

# MEP Heart Group meeting

## February 3<sup>rd</sup> 2021

### **Telemonitoring and teleconsultations of cardiovascular patients before and after the pandemic**

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# Follow-up care for coronary artery disease patients after a cardiac infarction

“Tulppa”- Digital rehabilitation created by Finnish Heart Association



# Digital cardiac rehabilitation

## MONITORING AND SUPPORT

Telemonitoring (e.g., blood pressure, exercise)

Contact with a professional throughout the entire rehabilitation



## GROUP ACTIVITIES

Group video conferences and chats, plus peer support.

## INDEPENDENT LEARNING

Rehabilitation includes informative material and tasks.

The rehabilitation progresses independently at the patient's own pace.



# Tulppa rehabilitation as part of the cardiac patient's care

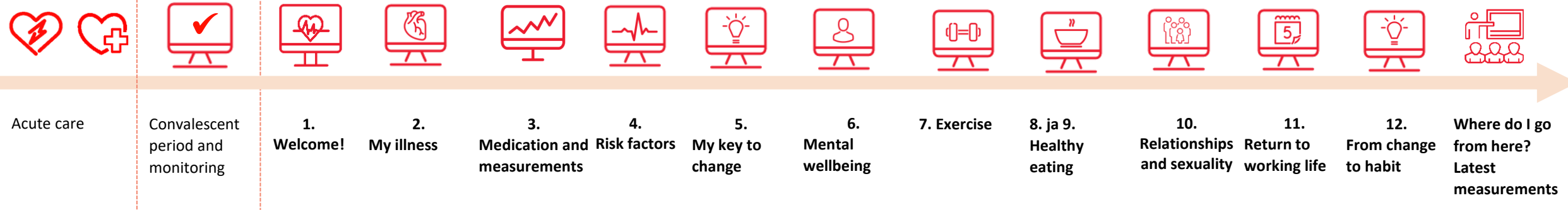
*In hospital*

*Outpatient*

*Digital care pathway*

*Digital care pathway of a CAD patient*

*Tulppa- digital cardiac rehabilitation*



Acute care

Convalescent period and monitoring

1. Welcome!

2. My illness

3. Medication and measurements

4. Risk factors

5. My key to change

6. Mental wellbeing

7. Exercise

8. ja 9. Healthy eating

10. Relationships and sexuality

11. Return to working life

12. From change to habit

Where do I go from here? Latest measurements



Group communication and weekly discussion, self-monitoring, following the personal plan and support from health care professionals throughout the entire rehabilitation.





# Heart Failure: Remote Monitoring



# Heart Failure: Remote Monitoring



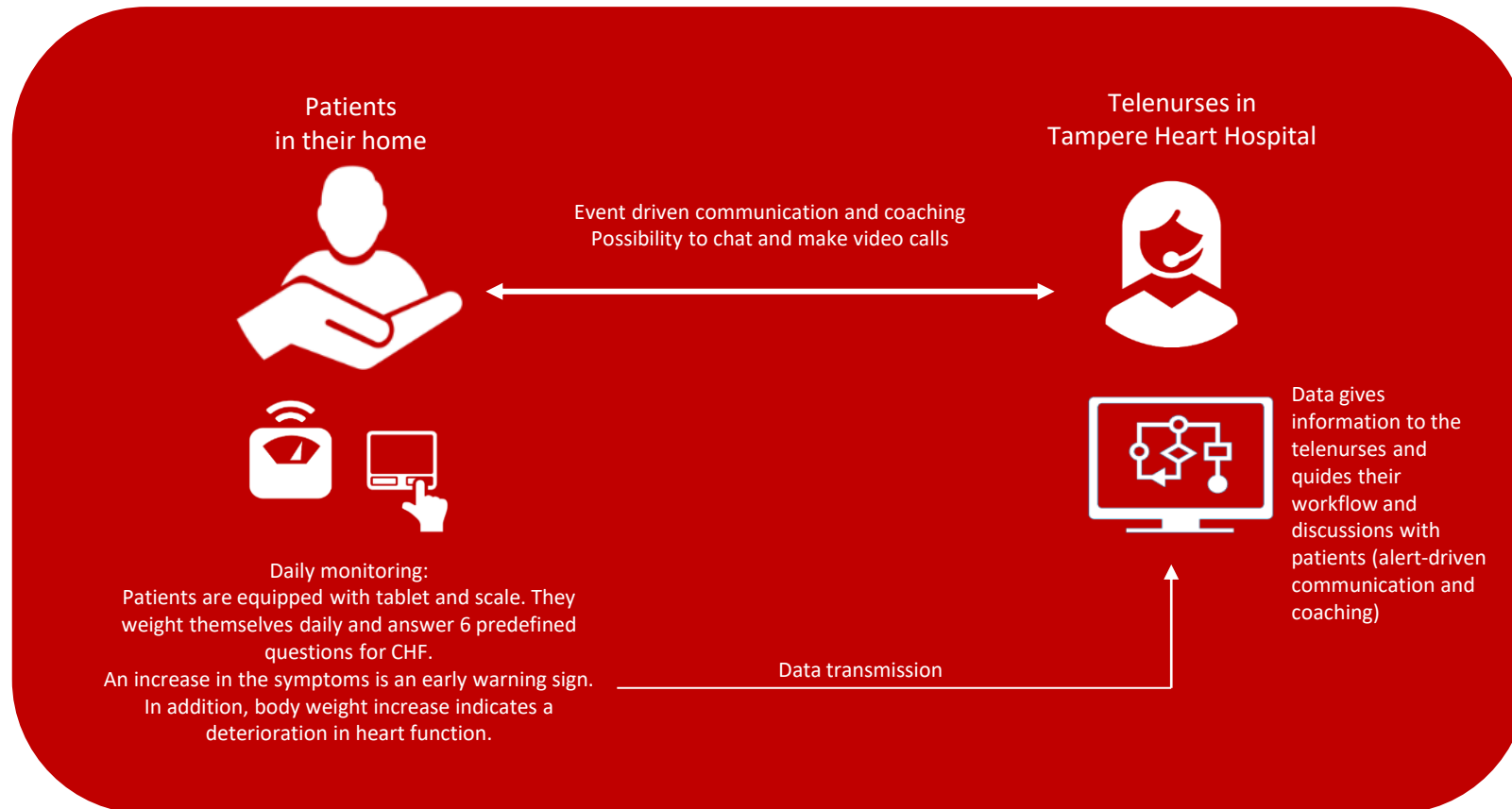
Tampere Heart Hospital remote monitoring is based on:

- 1) patient-centred care models that offer the right care for those that need it;
- 2) active monitoring of patient-generated signals to direct pre-emptive attention when it is needed;
- 3) improved coordination of care across the Tampere healthcare system; and
- 4) remote patient coaching program to empower them to improve and sustain their health.

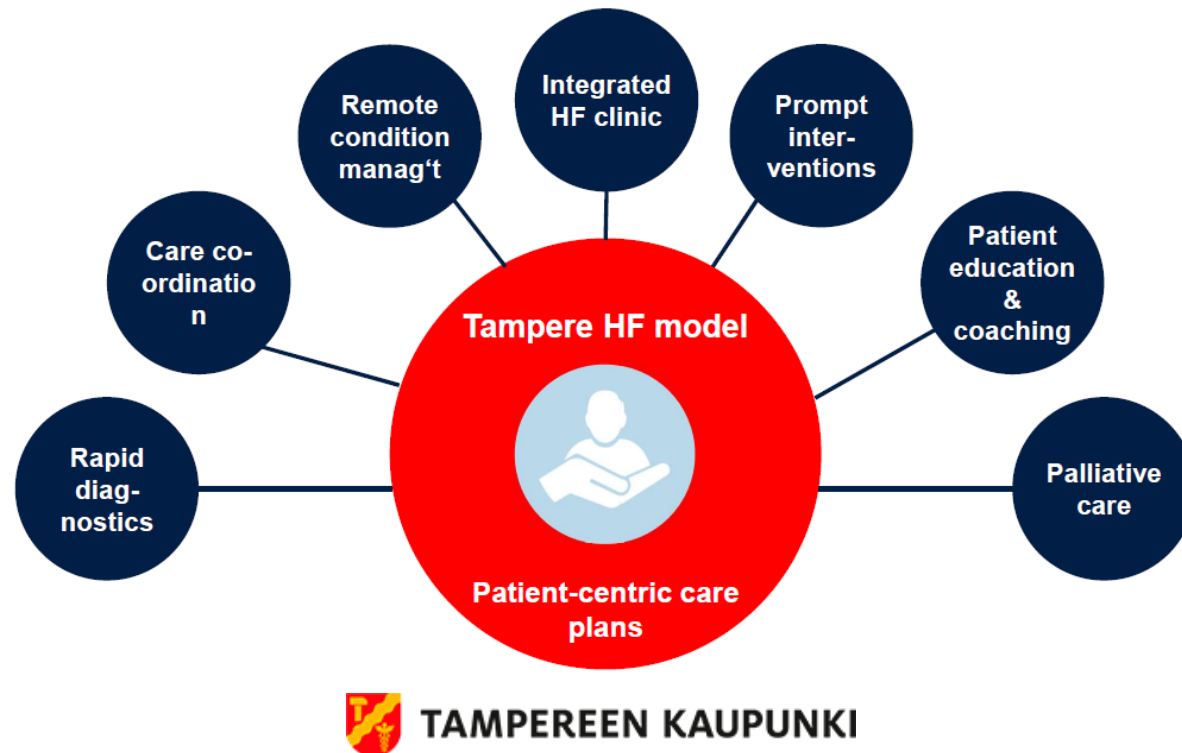




# The model puts the patient in the centre and is adaptive to his or her needs, behaviours and circumstances



## Integrated Heart Failure Model: Better outcomes and better costs



Reduction of

- ✓ Hospitalisation
- ✓ Mortality
- ✓ Costs

Improvement of

- ✓ Quality of life
- ✓ Compliance
- ✓ Self-management

High patient satisfaction



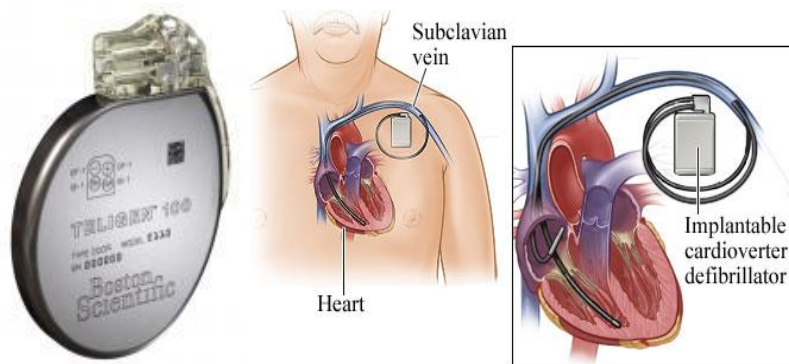




# Cardiac Pacemaker Remote Monitoring



## Cardiac Pacemaker Remote Monitoring



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Almost 100 % cardiac pacemaker patients monitored remotely (since 2012-)

- One of the biggest units in Europe
  - Currently > 4.000 patients
- Less outpatient visits > HC savings/patient/year 500–700€
- Continuous monitoring > better patient safety and quality



A common estimation before the pandemic: the cost saving opportunities are around 10 % in average, if the already existing methods of digitalisation are used widely in health care.

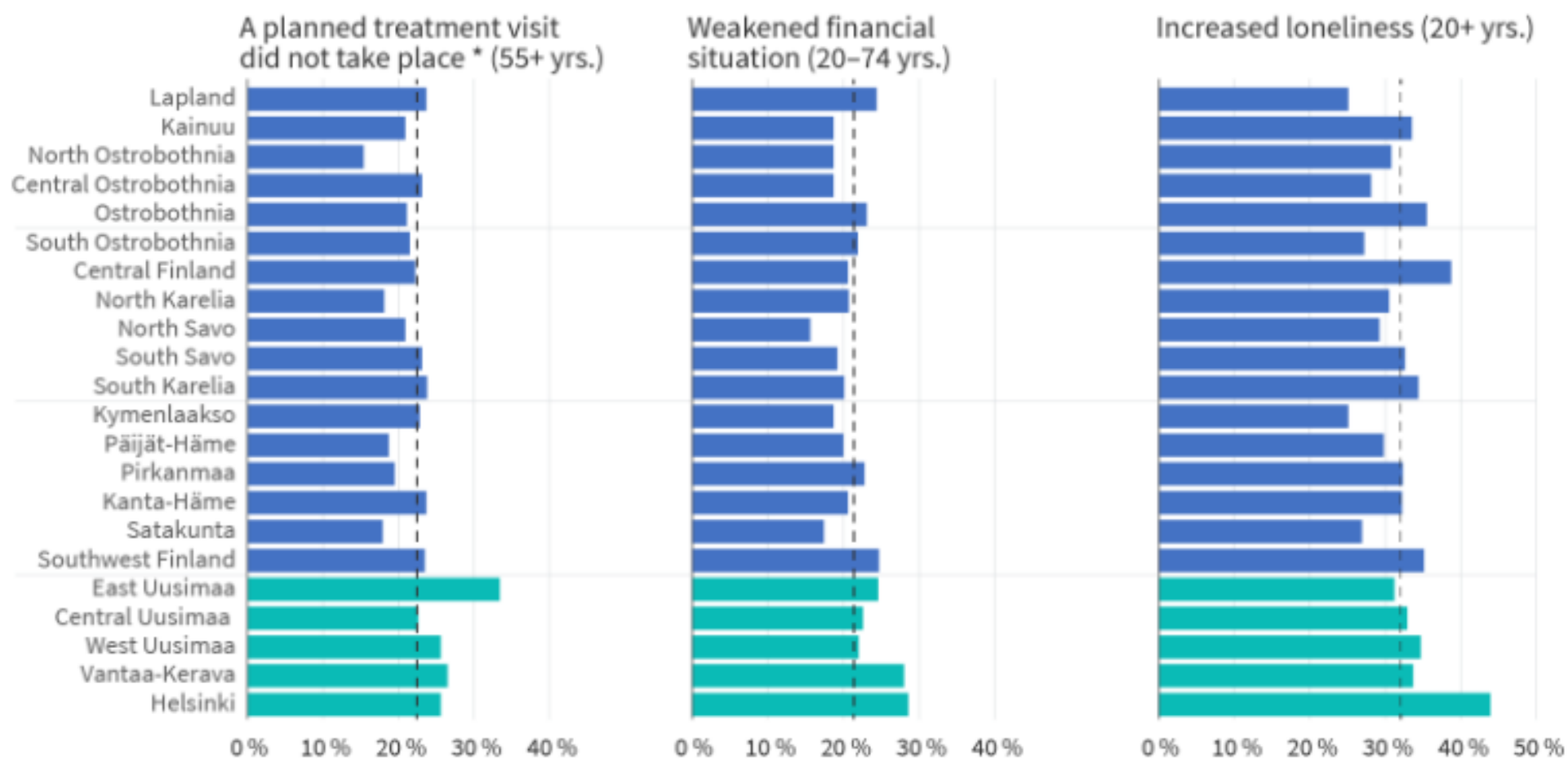


The need to improve access to care has increased due to COVID-19 for many years ahead.

We simply can not afford not to take all the action to speed up the use of telemonitoring and teleconsultation.



# The impact of the corona epidemic on everyday life and use of services is highest in Uusimaa



thl

#coronavirus

\* (%) of people who needed the services of a physician or a nurse  
 - - - - the dashed line indicates the percentage in the entire country

Source: FinSote, advance information, collected Sep-Nov 2020. Finnish Institute for Health and Welfare 2020

One way to use digitalisation as a tool to enhance equality:  
Patient segmentation. By using the methods of digitalisation with highly capable patients we gain more resources for face to face care for those who need it most.



# Conclusions

from EHN's paper on

*Digital tools for CVD patients and  
the Blueprint for EU action on CVD*  
by EHN and ESC



1. Co-creation of digital health tools with all relevant stakeholders, including most notably patients and health professionals, is needed to overcome common barriers such as lack of personal motivation, low digital literacy, lack of interoperability, and increased workload.





2. We call upon the EU to fund much needed research on the cost effectiveness of the measures most beneficial to patients.



3. Promote and support the development of harmonised and comprehensive continuous patient registries in CVD, as well as the digital capability to enable the evidence generated within health systems to improve the speed and efficiency of randomised controlled trials



4. Establish a structured collaboration between academic clinical trialists, patients, regulators and industry to modernise the International Council of Harmonisation (ICH) Good Clinical Practice (GCP) standards and make them fit for the digital era



# 5. Support research and deployment of digital health technologies in cardiovascular disease prevention and management



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