



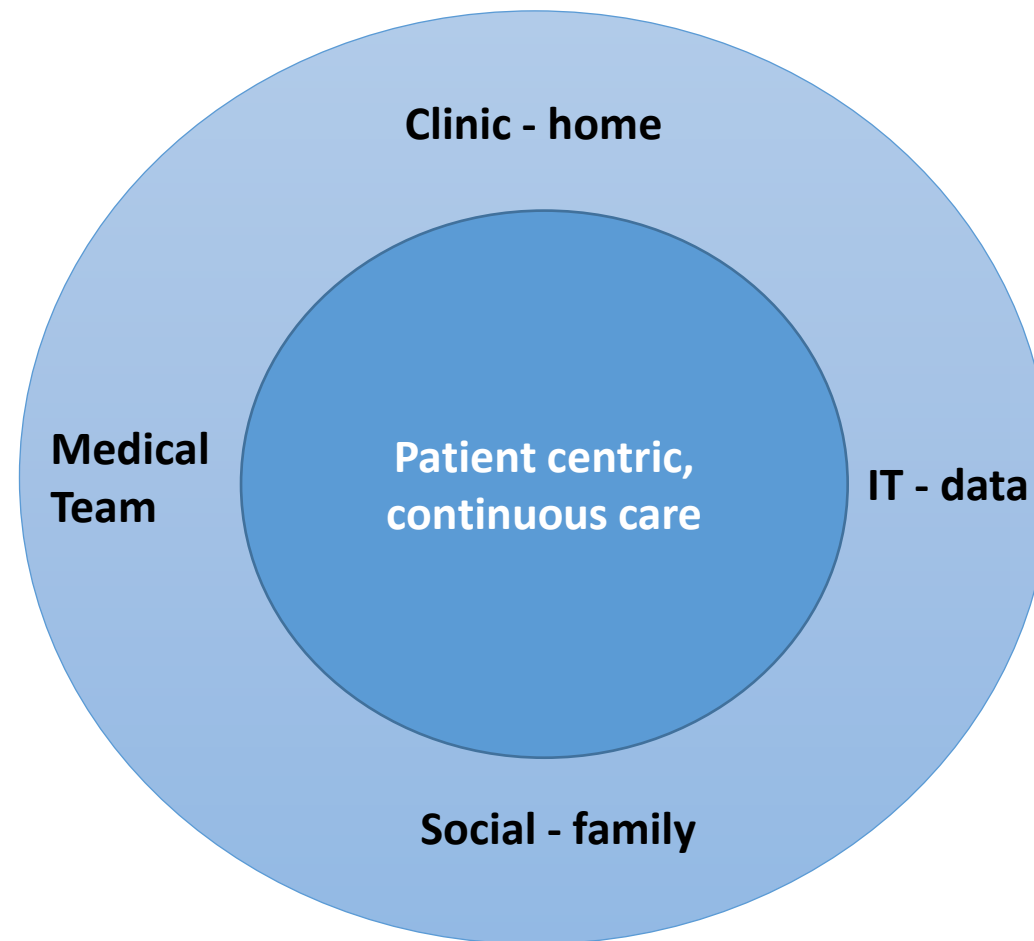
# TeleRehab services for E-coaching

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CEO

imaginary is one of the best practices  
chosen by the European Commission  
for the sector **Silver Economy**



# Aim



**Sustainable through adherence to the therapy: patient motivation!**

VIDEO: <https://www.youtube.com/watch?v=UeJqaF7BaiA&t=3s>



## Objectives and background

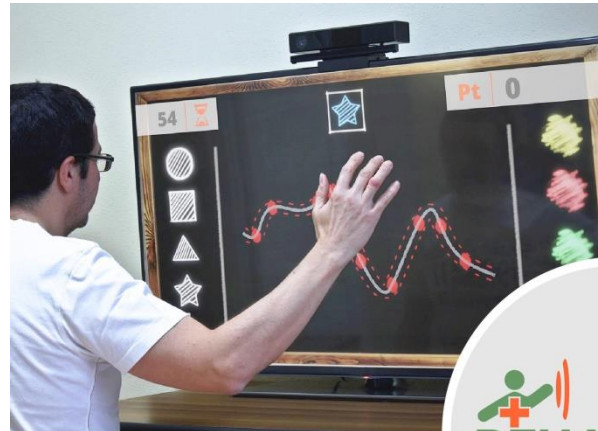
**REHABILITY** is the **suite of serious games** for physical and cognitive rehabilitation of neurological patients (studied for stroke, multiple sclerosis, Parkinson's disease, >7 yrs multi-disciplinary research).

**REHABILITY** was designed with specialists AND PATIENTS!

**REHABILITY** allows patients to follow the **rehabilitation therapy** from home with **continuous remote medical support**.

# The Games

- Upper limb
- Balance
- Cognitive
- [Lower limb]





## Benefits

- Shift of therapy **from hospital to home.**
- **Reducing cost** of care.
- Patients are **more motivated**
  - Complain less of pain and fatigue
  - Adhere better to the therapy
- Supports medical staff keeping **patients engaged** in therapy.

# Hard outcomes

**Data** shows significant tendencies for

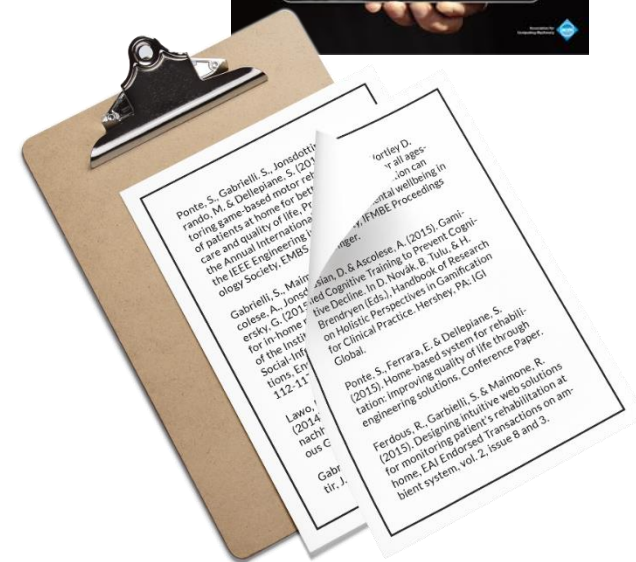
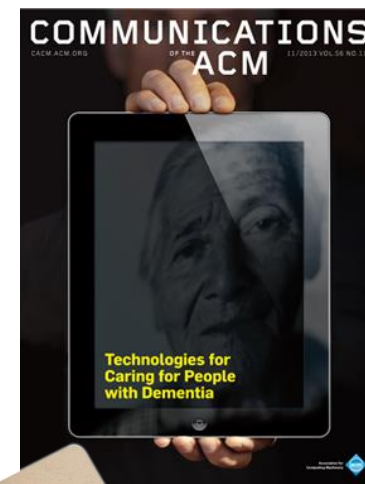
- **increasing of motivation**
- **patient engagement**
- **rehabilitation progress in patients.**

**2 randomized clinical trials:**

- European one closed
- Italy + SE Asia running

Several **scientific publications** issued:

[www.rehability.me](http://www.rehability.me)





# Conclusions

CCP Trials	• <b>MOTOR</b>	• <b>COGNITIVE</b>
Patient	<ul style="list-style-type: none"><li>• Involvement</li><li>• Acceptance</li><li>• Well tolerated</li></ul>	<ul style="list-style-type: none"><li>• Acceptance</li><li>• Intuitive</li></ul>
Therapist	<ul style="list-style-type: none"><li>• Usability</li></ul>	<ul style="list-style-type: none"><li>• Look&amp;feel</li><li>• Usability</li></ul>
Technology	<ul style="list-style-type: none"><li>• Free movement, non invasive</li><li>• Intuitive</li></ul>	<ul style="list-style-type: none"><li>• Reliability</li></ul>



## Soft outcomes - specialists and patients comment



***Patients have improved. It is important to have a tool like this.***

*Dr. Stefas Eleftherios, Scientific Director of the EVEXIA Rehabilitation Centre - Greece.*



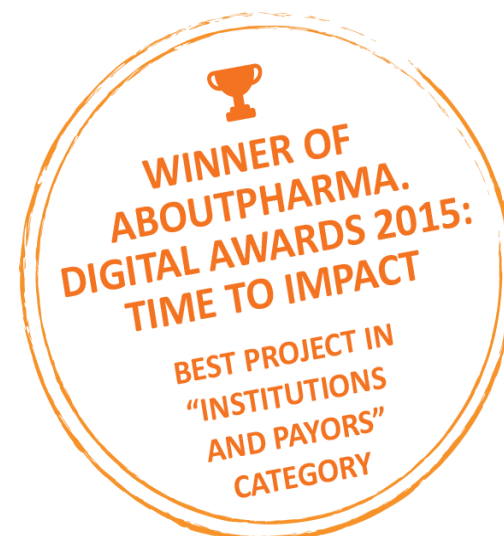
An association in Italy reports the satisfaction of patients who – feeling as **“losers”** in their lives - are able to **“win” again**!



**1<sup>st</sup> prize in AboutPharma Digital Awards**  
(Oct 2015) for the category  
**“reorganization of the NHS”** and is in the  
**top 3** nominations in the category of  
**“Tech for Patients”**.



**Best Presentation  
Award at  
[Healthtech Invest  
Europe](#), Helsinki,  
March 2017**



# Home Monitoring



**REHABILITY** is integrated with the **home monitoring app Santiago** by [HIS](#): it allows the adding of **REHABILITY**'s cognitive ability monitoring to the available control functionalities of the environmental, home automation and clinician components.

In **ITALY** by Finmatica Group with the commercial name Smart\*HOC



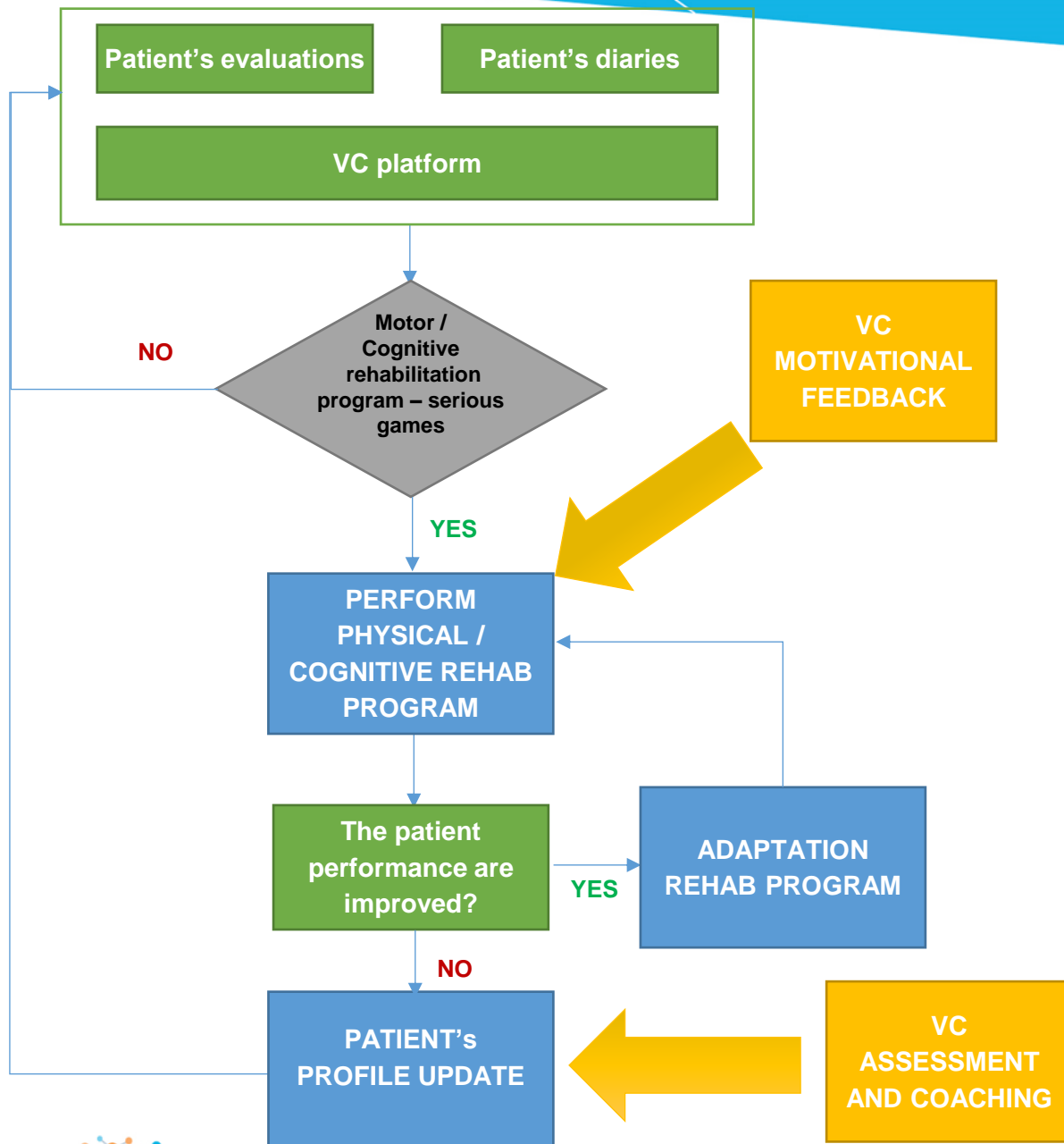
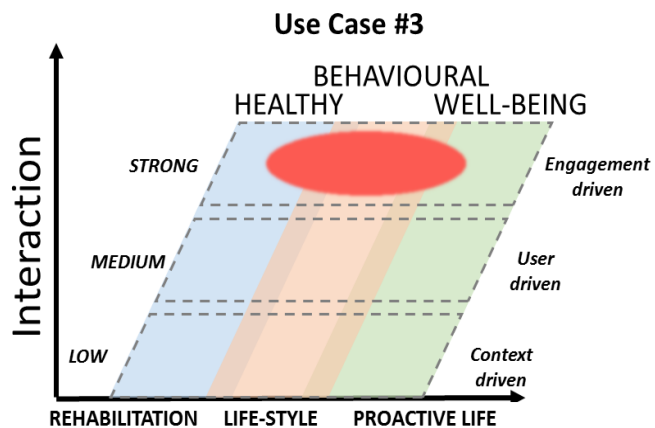
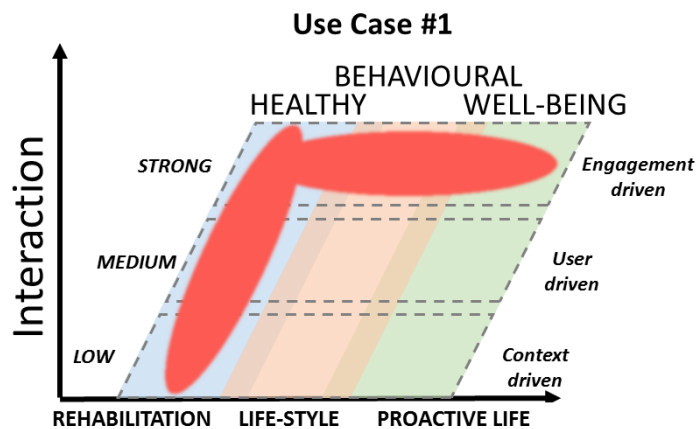
# New developments with



- **Assessment of patient for initial configuration**
- **Improving reasoning system for automatic suggestions (re-adaptation; tutoring)**
- **Application in cardiology**
- **Integration with virtual tutor (3D avatar and app): bilateral exchange of data**

# Use cases

Reference sites	Stroke disease	Parkinson's disease	Heart failure disease	Ischemic heart disease
Needs	CCP (Italy)	OSA (Spain)	UMFCD (Romania)	AU (Denmark)
<b>Physical therapy</b>	Must have	Must have	Must have	Must have
Occupational therapy	Good to have	Good to have		
<b>Cognitive training</b>	Must have	Must have		
Emotional and social rehabilitation (e.g. depression and anxiety)	Nice to have	Good to have	Must have	Must have





# Connecting health with Telerehab for eCoaching!



- Virtual coach
- Serious games
- TV / PC
- MTS





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