




VIRTUAL REHABILITATION COACH: A JOURNEY FROM THE PROOF OF CONCEPT TO ROUTINE CARE

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VCARE
VIRTUAL COACHING ACTIVITIES
FOR REHABILITATION IN ELDERLY

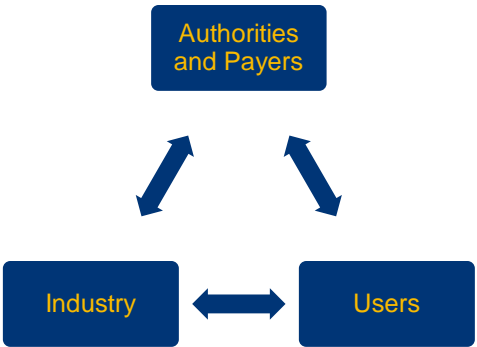
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769807.




Collaborating for digital health and care in Europe



EHTEL
EUROPEAN HEALTH TELEMATICS ASSOCIATION




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graph TD; A[Authorities and Payers] <--> B[Industry]; A <--> C[Users]; B <--> C;
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EHTEL is working to re-imagine the future of care, and bringing it to life across Europe
John Crawford,
EHTEL President

2



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Road map to 70% CR participation

Cardiac rehabilitation adherence

- Set 36 CR sessions as goal
- Home-based CR option
- Flexible CR hours
- Work to minimize CR co-pays

Cardiac rehabilitation enrollment

- CR staff liaison
- Early appointment at CR
- CR *enrollment* as performance measure
- Work to minimize co-pays

Cardiac rehabilitation referral

- EMR-based referral
- CR staff liaison
- CR *referral* as performance measure

MAYO CLINIC PROCEEDINGS

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< Previous Article **February 2017** Volume 92, Issue 2, Pages 234-242 Next Article >

Increasing Cardiac Rehabilitation Participation From 20% to 70%: A Road Map From the Million Hearts Cardiac Rehabilitation Collaborative

Philip A. Ades, MD, Steven J. Keteyian, PhD, Janet S. Wright, MD, Larry F. Hamm, PhD, Karen Lui, RN, MS, Kimberly Newlin, ANP, Donald S. Shepard, PhD, Randal J. Thomas, MD, MS

DOI: <https://doi.org/10.1016/j.mayocp.2016.10.014> Check for updates

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Cardiovascular Realities in Europe Number of Cardiologists

ESC Atlas of Cardiology

There are wide disparities across Europe in the number of cardiologists per million people. Greece and Georgia have the highest number, respectively, at 277 and 256 cardiologists per million people.

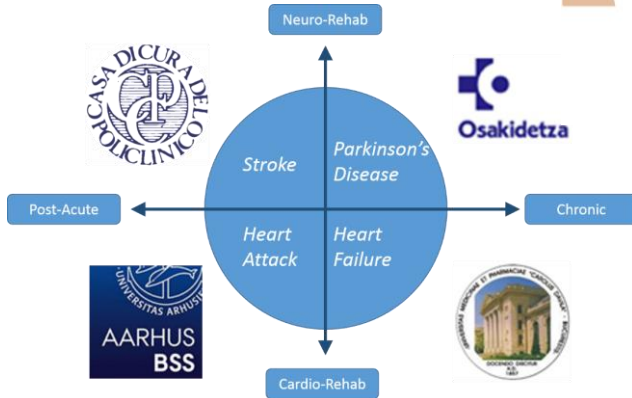
Color	Cardiologists per million people
Lightest Pink	20-59
Light Pink	60-99
Medium Pink	100-159
Dark Pink	170-200

Source: Tranchesi A, Savelkoul H, Gali C, Grubbens B, Montecassini N, Pasteris M, Wilson C, Wright L, van R, van J, Bore M, Paster C, Verbeek F. European Society of Cardiology Cardiovascular Disease Statistics 2017. Eur Heart J. 2017;38(11):1098-1175. www.escardio.org/atlas

ESC
European Society of Cardiology

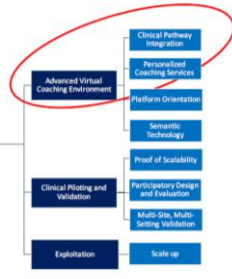
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OBJECTIVES



- Risk Factor reduction
- Enhancement of Quality of Life
- Better Adherence to Care Plan at Home
- Personalization and Health Promotion

SMART VIRTUAL COACHING SYSTEM
RECOVER AN ACTIVE AND INDEPENDENT LIFE AT HOME



5



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HOW WILL WE DO IT?

Feedback & Serious games



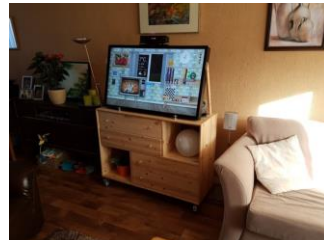
Virtual coach, machine learning and knowledge integration



Unambiguous location & fall detection



Activity and Health Monitoring

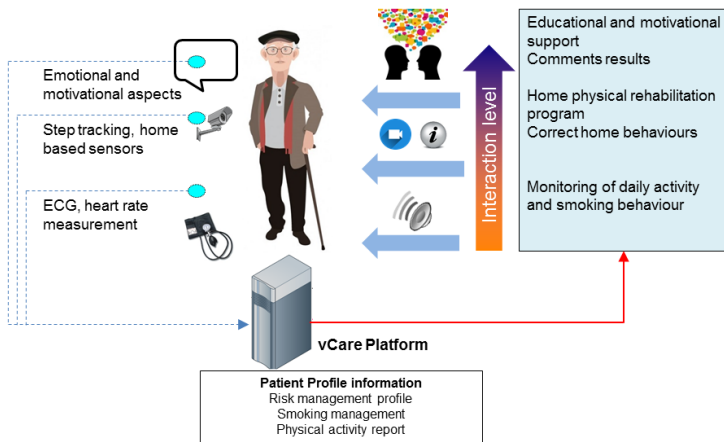


Contextualisation

6

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REPRESENTATION OF PROPOSED PERSONALIZED HOME REHABILITATION PATHWAY



7



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IT'S MORE THAN A PIECE OF TECHNOLOGY



10



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“THERE ARE MORE PILOTS IN TELEMEDICINE THAN IN ...
BRUSSELS AIRLINE!”



"Be patient, a few more strokes and I'll soon have the momentum going."

search ID: amc0615

11



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18 CRITICAL SUCCESS FACTOR FOR SCALING-UP

#2: A compelling need

i.e. the recognition that the innovation is contributing to

- Quality of care/rehabilitation
- Quality of Life of patients
- Efficient use of healthcare resources
- ...



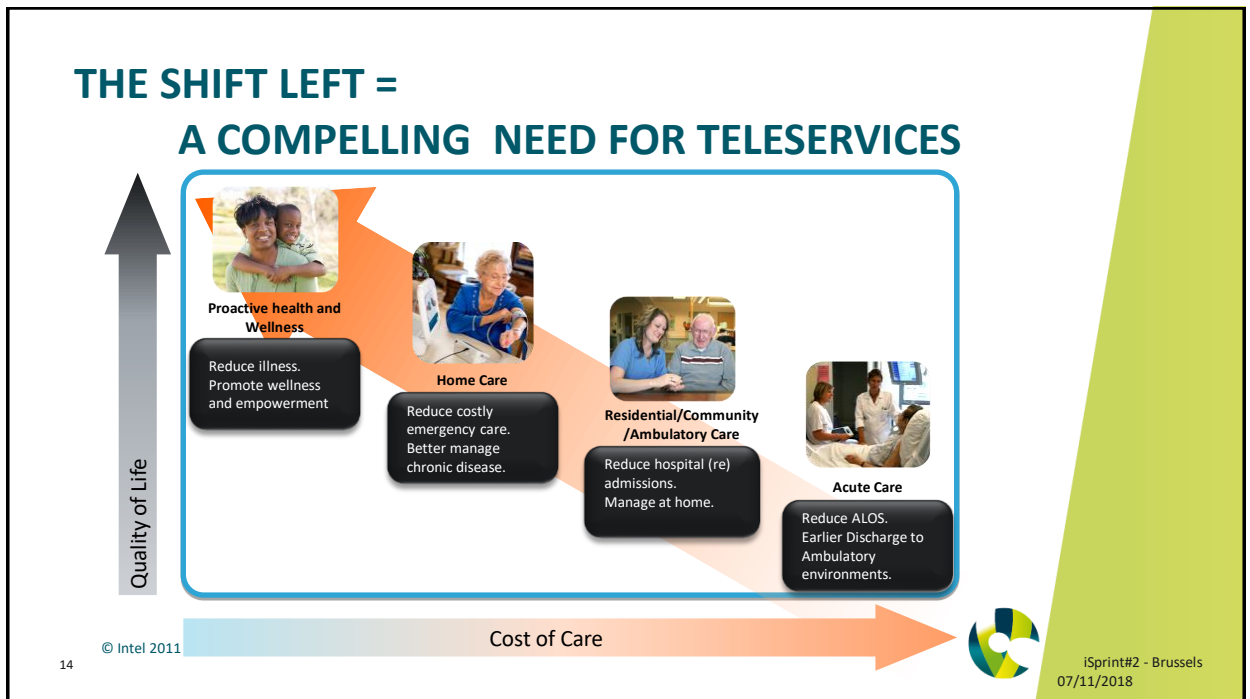
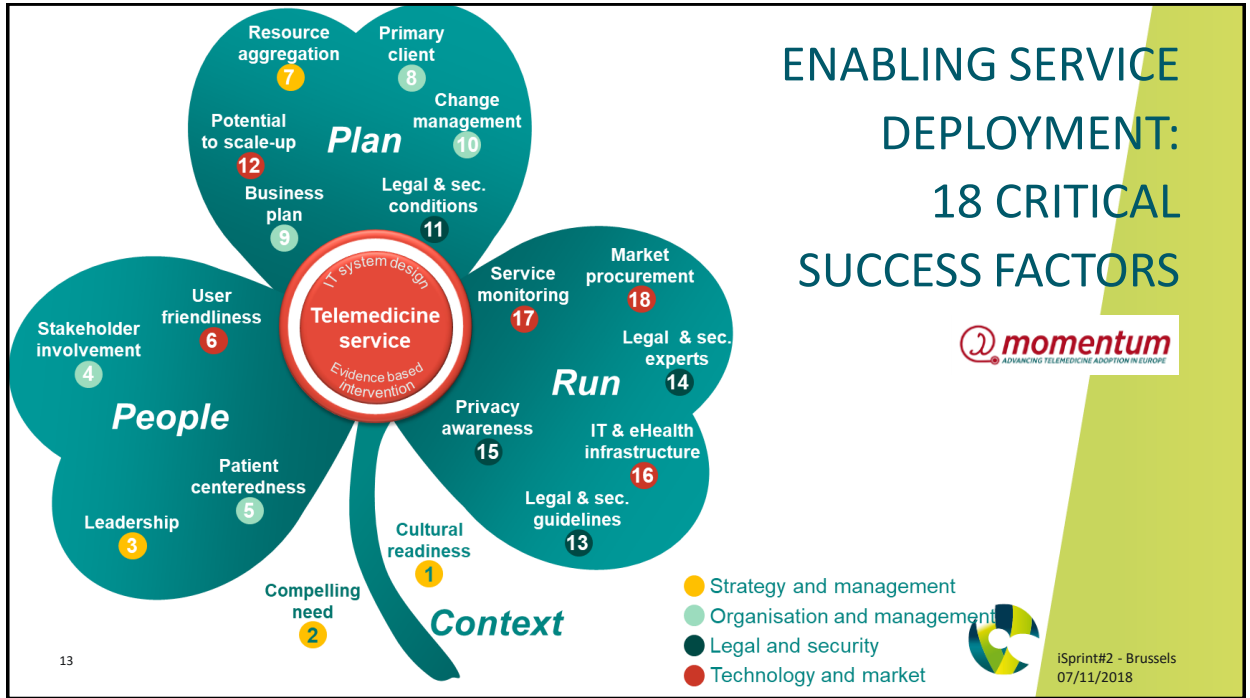
12



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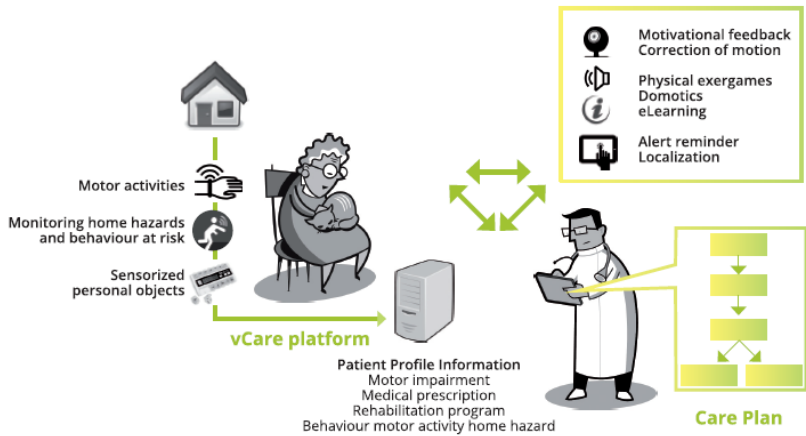


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HOME REHABILITATION WITH VIRTUAL COACH

Proof of Concept: The journey is just starting

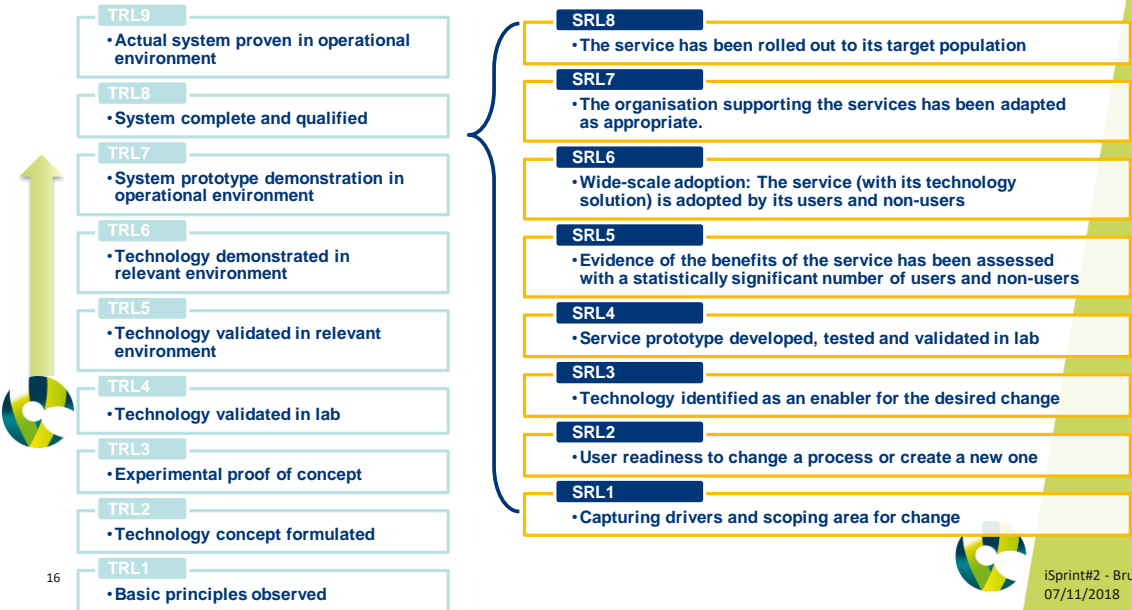


15



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ROADMAPPING FOR SERVICE INNOVATION



16



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H2020 vCARE PROJECT

TECHNISCHE UNIVERSITÄT DRESDEN
 AARHUS BSS
 iSprint
 TUD
 EHETEL
 FZI
 AIT
 CCP
 IMA
 OSA
 MYS
 SIV
 UMFCD

Virtual Coaching Activities for Rehabilitation in Elderly
 Started 1 September 2017
 Length 48 months

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17

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спасибо 谢谢
GRACIAS
THANK YOU
 ありがとうございます MERCI
DANKE धन्यवाद
 شكراً OBRIGADO



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