not only adopting telemedicine tools and solutions, but also fostering professional management and governance approaches allowing these tools to be used in the optimal way.

For many years, telehealth solutions have been trialled, seeking evidence that their use can release a number of benefits in terms of both quality and cost of care, and experience shows that, if provided appropriately, telehealth can deliver major advantages.

The core assumption behind the United4Health project is that to make the most of telemedicine solutions, it is essential to adopt innovative health and care service models. These are to increase the personal control and engagement of patients and provide greater independence, so that health and care services can be delivered where patients want them in a cost-efficient and care effective manner.

The project's driving philosophy is that telemedicine solutions provide value for citizens, providers, and payers by improving access to services (locally or in the home), reducing costs (reduced home visits, fewer emergency admissions to hospital), and increasing quality (more personalised and tailored care, easier involvement of family and informal carers).

## **Project Description**

United4Health aims to exploit and further deploy innovative telemedicine services implemented and trialled under Renewing Health.

Further, the project has the ambition to increase the use of telemedicine in Europe by producing high quality evaluations that can serve as support for decision makers considering implementing telemedicine services.

United4Health takes the best from previous trials in terms of homogeneous interventions in all the pilot sites. The pilot sites represent the variety of healthcare delivery organisations and cultures present in the EU. The project capitalises upon the results of its predecessors and will allow new regions to benefit from the experience acquired by the regions who participated in Renewing Health.

This will allow for, on the one hand, aggregating data coming from different pilot sites because of the homogeneity of the intervention and of the inclusion/exclusion criteria and, on the other hand, stratifying results to see how the same intervention has a different impact on the local healthcare delivery organisations in different countries.

The services trialled in United4Health have been selected from the vast range of services in Renewing Health. This limited number of interventions will be trialled in 15 regions. In general terms, they aim to give patients a central role in the management of their own disease in a way that is convenient to their daily lives by the use of remote monitoring. Further, the interventions are to fine-tune the choice and dosage of medications, promote compliance to treatment, and help professionals to detect early signs of worsening. The trials will run for two years targeting diabetes, chronic obstructive pulmonary disease (COPD), and cardiovascular diseases.

The project operates as a multi-centre clinical trial measuring efficiency and cost effectiveness of the implemented solutions. This will give scientific validity to the results and will promote adoption of remote patient monitoring and treatment on a large scale.

#### **C**ASE STUDY

In one of the Welsh pilots, patients suffering from COPD receive a patient briefcase upon discharge from hospital. The briefcase includes a Tablet display for video-communication with the community specialist nurses. In addition, it also contains the equipment for the measurement of pulse and blood oxygen saturation. Daily scheduled tele-consultations are held with a specialist nurse for two weeks after hospital discharge before a step down service to peripheral monitoring with a text messaging service commences for up to a further 12 weeks. Here the primary outcome in the study with 200 patients is the number of readmissions.

# **Results & Impacts & Preliminary Results Expected**

#### **Evaluation**

The effectiveness of the solutions trialled in the project will be evaluated using the MAST methodology. MAST, developed by two of the project partners, is increasingly the method of choice for evaluating healthcare projects. The use of MAST ensures that the outcomes with regard to safety, clinical impact, patient perception, economic aspects, and organisational aspects are assessed in accordance with scientific guidelines.

The MAST evaluation framework has been developed in the context of MethoTelemed, validated in Renewing Health in 21 different settings, and become a success story thanks to its adoption by a number of players from within and outside the EU programmes. MAST will be used throughout all the trials of United4Health, and will ensure both quality and comparability of results with a number of complementary activities going on in the international arena.

Thanks to the consistent use of the same evaluation methodology across participating regions in both Renewing Health and United4Health and the increased geographical scope of the trials, the case for the deployment of telehealth solutions will be dramatically strengthened.

### **Impacts & Preliminary Results Expected**

United4Health will overcome the limitations of both the Whole System Demonstrator which, although very significant in terms of samples size, was run in just one of the British regions (England), and Renewing Health, which, due to the constraint of starting from pre-existing pilots, had to renounce the ability to aggregate data across various national pilots.

Considering that the Whole System Demonstrator, Renewing Health and some 130 other Randomised Controlled Trials of telemedicine interventions carried out throughout the globe have already demonstrated all which could be demonstrated on the clinical impact of telemedicine on chronic conditions, United4Health will focus on the organisational aspects, the efficiency gains, and the economic aspects of the telemedicine interventions.

The project is supported by the Health Authorities of the participating regions which have the responsibility for the healthcare budget; they are fully committed to deploying the telemedicine services in their territory. They are also committed to co-operating among themselves and with other European initiatives with similar objectives in order to promote the further uptake of the services at pan-European level.

The long term impact of the United4Health project is the integration into healthcare systems of a new care model for chronically ill patients in order to improve quality of life, accessibility of care, and efficient use of resources. These improvements are expected to come from a combination of factors:

- easier and more timely access by healthcare professionals to relevant information about the patient
- better tele-monitoring of the patient's health condition through the use of PSH
- effective involvement of the patient in the management of his/her disease through education and access to clinical data
- better interaction between patients and healthcare professionals

In summary, United4Health should demonstrate, once and for all, through the deployment of services at scale, the benefits of telehealth, and unlock the market for these services in the whole of the European Union. It will promote collaboration between EU regions and establish a network for exchanging successful experiences, best practices, and benchmarking.

#### United4Health

**UNIversal solutions in TElemedicine Deployment** for European HEALTH care

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Supporting organisations: Continua Health Alliance, EHTEL, Health Information Management SA, European Wound Management Association, GSM Association, AIM, COCIR

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#### **KEYWORDS**

Telemedicine, remote monitoring services, chronic disease management, evidence, MAST, COPD, Diabetes, Chronic Heart Failure, Hypertension, new clinical pathway

