

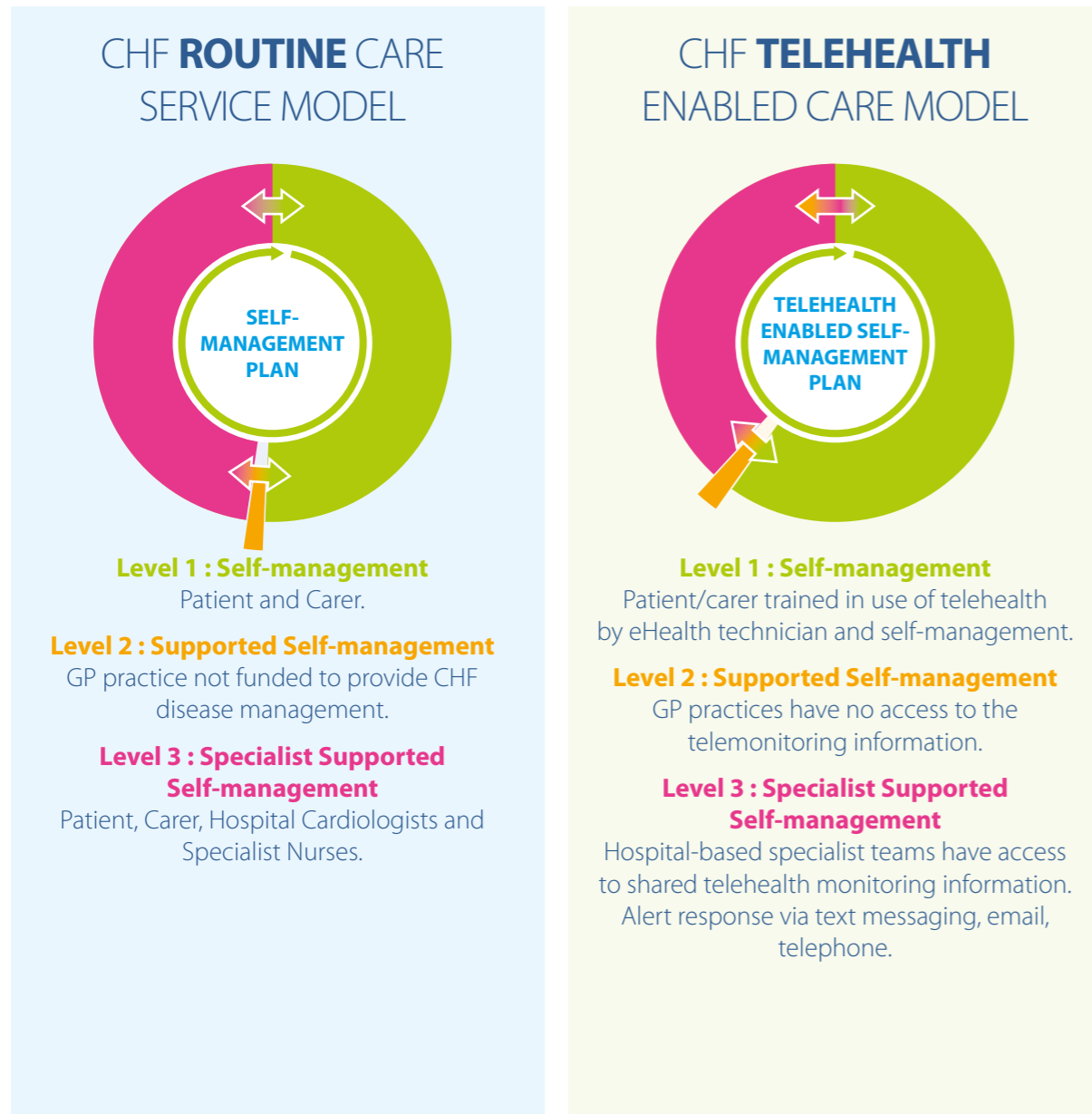
Telehealth in Practice

Northwest Moravia, Czech Republic - Congestive Heart Failure (CHF)

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Ambition

The overall aim for implementing telehealth into the care management programme for patients living with congestive heart disease is to support and improve the individual patient's endeavours to self-manage and lead a lifestyle to reduce their risk of exacerbation and improve their quality of life.



CHF Care Management – routine care

The routine care for patients living with CHF takes place at the University Hospital Olomouc and follows the Czech Society of Cardiology Guidelines for the diagnosis and treatment of chronic heart failure. Patients self-manage (Green) and have scheduled outpatient consultations in accordance with their ongoing health status and disease progression although most patients are seen every 3 months by the hospital specialists (Pink) in order to review their physiological measurements, and make any adjustments to their medication and treatment. GPs are not funded to provide CHF care management (Amber).

U4H Telehealth Enabled CHF Care Management

Patients are provided with a smartphone or tablet, blood pressure meter, pulse oximeter and weight scales and are given training to use software application called Medimonitor on the smartphone (Green). The smartphone or tablet acts as a gateway to upload the vital signs readings daily to the telemonitoring centre located in the hospital's Cardiology Clinic. Doctors, specialist nurses and biomedical engineers are able to access the telehealth portal with collected data via internet using a web

browser with secure login (Pink). The Medimonitor system generates alerts in response to:

- A patient's vital signs readings are outside their threshold parameters. Patients will be contacted by a specialist nurse who will assess the severity of the situation. If the patient's treatment and self-management plan needs adjusting, the cardiologist will contact the patient to make the necessary adjustments and/or invite the patient to attend an unscheduled outpatient appointment.
- If there is missing or incomplete measurement uploads twice in a row – either a biomedical engineer or nurse will contact the patient by telephone, SMS or Medimonitor message and provide additional training in the use of the smartphone or tablet if required.

The scheduled outpatient consultations are enhanced through the availability of the telemonitoring information which is also able to be accessed by hospital specialists in a patient's symptoms worsen and they are admitted to hospital. The system can also receive data from INR measurements (anticoagulation therapy) using the Medimonitor if required as part of the patient's care management.

