

**ALEC 2017**

Arctic light E-health Conference

1-2 February in Luleå, Sweden



# USE OF SCIROCCO TOOL IN PUGLIA REGION, ITALIA – Pratical Experience

Dott.ssa Francesca Avolio



Co-funded by  
the Health Programme  
of the European Union



@ SCIROCCO\_EU

# Puglia Region

- 4,1 millions population
- 40% Chronic patients
- 21% over 65yrs



**Southern  
Italy**

# 1. COMPREHENSIVE HOSPITAL NETWORK

---



5

Second Level  
Hospitals

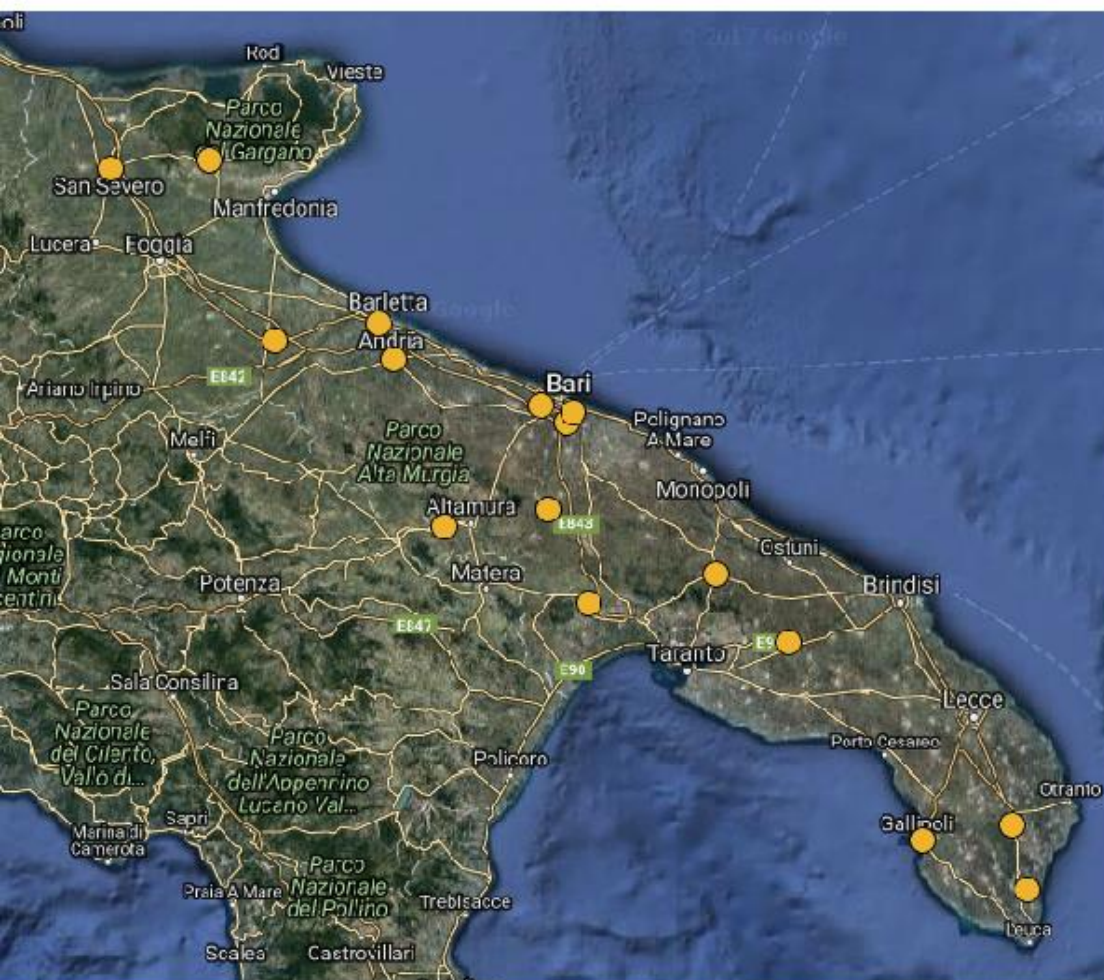
average

825 beds



# 1. COMPREHENSIVE HOSPITAL NETWORK

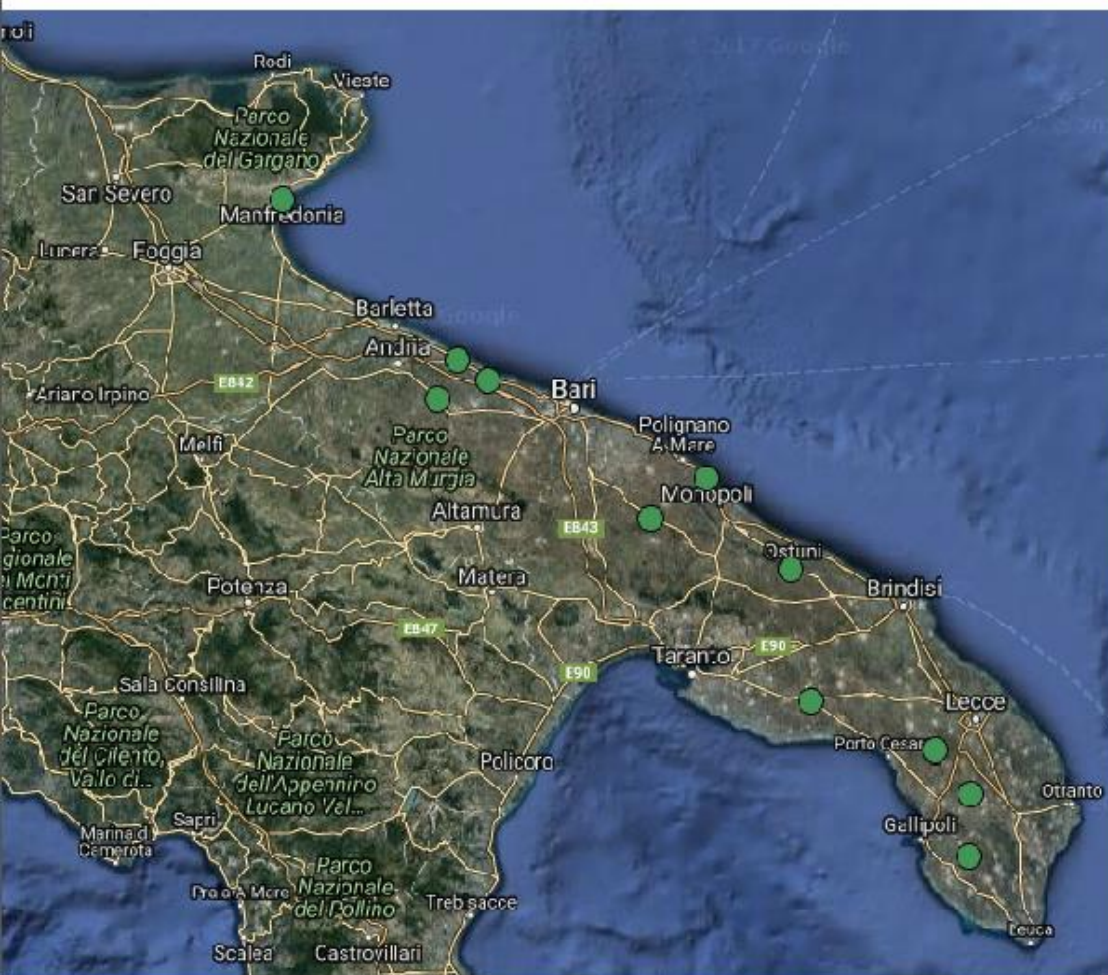
---



16  
First Level  
Hospitals  
  
average  
299 beds

# 1. COMPREHENSIVE HOSPITAL NETWORK

---



12  
Basic  
Hospitals  
  
average  
127 beds



## 2. INTEGRATED HEALTH COMMUNITY CENTERS (PTA)



- 31 PTA (Presidi Territoriali di Assistenza)
- Most of them once (2010 e 2016) were hospitals
- PTA is not a “box full of things”
- ...but a center of integrated healthcare service

## 2. INTEGRATED HEALTH COMMUNITY CENTERS (PTA)

---

- *Patient Information and Orientation*
- *Primary Care and GPs associated*
- *Ambulatory Care and Outpatient Surgery*
- *Bioimaging and Diagnostics*
- *Dyalisis Center*
- *Prevention and Vaccination Services*
- *Rehabilitation Services and Accommodation*
- *Health Community Housing (hospice, disability, senior)*
- *Family Counselling and Maternal Services*
- *Psychiatric services and housing*

### 3. CARE PUGLIA FOR CHRONIC PATIENTS: THE ISSUE

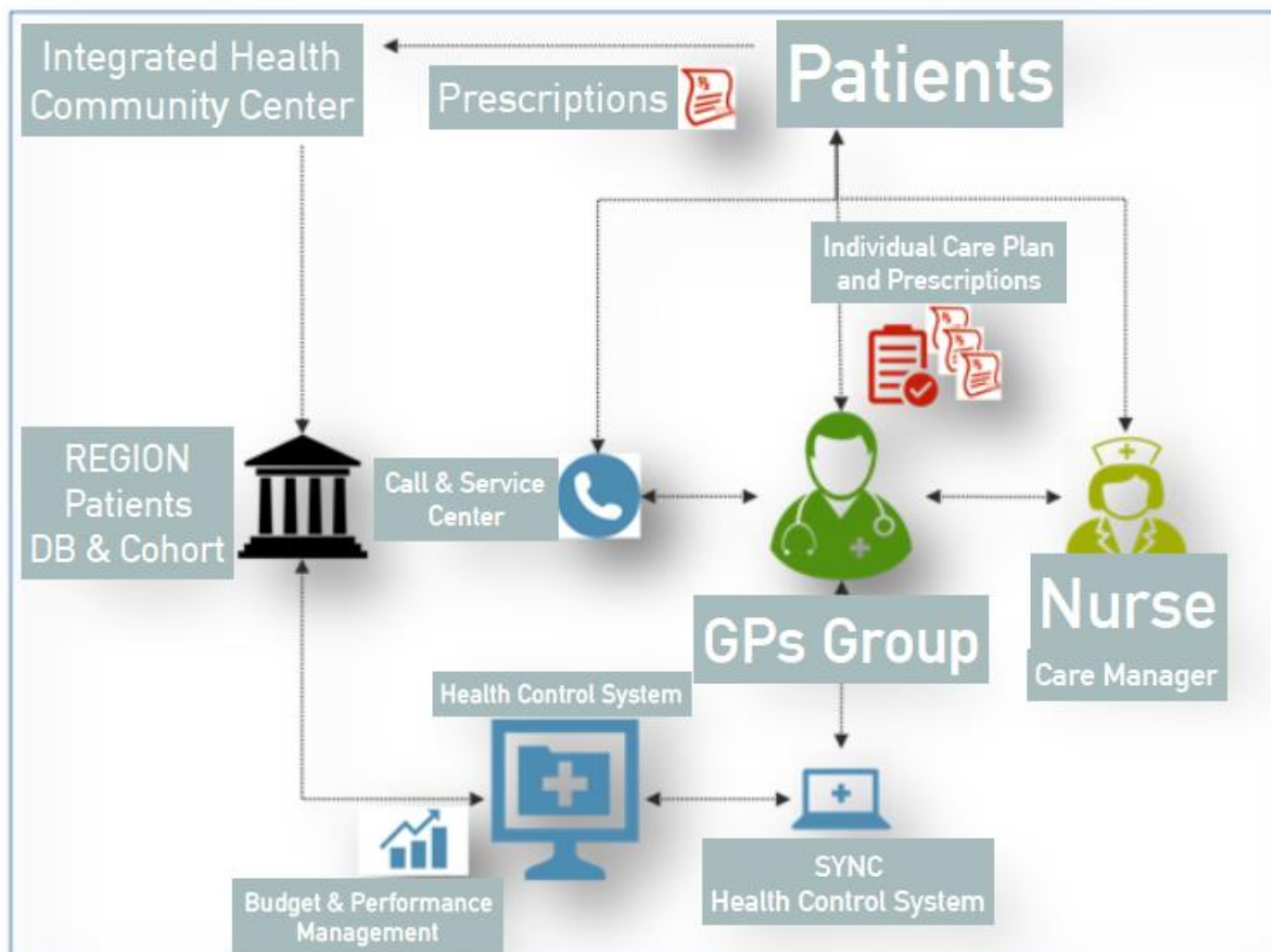
.....

CATEGORY	% Citizens	% Expenditure	Num Citizens	€ Expenditure per capita	€ Total Expenditure
Deceased	1	8	37.963	7.074	268.561.712
Chronic	40	79	1.613.426	1.580	2.549.260.471
No Chronic	40	13	1.608.067	257	413.508.332
No Consumer	19	-	780.373	-	-



### 3. CARE PUGLIA FOR CHRONIC PATIENTS: THE MODEL

.....



## GOOD PRACTICES

### 1. CKD Integrated Care Policlinico di Bari

Chronic Kidney disease Quality of life, cost savings, hospitalization .

**Viability score 19**

### 2. RMHF Policlinico di Bari

Heart failure and arrhythmia, remote monitoring of implantable devices

**Viability score 19**

### 3. TELEHOMECARE ASL di Brindisi

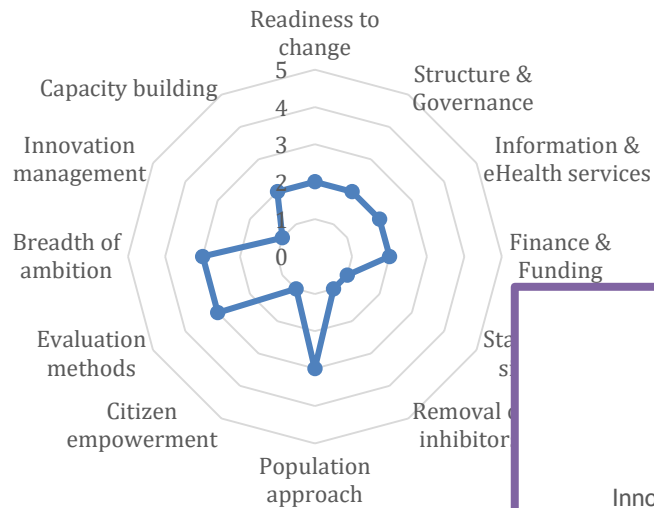
Hospital at home. Protected de-hospitalization, Integrated management (Hospital Territory) reduces hospital stay

**Viability score 21**

# 3 experiences in Puglia

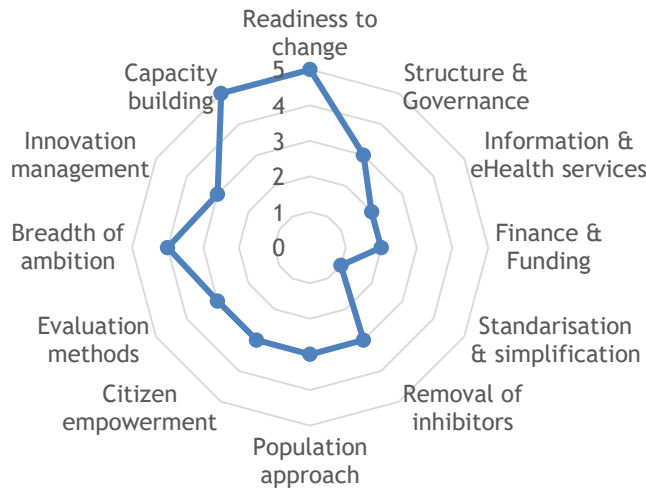
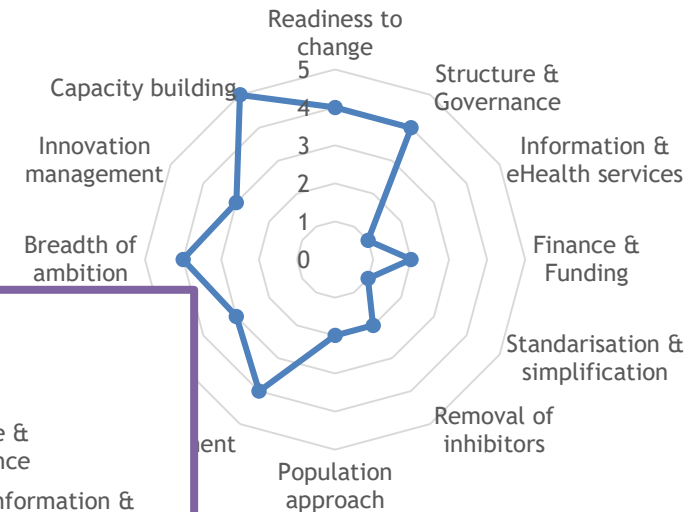
## RMHF

Average maturity score of 1.92,



## Telehomecare project

Average maturity score of 2.92



## CKD Integrated Care

Average maturity score of 3.08



# Chronic Kidneys Desease (CKD) integrated Care

CKD integrated-care is a platform with in e-learning environment with edu-games for the empowerment of the general population and patients affected by CKD and their caregiver.

A business intelligence tool on board for the early detection of CKD patients through the analysis of clinical data, a SW, inspired by home living design and fully equipped with medical devices connected telemonitoring system for audio-video connection between patients, nurses and nephrologists.

Care and Case managers, and Physicians with specific expertise, trained on the use of Ulysses, Help-Large and telemonitoring/teledialysis system.

Work force development on Health Innovation and Integretion Hospital Territory.

# Challenges Addressed

- Increased **ageing of population** and the related increased prevalence of chronic degenerative diseases (empowerment and ICT support System)
- **early detection** by GPs of CKD, a silent disease, that should be early referred to nephrologists to avoid its progression towards end stage kidney disease (*rate of progression of CKD reduced by 10% costs, leads to savings in health spending of 2.5 billion euros in 5 ys*)
- **de-hospitalization** of chronic patients on “in-center” hemodialysis
- demand for a good quality of life and the risk of **marginalization** of the most vulnerable people.
- commitment of financial and human resources to **improve access to healthcare**: better care, less costs, care training (professionals) , client empowerment and **social and healthcare integration**

## Key Innovative Elements

- ▶ CKD integrated-care is a platform with an e-learning environment, with edu-games for the empowerment of the general population (Help-Large) and patients affected by CKD with their caregiver
- ▶ a business intelligence tool on board for the early identification of CKD patients through the analysis of clinical pathology data
- ▶ a software, inspired by home living design and fully equipped with medical devices connected telemonitoring system (TELECARE) able to create an audio-video connection between patients, nurses and nephrologists
- ▶ The use of the platform brings assistance directly to the patient's home, allows consultation among distant specialists, promotes the sharing of knowledge and diagnostic and therapeutic protocols, providing to the whole welfare system a powerful and efficient clinical information management infrastructure
- ▶ The other innovative element introduced is the empowerment of the patient and caregiver through a social network and e-learning system: patient trained to self perform dialytic treatment.



# Transferability

- ▶ Adequately equipped control room (PCs, monitors, network, etc..);
- ▶ Specialized physicians (Case manager);
- ▶ Specialized Nurses (Care manager);
- ▶ ICT specialist (software maintenance and improvement)
- ▶ Home telemedicine kits (sofà + medical devices + HD camera);
- ▶ Smart devices (tablet, PC, smartphone, etc..);
- ▶ ICT regional structure, with privacy and security systems;
- ▶ Training facility.

# Transferability

- ▶ Commitment of Political Government in introducing telemonitoring systems in daily clinical practice.
- ▶ Specific requirements like ICT infrastructure at Patient Home and Control Room (multiconnection audio-video platform).
- ▶ Technical interfacing problem with the existing ICT structure
- ▶ Difficulties in the use of devices by older patients
- ▶ Privacy Policies

# Viability Criteria 1/2

Viability total score: 19

- ▶ **Time to deployment** :Between one year and three years  
**SCORE: 3**
- ▶ **Investment**: Between €100 – €1.000 per targeted citizen / patient  
**SCORE:4**
- ▶ **Evidence**:Documented evidence. Evidence is based on systematic qualitative and quantitative studies  
**SCORE: 3**
- ▶ **Maturity**:There is evidence that the practice is economically viable and brings benefits to the target group. Further research and development is needed in order to achieve market impact and for the practice to become routine use.  
**SCORE: 3**



## Viability Criteria 2/2

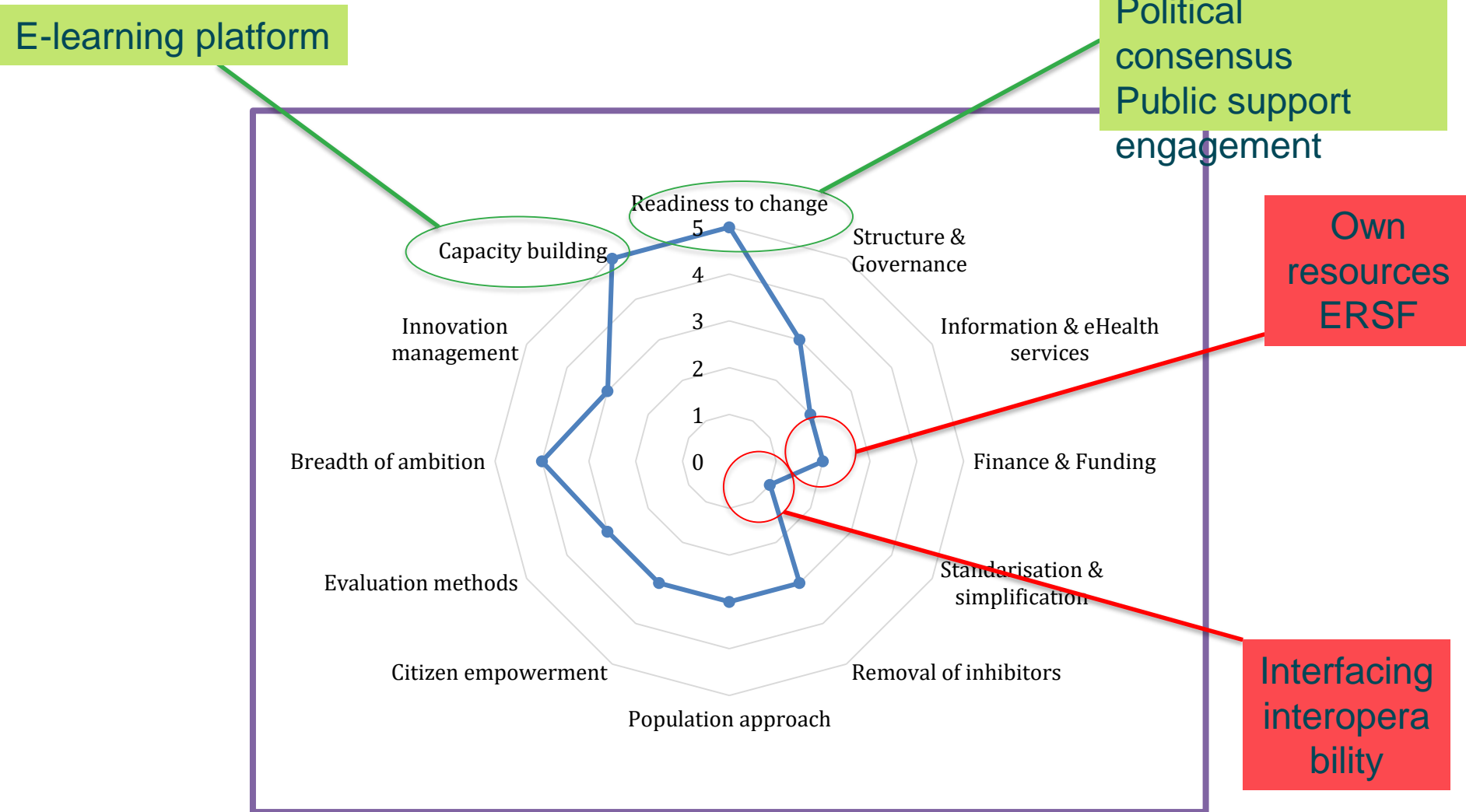
- **Impact** : Long term and sustainable impact – e.g. a long time after the pilot project ended and routine day-to-day operation began

**SCORE: 4**

- **Transferability**: Ready for transfer, but the innovative practice has not been transferred yet. The innovative practice has been developed on local/regional/national level and transferability has been considered and structural, political and systematic recommendations have been presented. However, the innovative practice has not been transferred yet.

**SCORE: 2**

# CKD Integrated Care



# Conclusions

- ▶ The online tool was easy to use and to access
- ▶ Dimensions seems appropriate to assess the maturity of the context
- ▶ Refinement on some of the scales is needed and some language issue should be analysed
- ▶ The use of the MM was accepted by stakeholders as a very “precious “ support for the development of feasibility studies prior to activation of scaling up processes
- ▶ The outcome of the GPs assessment was coherent to context, regional framework, point of weaknesses and strenght of GP, but **mainly** “context” and “policies” :
  - ➔ to do list
  - ➔ agenda priorities



ALEC 2017

Arctic light E-health Conference

1-2 February in Luleå, Sweden

Thank You