

SmartCare: Integrated Care Services Using e-Health Tools for Management of Type II Diabetes Mellitus in the Municipalities of Agios Dimitrios, Alimos and Palaio Faliro

ATTICA REGION

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ΠΑΝΕΛΛΗΝΙΑ ΟΜΟΣΠΟΝΔΙΑ
ΕΣΜΑΤΕΚΩΝ - ΣΥΝΑΓΩΓΩΝ ΑΤΟΜΩΝ
ΜΕ ΣΑΚΧΑΡΩΔΗ ΔΙΑΒΗΤΗ
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ΜΕΛΟΣ ΤΗΣ Ε.Σ.Σ.Α.Α



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ΕΝΗΜΕΡΩΣΗ - ΓΝΩΣΗ - ΕΚΠΑΙΔΕΥΣΗ - ΠΡΟΛΗΨΗ



This project is partially funded under the
ICT Policy Support Programme (ICT PSP),
grant agreement number 325158.



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framework programme
2007-2013



- Palaio Faliro is a B3 Integrated Care EIP on AHA group member
- SmartCare is a PSP - ICT Pilot - A project co - funded by the EU. Budget is 16 m €.
- More than 40 stakeholders, 10 deployment sites, in two waves.
- ATTICA belongs to the second wave.

SmartCare



SmartCare Support structure

- SmartCare coordination & management structure
- Expert advise & support (User Advisory Board, Industry Board, Committed Regions Board, Internal Scientific Board)
- Local SmartCare Alliances / Stake Holder Partnerships



Common SmartCare approach



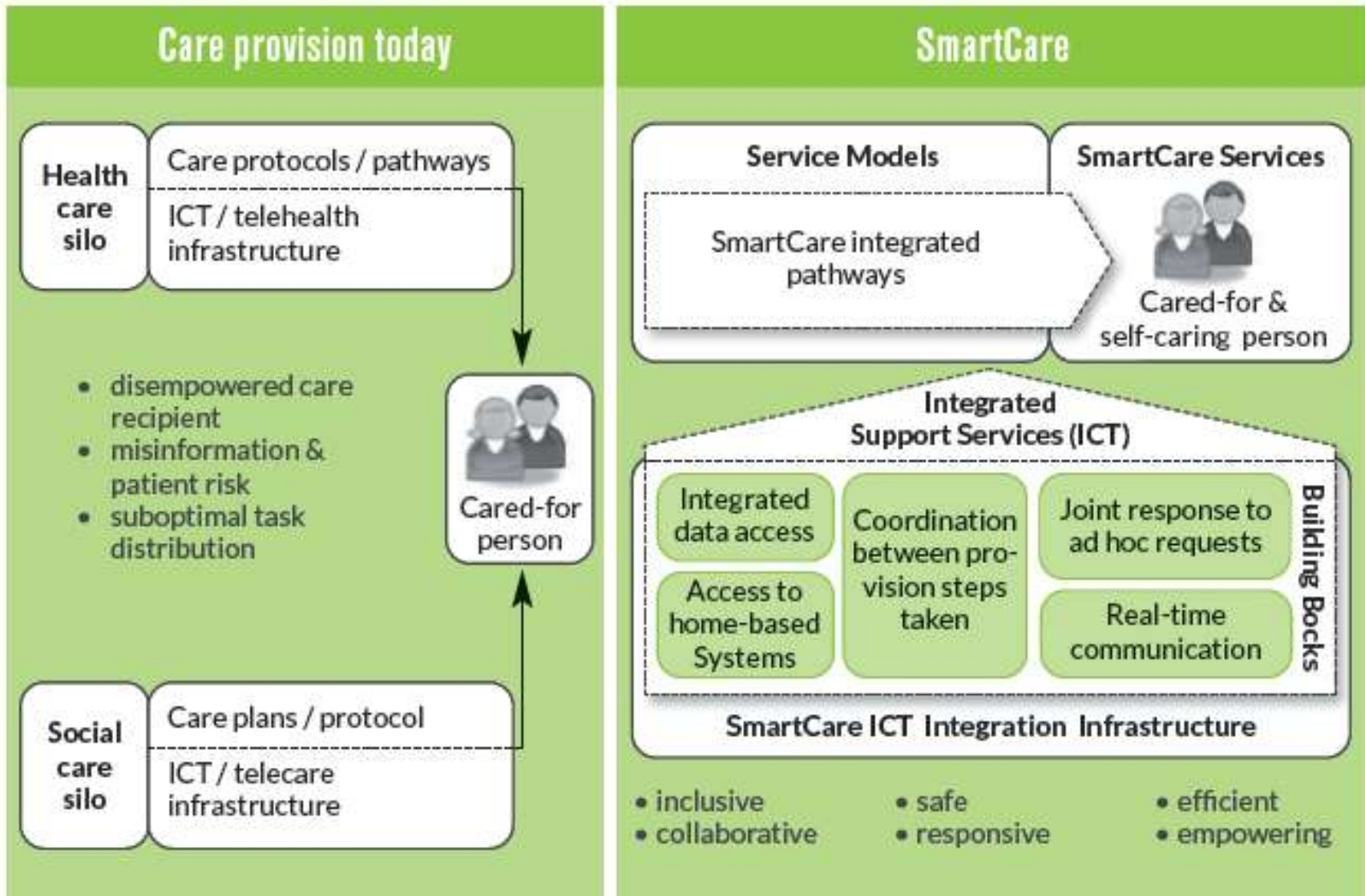
SmartCare work programme

- Requirements elicitation, use cases & integrated care pathways development
- Pilot service specification & process model development
- Joint definition of common building blocks for ICT integration infrastructure
- Pilot site preparation & operation in two waves
- Pilot evaluation & exploitation support

Shared outputs

- Common ICT integration infrastructure architecture
- Generic care pathways, service models & value chains
- Guidelines for procurement, implementation & up scaling
- Synthesised evidence on impact
- Sustainable business models & transferability assessment
- Consensus building on further organisational & policy development for care integration
- Contribution to EIP by critical mass for large scale uptake

SmartCare



Study Protocol



- The study protocol for the ATTICA Pilot has been created by a multidisciplinary team of social and health care professionals.
- The protocol will be implemented mainly by this very same team, thus ensuring the smoothest possible operation of the pilot at execution level.

Study Design



- The Theoretical Background upon which the pilot is based, is the Chronic Care Model.



Study Design - continued



- An open label controlled clinical study.
- The **SmartCare** intervention in ATTICA is a **Computer-based diabetes self-management** one [Cochrane Review 2013]
- An **intervention** group of **210**, elderly patients with T2DM, treated either with oral or injectable anti-diabetic agents and their carers receiving **SmartCare** Services.
- A **control** group of **210**, elderly patients with T2DM receiving “**Standard**” Care, as defined by their specialists.

Study Design - continued



- In order for ATTICA study to be CCM based, changes in the majority of areas of areas of CCM model must be designed and implemented i.e. **self-management support, decision support, delivery system design, clinical information systems, healthcare organization, and community resources**

Study Design - continued



- The **aim** of the Pilot is to investigate whether the SmartCare intervention can contribute to achieving and maintaining improved quality of life and good diabetes control as determined by HbA1c measurements among the intervention group and to describe changes in various outcomes described further in the outcomes slide.

Study Design - continued



- The **SmartCare** intervention in ATTICA consists of the following components:
 - Integrated Care Socio Medical Electronic Record
 - Web based portal for professionals, patients, carers with educational material and virtual peer to peer support groups
 - Work flow engines
 - Patient self management support tools
 - Vital Parameter Monitoring
 - Alerts, reminders, messages and schedulers for patients
 - Reports and protocols
 - Video conferencing

Inclusion Criteria



- The following inclusion criteria are defined:

Medical	Social
Stable Medical Condition	People with medical insurance plan
Oral Antidiabetics or/and Insulin injections as a method of treatment	Digital literate patients (or their carers)
7 < HbA1c < 10	Living with a carer or receiving informal care at home
	Ready to make changes in their lives

Hypotheses



- SmartCare Services can:
- Reduce HbA1c levels
- Increase Self - Efficacy for management of T2DM
- Induce more physical activity
- Result in an improved quality of life
- Can reduce the frequency of visits to Diabetologists
- Can increase satisfaction from patients
- Can increase the health status of patients
- Can decrease the admission to hospitals due to Diabetes complications
- Can decrease depression status of patients
- Can decrease the diabetic complications - related visits to other specialists.

Endpoints



- **Primary Endpoint:**
 - Improvement in Quality of Life (QoL).
- **Secondary Endpoints:**
 - Optimization of HbA1c levels in intervention group compared to control group, Adoption of Healthy Diet, Increase in Physical Activity, Improvement in Health Status, Satisfaction with SmartCare Services, Decrease in Resources Utilization and Improvement of depression status.

Recruitment



- Residents who meet the inclusion criteria are identified among patients who have formerly attended the KAPI and /or the practices of the diabetologists and are informed about the pilot by the care coordinator. Those willing to participate are asked for written informed consent and are consecutively randomized to receive either standard T2DM care according to local modalities and guidelines or smartcare services.

Baseline Data



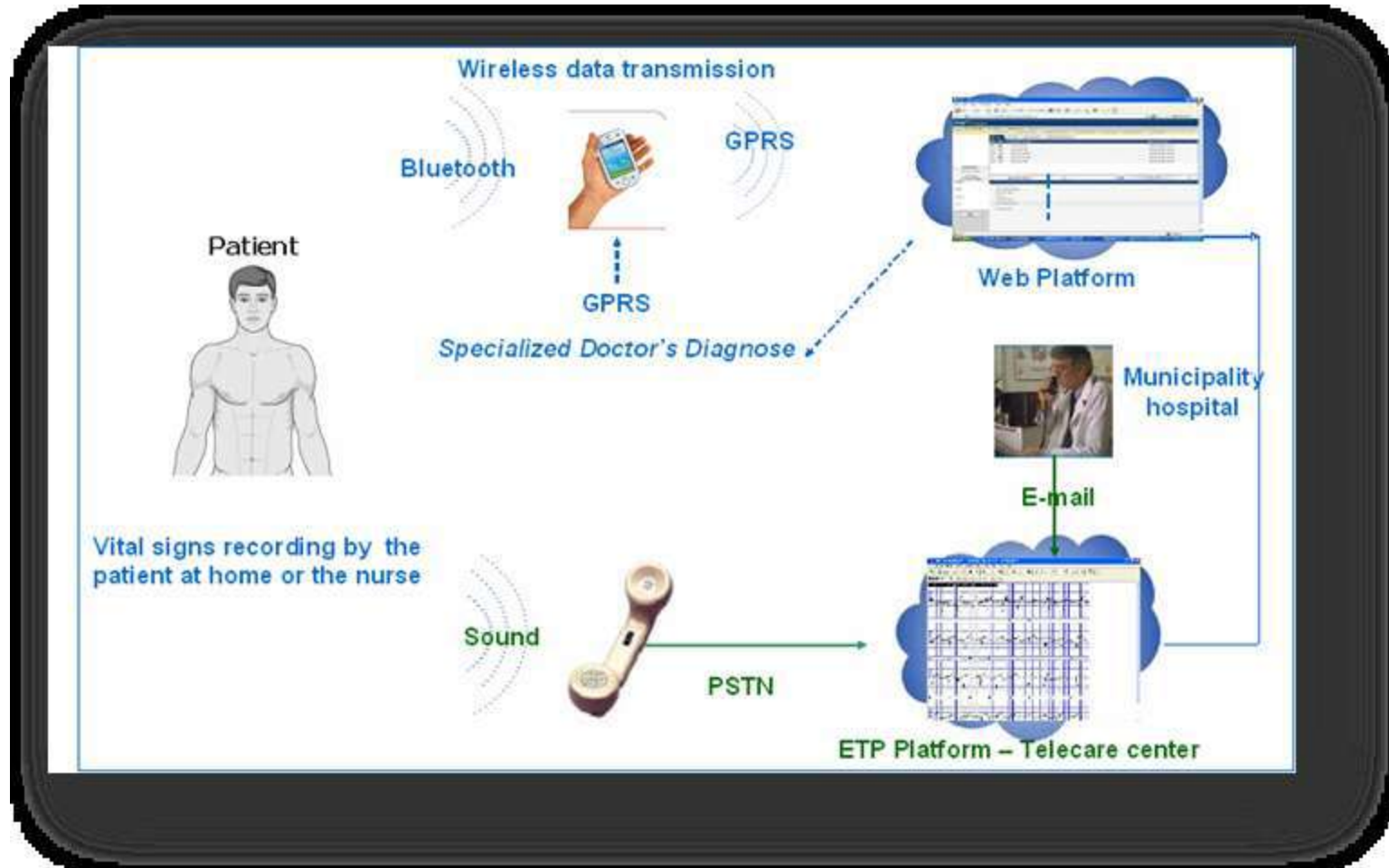
- Anthropometrical measurements
- Biochemical measurements
- Haematological measurements
- Full Urine Test
- Foot at risk evaluation data
- Clinical examination results
- Lifestyle factors: smoking and drinking habits
- Pharmacological treatment - General
- Pharmacological treatment - Antidiabetic
- Diabetes duration
- Complications of T2DM
- Socio - economic data

Baseline Data - continued



- Questionnaire about QoL - Existing
- Questionnaire about Health Status - Existing
- Questionnaire about depression in primary care - Existing
- Questionnaire about dietary habits - Existing
- Questionnaire about physical activity - Existing
- Questionnaire about readiness to change - Existing
- Questionnaire about satisfaction from SmartCare services - **Under Construction**
- Questionnaire about self efficacy in T2DM management - **VALIDATED and under publication**

System Architecture



THANK YOU!

ANY QUESTIONS?

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