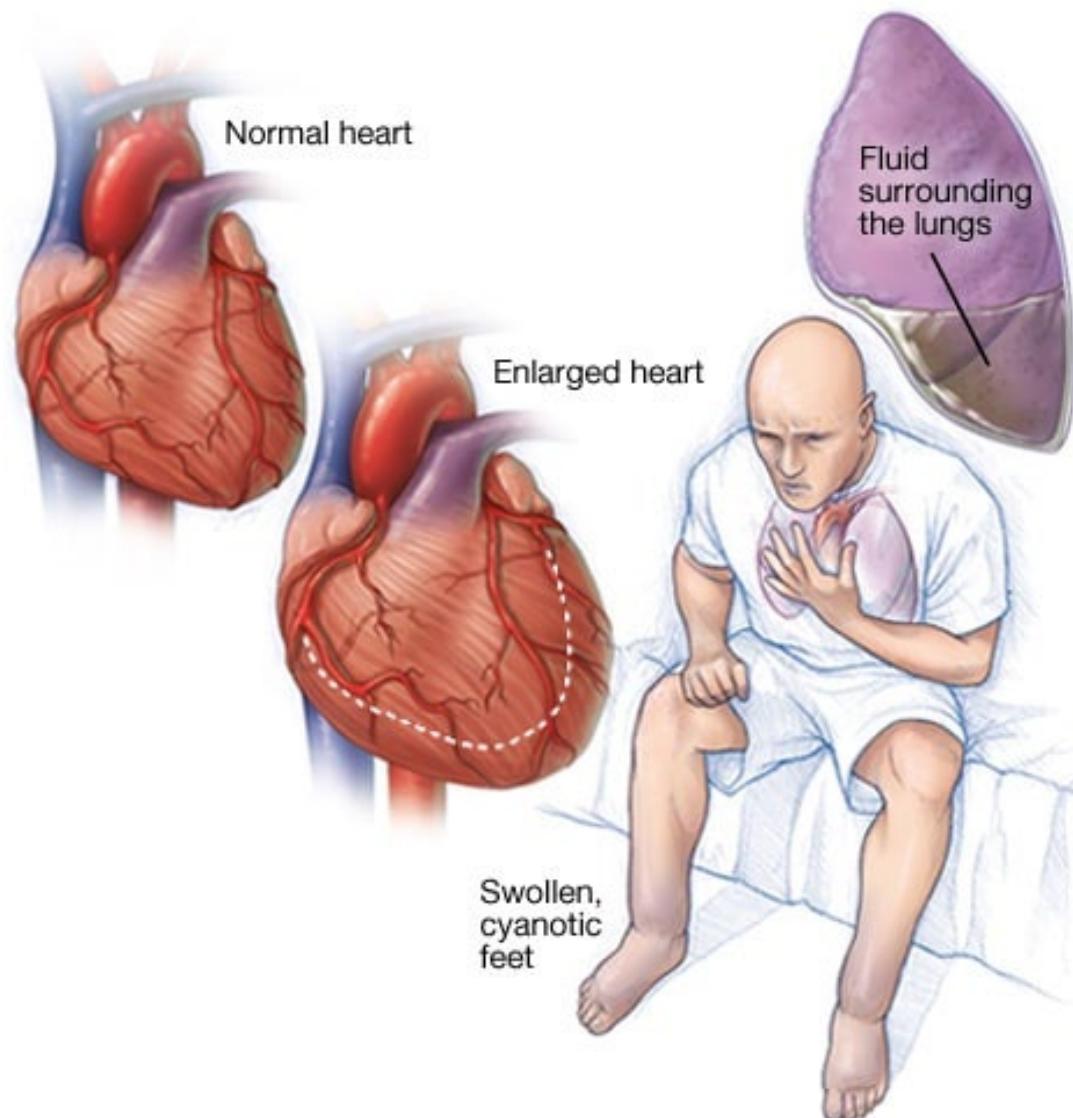


What is the Value of Digital Tools for Heart Failure Patients?

Dr. Martijn Scherrenberg
Jessa Hospital
University of Hasselt



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.



Patient at home



Tablet with
Telemonitoring App

Heart Failure:

- Body weight daily
- Blood pressure once a week
- Pulse once a week
- Questionnaire once a week



Medical Service Center



Specialised nurse

Heart Failure:

- Body weight:
 >1.5 kg increase
 >1.5 kg decrease
- Systolic blood pressure:
 <100 mmHg
 >140 mmHg
- Pulse:
 >45 bpm decrease
 >75 bpm increase
- Or deviation of a 'preset bandwidth'



Doctor or nurse in the hospital



The same day

Action taken, e.g.:

- Adjustment of medication
- Blood test





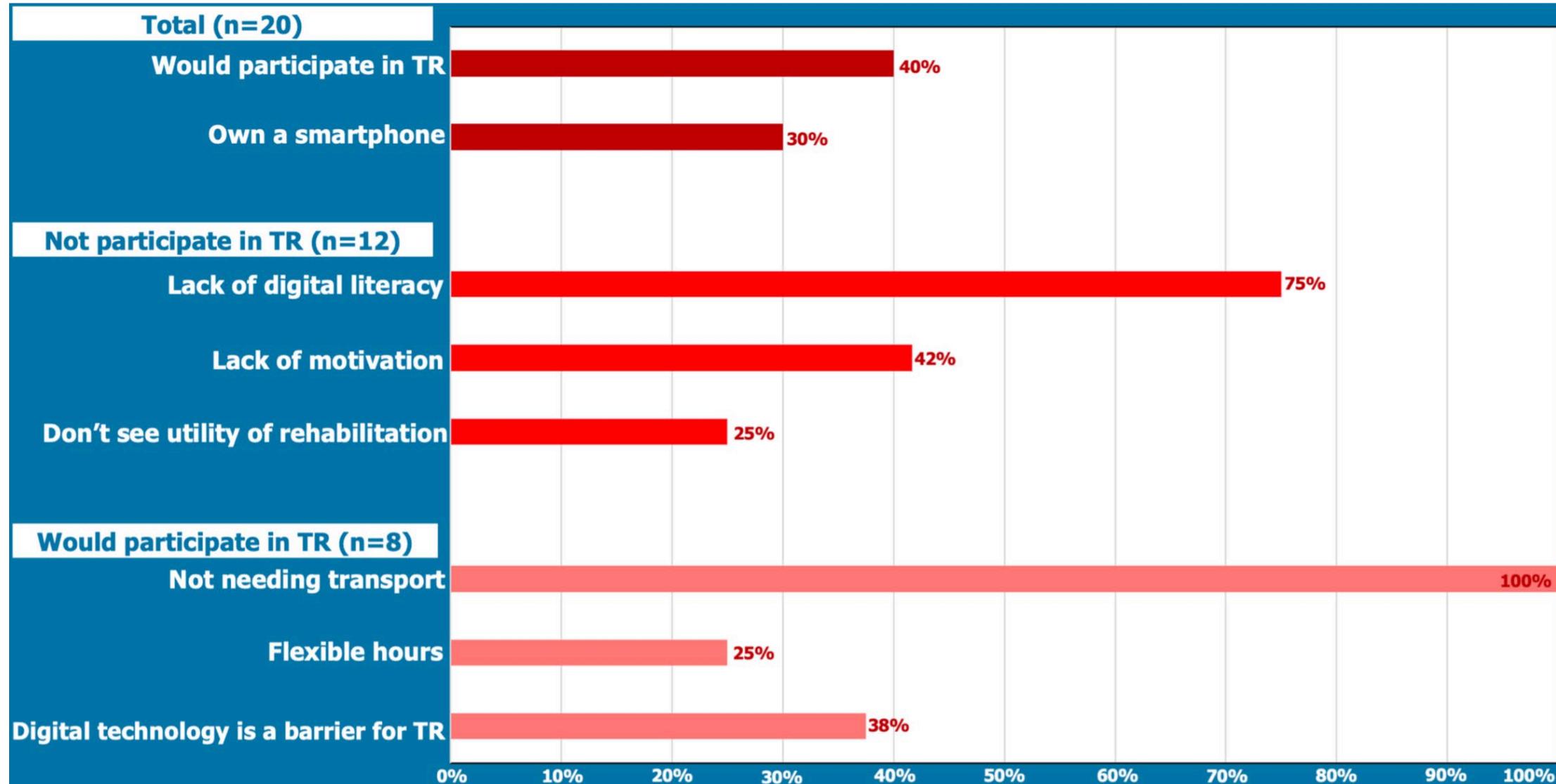
	Remote patient management (n=765)	Usual care (n=773)	Ratio, remote patient management vs usual care (95% CI)	p value	
	Number of patients with event	Weighted average (95% CI)	Number of patients with event	Weighted average (95% CI)	
Percentage of days lost due to unplanned cardiovascular hospitalisation or death of any cause	265 (35%)	4.88% (4.55–5.23)	290 (38%)	6.64% (6.19–7.13)	0.80* (0.65–1.00) 0.0460
Days lost per year	..	17.8 days (16.6–19.1)	..	24.2 days (22.6–26.0)
All-cause mortality†	61 (8%)	7.86 (6.14–10.10)	89 (12%)	11.34 (9.21–13.95)	0.70‡ (0.50–0.96) 0.0280
Cardiovascular mortality†	39 (5%)	5.04 (3.68–6.90)	59 (8%)	7.51 (5.82–9.70)	0.67‡ (0.45–1.01) 0.0560

*Ratio of the weighted average. †Measured during individual patient follow-up time plus 28 days after the last study visit, to a maximum of 393 days. ‡Hazard ratio.

Table 2: Primary and key secondary outcomes







PULMONARY
ARTERY PRESSURE
SENSOR



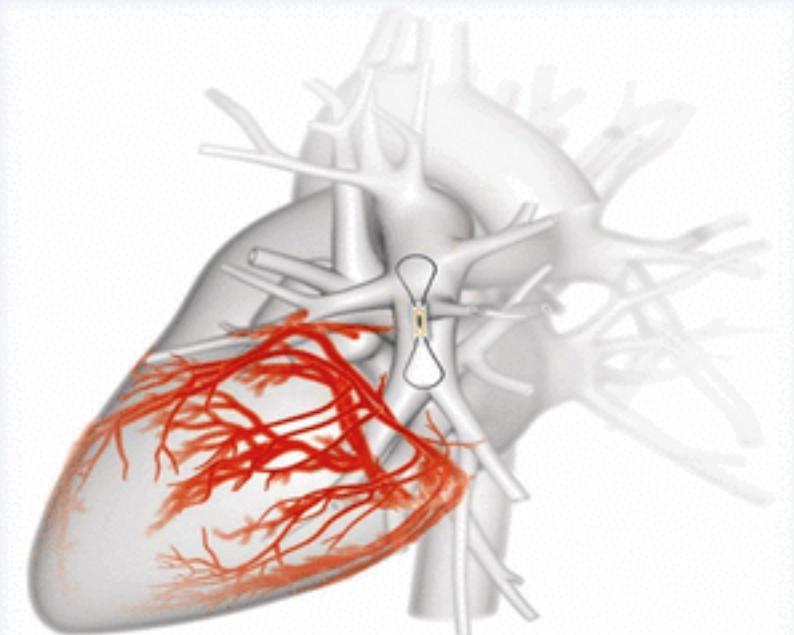
PATIENT
ELECTRONICS
SYSTEM



MERLIN.NET™
PCN



TARGET LOCATION FOR
PA PRESSURE SENSOR





What is the value of digital tools for cardiovascular patients?

<https://www.ehnheart.org/medias/news/1838-digital-tools-value-cvd-patients.html>