

Slovenian experience in evidence-informed management

# Smart System of Integrated Health Care and Home Care

Evidence-based chronic disease management





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# Are we ready for the future?



# Healthcare transformation with ICT



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# Change management = "It is about people "

### 1. Medical staff

implementation of digital technology in clinical care pathways remote patient management interpretation of patient-generated data data management, privacy, regulations

#### 2. Organization

clear responsibilities, job descriptions, change in interprofessional relationship, integrated care education for front line staff Information flow and clinical teamwork

### 3. Patient

transformation of the tradicional patient-clinician relationship engagement empowerment active self-care, responsibility for health e-literacy



# Evidence – based clinical decision making

Dynamic care plan management Real time data Patient information Alerts Data reporting



#### The eHealth Enhanced Chronic Care Model (eCCM)



## Integrated Clinical Pathway Five modules for chronic disease management with telemedicine

- Pacient empowerment, selfcare in healthy living
  - Integrated care for **stable chronic disease**
- 3
- Prevention of hospitalisation for patients at risk
- Remote diagnostics (arrhythmia, respiratory insuficency)
- **B** Home care (E-care)



# Pilot for chronic disease management with telemedicine



**Chronic heart failure** *UMC Ljubljana* **COPD and astma** *Klinika Golnik* 

Diabetes typ 2 Primary care – ZD Trebnje Arterial hypertension Primary care - ZD Trebnje Analysis and KPI

D1 Safety

D2 Clinical efficiency

**D3** Satisfaction

- D4 Economic efficiency
- D5 Organisation
- D6 Social, ethical and

legal aspects

**D7** Transferability



#### **INTEGRATED CLINICAL PATHWAY – CHRONIC HEART FAILURE**



# Dynamic care plan management

Program za napredovalo srčno popuščanje in transplantacije srca KO za kardiologijo UKC Ljubljana



### **Clinical portal**



### **Teleconsultation**



# **Patient App**

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Sporočila (0)	
Pregledano	
Rezultati Meritev	
Informacije In Navodila	
Koledar	
Sprememba Gesla	



# Preliminary results

# Positive feedback from clinical teams

- use real time data to help clinical decision making
- individualized chronic disease management
- effective information flow
- acceptable workload
- 20% reduction of hospitalisations (CHF)
- patient feedback
- feel safe, engaged, better access to clinical teams
- stay longer independent at home



## **Project results**

Integrated telemedicine and telecare services implemented on the national level

### TELEMEDICINE AND TELECARE SERVICES

- Integrated clinical pathways and e-Care
- Individualised healthcare
- Telecare and Telemedicine Clinical Study (100 + 100 patients), MAST

#### ICT INFRASTRUCTURE

- Technical standards
- Telemedicine plaform, sensors and portals
- Personalized medical TV channel
- Interoperability with national eHealth
- Integration of IT systems (with HIS...)

> GDPR



#### **LEGAL ISSUES**

- Information officer agreement
- Ethical medical committee approval
- Review of key legislation, standards and amendments proposed
- Proposal for National deployment

#### **FINANCIAL IMPACT**

- > KPI
- MAST Methodology
- Reimbursement model



# Project results: Telemedicine platform with sensors and portals in production phase



# **Project Results**

### Application for patients

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TelekomSlovenije

# **Telemedicine** platform



Applications need to be part of care processes through platform











## Assistance centre



#### **Clinical portal for medical personnel**

Osnovni meni	Pregled - izpolnjeni protokoli										
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Skupine pacientov											





### How does E-care service work?





### **Potencial Eeffects of Smart System of Integrated Health and Home Care**



# Our challenges

- interoperability of information systems
- patient selection
- integration in the workflow of clinical teams
- change management
- sustainable funding of telemedicine / eCare
- national telemedicine strategy



### Evidence-informed decision-making in healthcare management Are we connecting the dots?

