



How was CVD care impacted by the COVID-19 pandemic, and how to proceed

Paul Dendale, MD PhD

Jessa Ziekenhuis, Hasselt, Belgium

Hasselt University, Belgium



Impact of Covid on CVD treatment and follow up

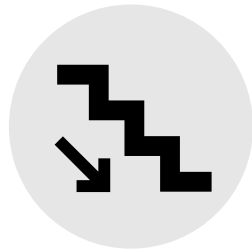
- decrease in hospitalisations and emergency visits for cardiology by 50%
- increase in sudden death and large infarcts due to late presentation
- decrease in normal follow-up by cardiologists and GP's
- sudden closure of all rehabilitation programs

What to do next ??

Emergency measures in Jessa Hospital Hasselt

- pacemakers and implantable defibrillators
- heart failure patients
- follow up by routine phone or videoconferences
- rehabilitation and secondary prevention

Why Telerehabilitation?



PARTICIPATION



LONG TERM



COVID-19

Delaying CR during COVID-19 was not an option

Table 2. Estimate of the delay on uptake and completion, and a shift to timely initiation.

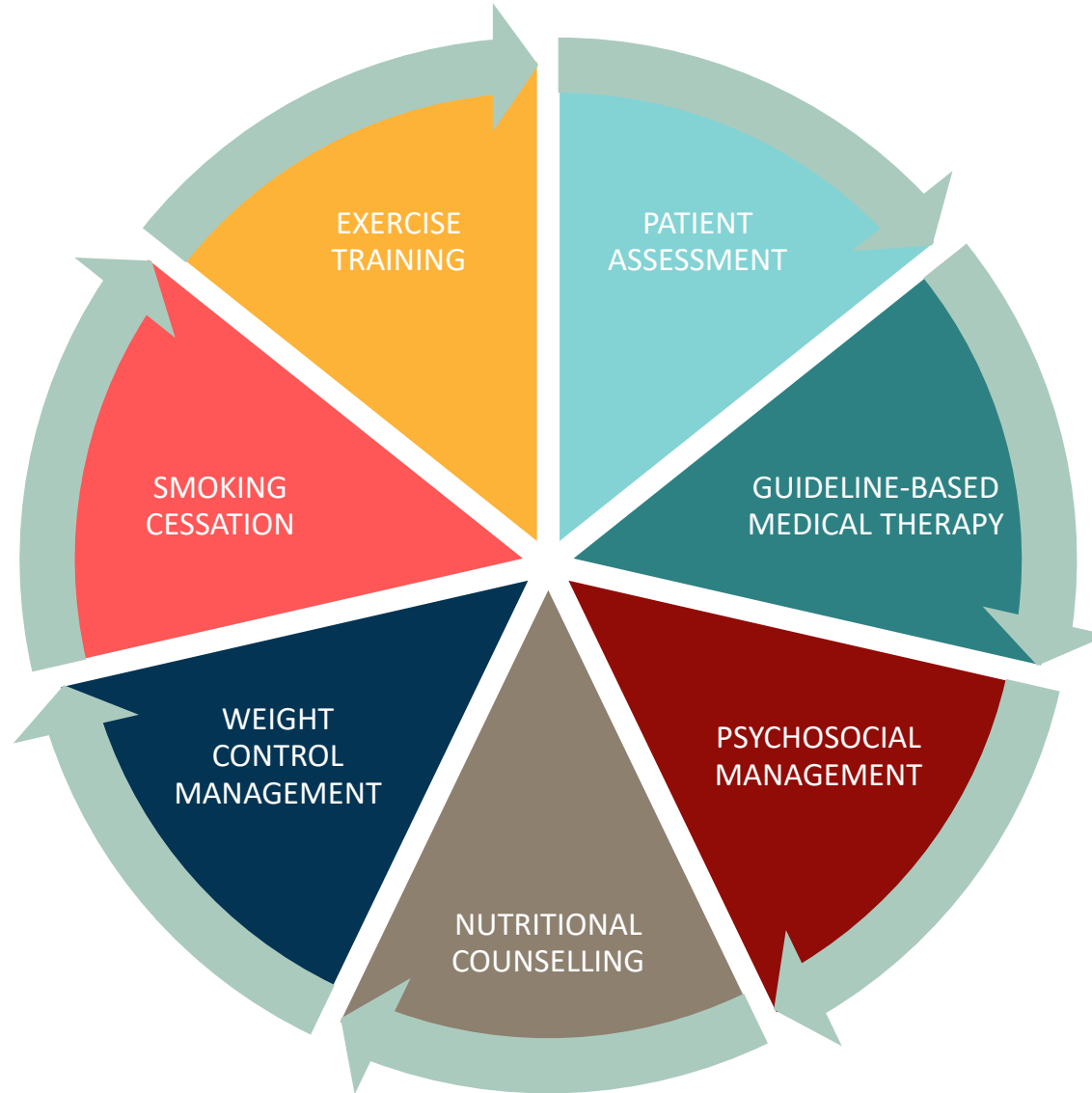
	Delayed CR offer	Timely CR offer	Difference (95% CI)
Uptake	45.5%	73.4%	14.3% (7.9% to 20.4%)
Completion	59.8%	75.4%	1.9% (0.8% to 3.0%)
Combined	33.4%	45.1%	11.7% (6.9% to 16.2%)

Table 4. Standardized Coefficients (95% Confidence Interval) From the Multivariate Analyses of the Relationship Between Wait-Time (Days) Phase, Total Wait Time, and Change in Key CR Outcomes (Table view)

Variable	Referral Wait Time	CR Wait Time	Total Wait Time
Resting heart rate	0.074 (1.389 to 3.062)*	0.047 (0.892 to 3.472)*	0.066 (2.671 to 5.918)*
Resting systolic BP	-0.020 (-2.496 to 0.401)	0.007 (-1.721 to 2.765)	-0.005 (-3.329 to 2.283)
Resting diastolic BP	-0.03 (-1.817 to -0.065)†	-0.004 (-1.564 to 1.147)	-0.028 (-3.597 to -0.203)†
Body fat %	0.031 (-0.071 to 1.497)	0.041 (0.228 to 2.656)†	0.032 (0.144 to 3.176)†
Body mass index	-0.003 (-0.122 to 0.101)	0.023 (-0.052 to 0.292)	-0.009 (-0.284 to 0.147)
Waist circumference	0.025 (-0.091 to 0.665)	0.023 (-0.176 to 0.987)	0.020 (-0.229 to 1.236)
$\dot{V}O_{2peak}$, mL·kg ⁻¹ ·min ⁻¹	-0.163 (-2.347 to -1.540)*	-0.114 (-2.104 to -1.215)*	-0.165 (-5.084 to -3.506)*
Session attendance	-0.065 (-3.082 to -1.262)*	-0.087 (-5.952 to -3.097)*	-0.081 (-7.526 to -4.017)*
Noncompletion‡	1.484 (1.240 to 1.776)*	2.215 (1.664 to 2.949)*	2.741 (1.948 to 3.857)*
Medical dropouts	1.209 (0.887 to 1.648)	1.085 (0.633 to 1.776)	1.515 (0.844 to 2.720)



Cardiac Telerehabilitation: More than exercise



The Jessa Experience

1. Telephone consultations

- Needs assessment
- Multidisciplinary guidance
- Weekly contact

2. Telerehabilitation videos

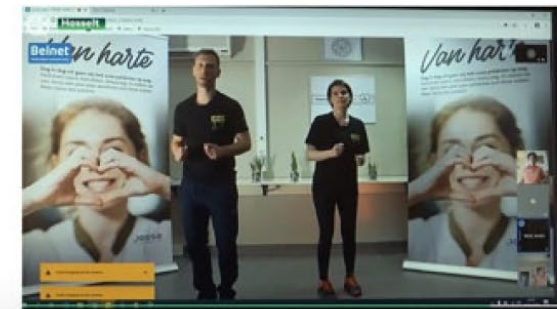
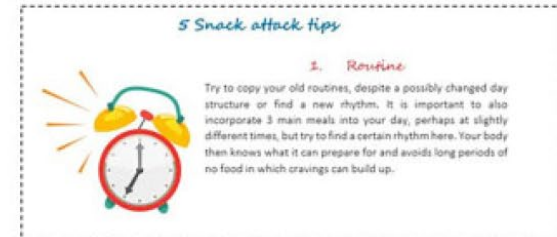
- Instruction videos for rehabilitation exercises at home
- Available on the website

3. Educational & informative web section

- Tools and tips to cope with the lockdown
- Nutrition, mental wellbeing, exercise

4. Tele-group sessions

- Through live stream
- Physical activity, dietary advice, psychological support, smoking cessation and medical advice



What did we learn?

Use of cardiac telerehabilitation during COVID-19 pandemic in Belgium

Martijn Scherrenberg, Ines Frederix, Johan De Sutter & Paul Dendale

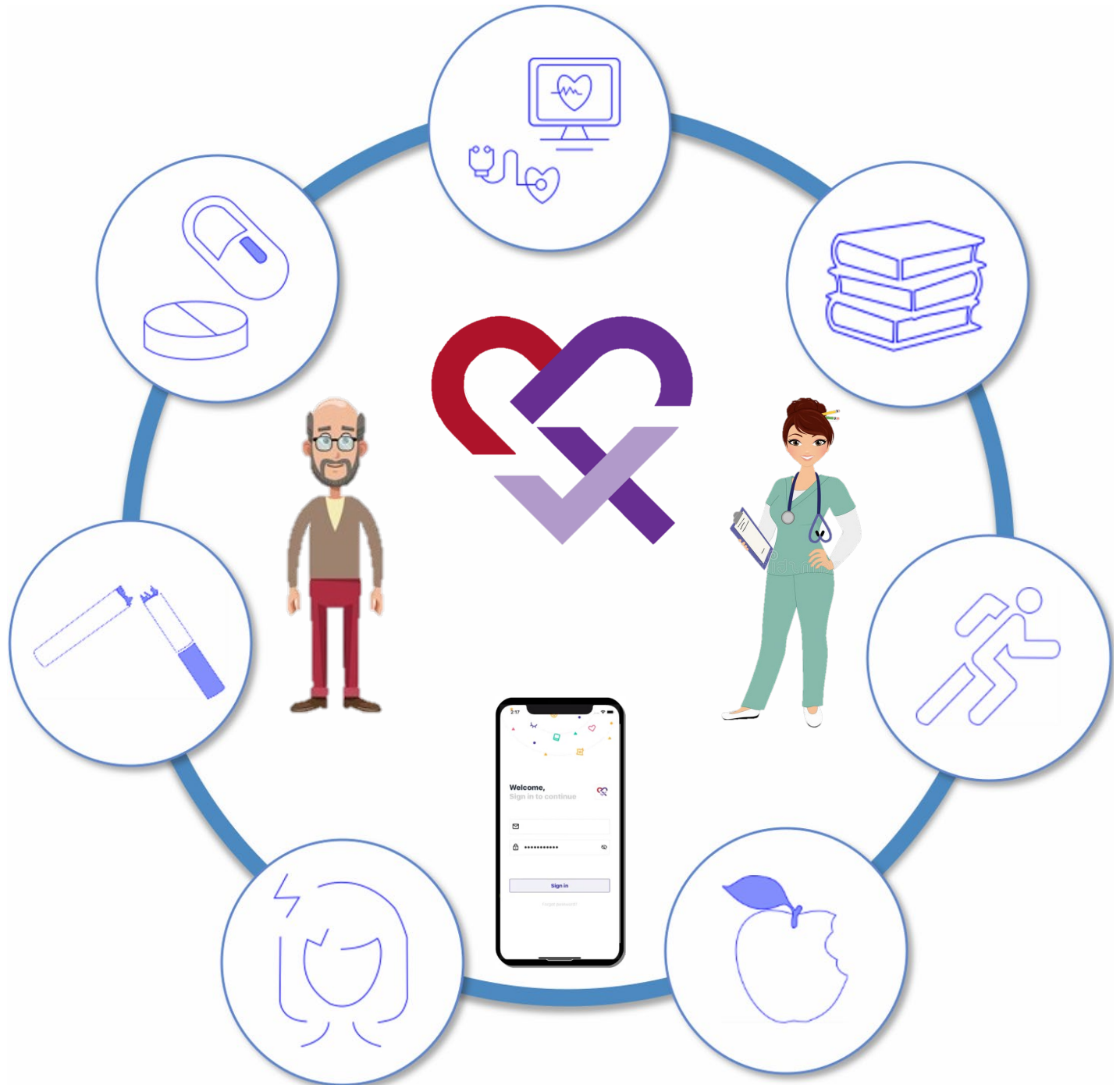
Patient experiences and willingness-to-pay for cardiac telerehabilitation during the first surge of the COVID-19 pandemic: single-centre experience

Martijn Scherrenberg , Maarten Falter & Paul Dendale

The future is now: a call for action for cardiac telerehabilitation in the COVID-19 pandemic



Future plans



What after COVID-19?
Is it implemented?



DIGITAL
DIVIDE

ADHERENCE

MOTIVATION

DATA
OWNERSHIP



UHASSELT



What after COVID-19?
Is it implemented?



LEGAL
ISSUES

INTER-
OPERABILITY

DATA
PRIVACY

REIMBURSE
MENT

QUESTIONS?

**CARDIAC
TELEREHABILITATION**

THE FUTURE IS NOW



Contact: paul.dendale@uhasselt.be

