

Individualiseret livsstilsintervention til diabetikere i samarbejde mellem almen praksis, kommuner og Steno Diabetes Centre

Carl J. Brandt, PhD GP

Research Unit for General Practice,
Department for public health
University of Southern Denmark

Contact: e-mail: cbrandt@health.sdu.dk

Tel: 20141566

ново
nordisk
fonden



Liva
healthcare

*Weight loss and reversing
Type 2 diabetes
cost-effectively through
eHealth coaching*

Dr Carl J. Brandt, PhD, GP, Postdoc and Co-founder/medical advisor





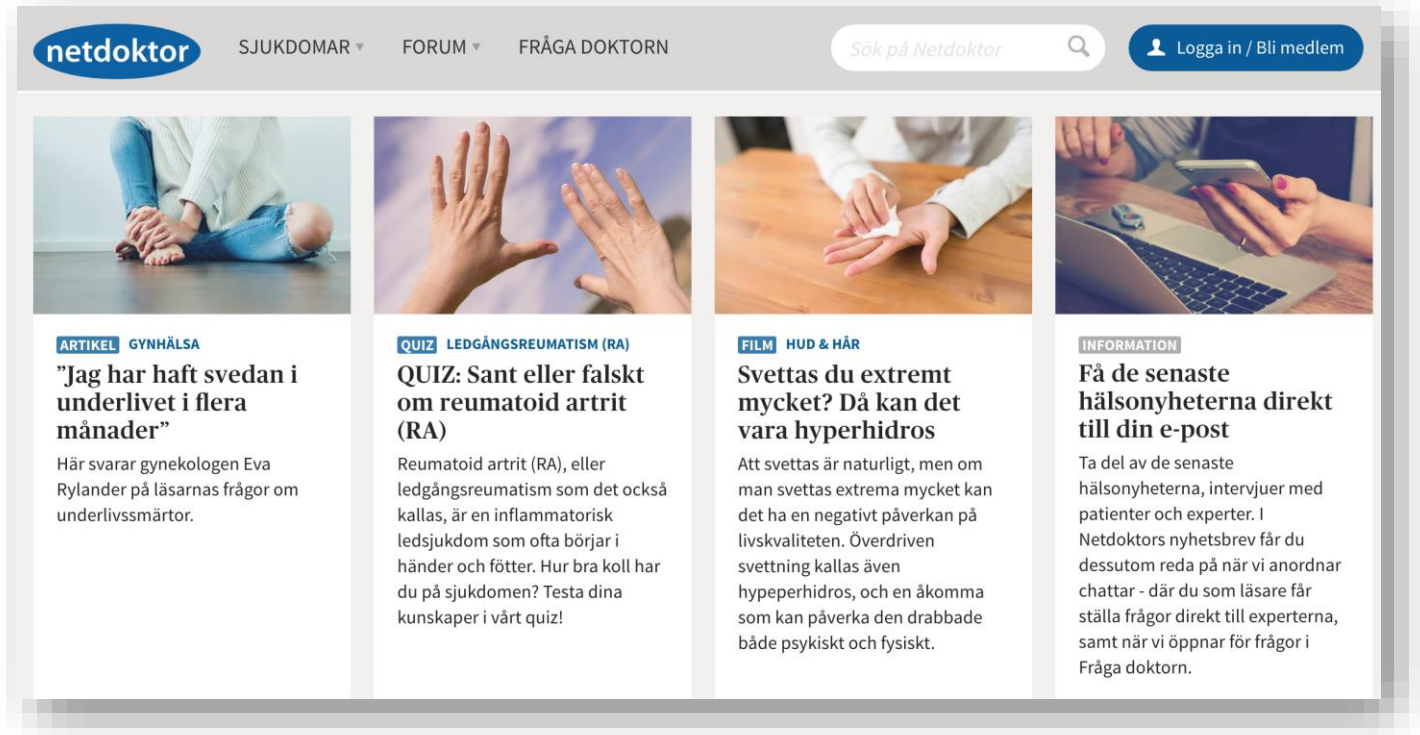
Rune Bech, co-founder,
Director

- Co-founded NetDoctor, SlankeDoktor and SundhedsDoktor .
- Former digital officer of Danish broadcaster TV 2 and Saxo Bank
- Master in Broadcast Journalism, Danish School of Journalism.



Dr. Carl Brandt, PhD
GP, co-founder

- Co-founded NetDoctor.com, SundhedsDoktor and SlankeDoktor
- Practising general practitioner and science/research personality within healthcare and lifestyle interventional programs



1998: NetDoktor.se

- B2C. Health information portal with a leading market position in UK, Germany, Denmark and Sweden.



Liva healthcare

2015: livahealthcare.com

B2B. A personal lifestyle coach in the pocket of the patient. Leading market position in Denmark and UK

DICTA

Digital Individualized and Collaborative Treatment of TD2 in General Practice Based on Decision Aid

By Prof. PhD GP Jens Søndergaard¹, Prof. PhD Michael Hecht Olsen², PhD Jens Steen Nielsen³, **PhD GP Carl J. Brandt**^{1,5}, Prof. PhD GP Jette Kolding Kristensen⁴, PhD Peter Gæde², Jesper Andressen⁵, PhD Camilla Sortsø⁵, PhD Sonja Wehberg¹, Prof. PhD GP Dorte Ejg Jarbøl¹, Prof. PhD Jesper Bo Nielsen¹.

¹Research Unit for General Practice, SDU

²Steno Diabetes Center Zealand, SDCS

³Den Danske Diabetes Database, DD2, SDCO

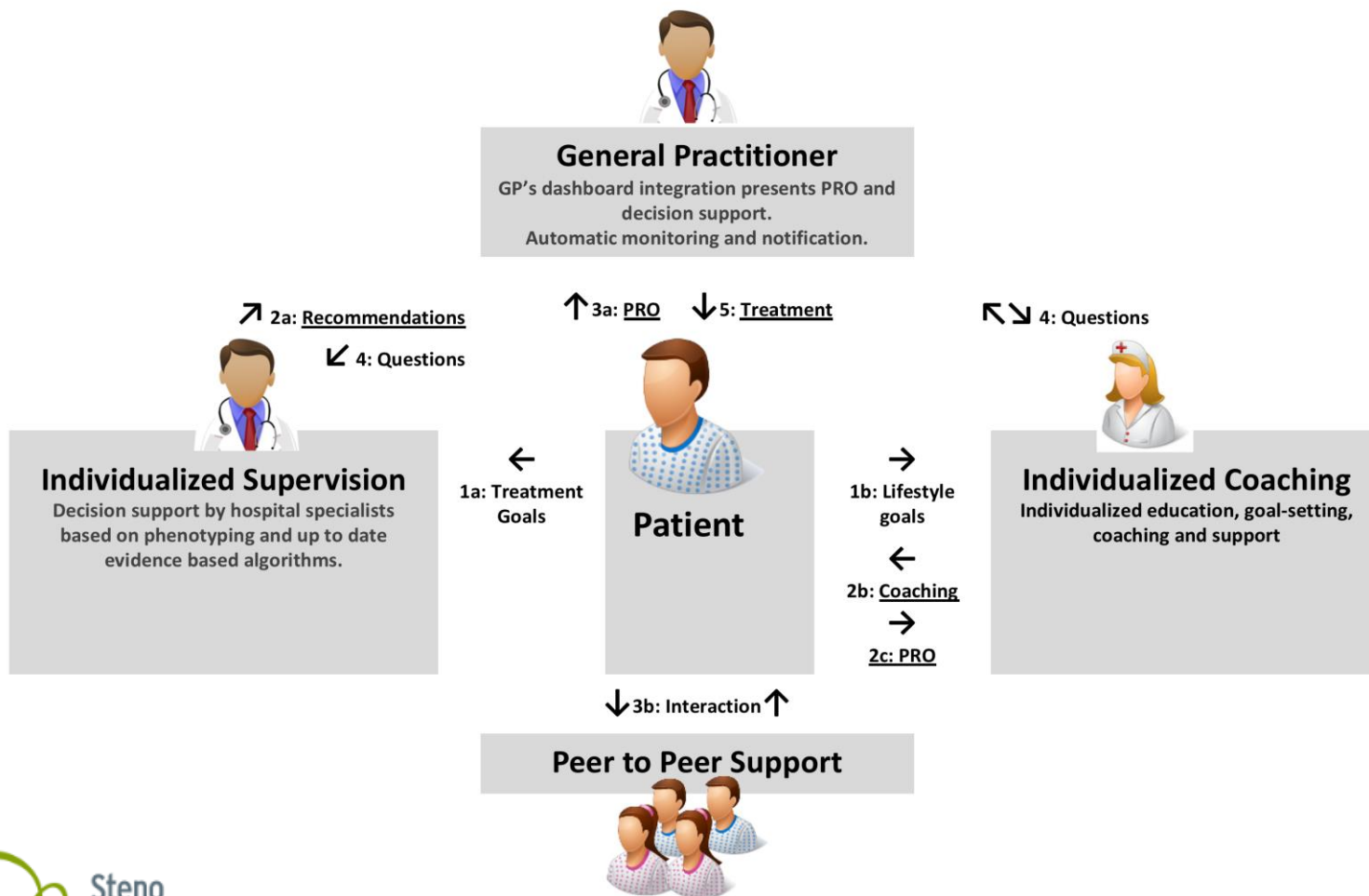
⁴Research Unit of General Practice, AAU

⁵Liva Healthcare

Supported by the Steno Collaborative Grant



novo
nordisk
fonden



1. Patient accepts to participate in DICTA
 - a) In collaboration with GP, the patient decides treatment goals
 - b) In collaboration with coach, the patient decides lifestyle goals
2. Ongoing intervention:
 - a) Specialist recommends treatment to GP
 - b) Coach supports lifestyle changes
 - c) Patient reports “patient reported outcomes” (PRO) to coach
3. Ongoing interaction:
 - a) Patient reports “patient reported outcomes” (PRO) to GP
 - b) Patient interacts with peers on a digital platform
4. GP may pose questions to either specialist or coach
5. Together with patient, GP decides overall treatment

DICTA – Collaborative eHealth for real

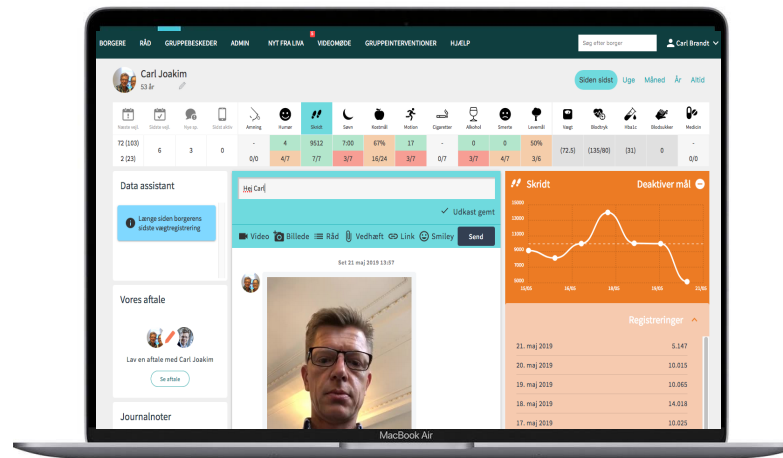
The DICTA platform makes **patient empowerment**, **personal empathic coaching** and **GP support** possible

1 Participant app
A personal coach in the pocket



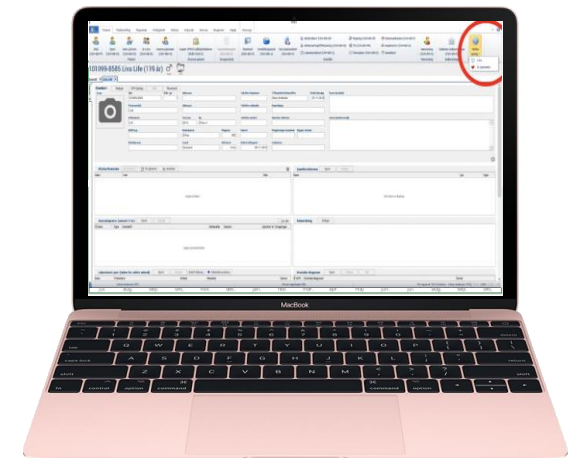
Participants

2 Coach dashboard
Scalable personal e-coaching



Health Coaches

3 GP dashboard
Real time/world outcomes data



General Practitioner

The Platform



Relationship



Technology

Liva's platform combines personal healthcare professionals with an advanced tech platform, promoting stronger user engagement and healthier individuals

Evidence



Users maintained 7 kg of weight loss after 20 months¹



15.000kr.+ saved in societal costs per year per diabetic²



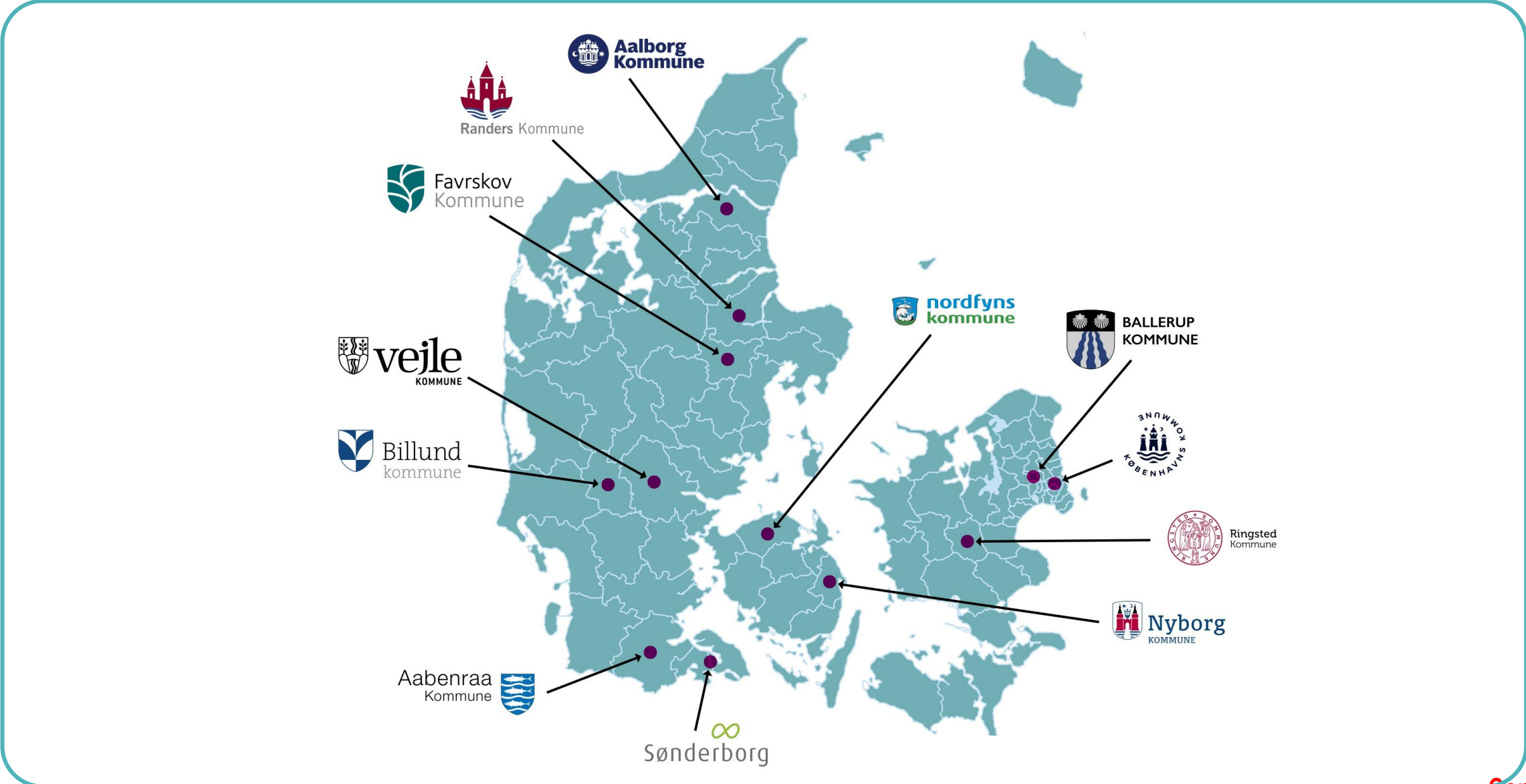
3-500 patients managed per full time health professional³

Key Customers



1. Brandt et al., "Sustained Weight Loss during 20 months using a personalized interactive internet based dietician advice program", *International Journal on Advances in Life Sciences*, 2011
 2. Institute of Applied Economics and Health Research, "Liva Healthcare Cost Effective Analysis", 2017 and Komkova A, Brandt CJ, Hansen Pedersen D, Emneus M, Sortsø C, Electronic Health Lifestyle Coaching Among Diabetes Patients in a Real-Life Municipality Setting: Observational Study. *JMIR Diabetes* 2019;4(1):e12140, DOI: 10.2196/12140, PMID: 30860486

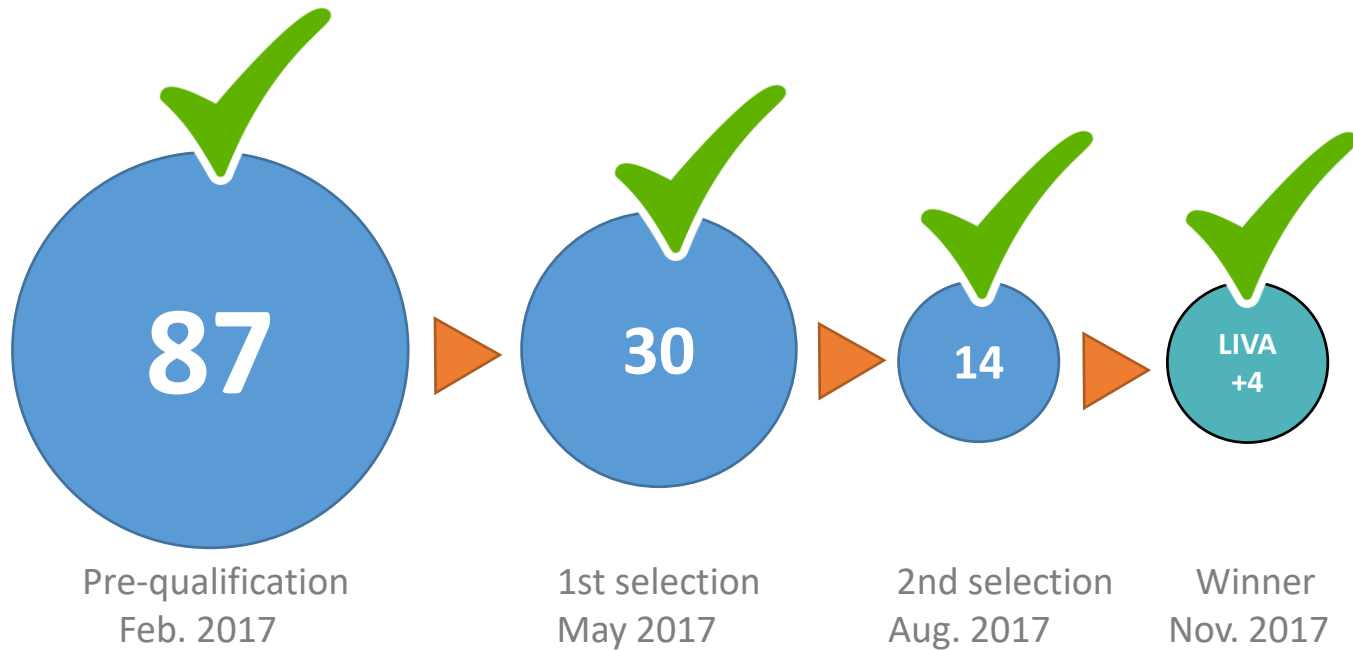
Danish health authorities with Liva in operation





Public Health
England

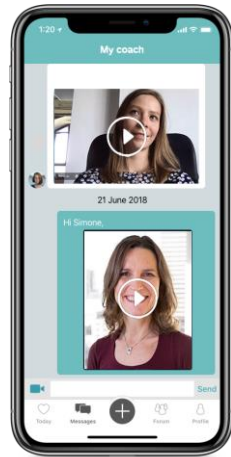
NHS
England



Type 2 diabetes can be reversed with a modest weight loss of 10% or more

- Researchers at the University of Cambridge have found that people with type 2 diabetes who **achieve modest weight loss of 10% or more** in the first few years after being diagnosed have the greatest chance of seeing their disease go into remission.
- The finding suggests that it may be possible for patients to recover from type 2 diabetes without intensive lifestyle interventions or extreme calorie restrictions.
- Previously, it has been shown intensive low-calorie diet involving a total energy intake of 624-700 kcal/day for 8 weeks is associated with remission.
- This research, funded by NIHR Programme Grants for Applied Research and the NIHR Health Technology Assessment Programme, reviewed data from 867 people newly diagnosed diabetes aged 40 and 69 years.
- Overall 257 participants (30%) were in remission at five-year follow-up. People who achieved weight loss of 10% or more within the first five years after diagnosis were more than twice as likely to go into remission compared to people who maintained the same weight.

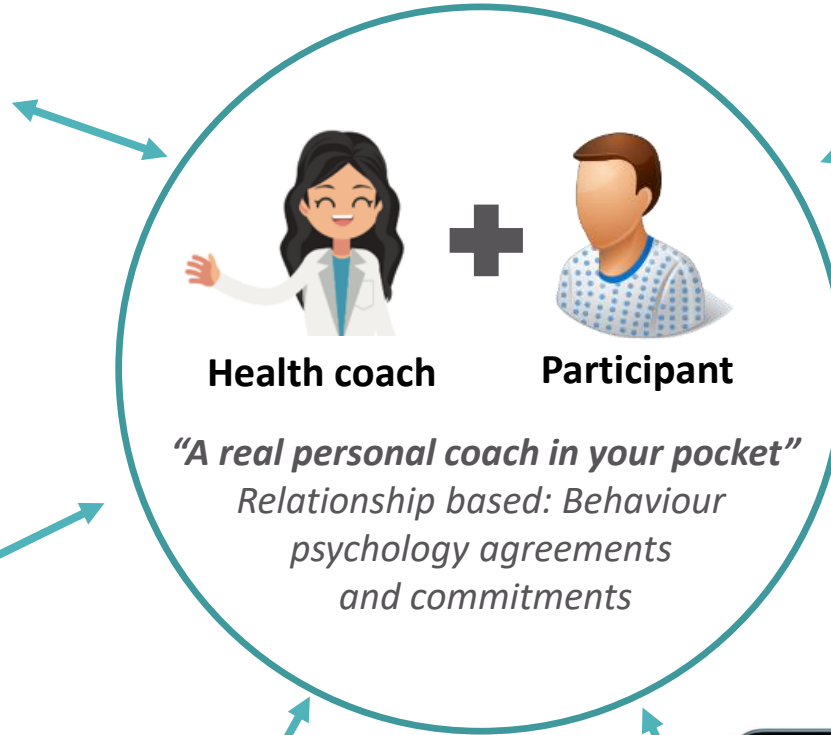
Personal relationships are key to succeeding with a lifestyle change



Ongoing personal e-coaching
Asynchronous via app by text and video



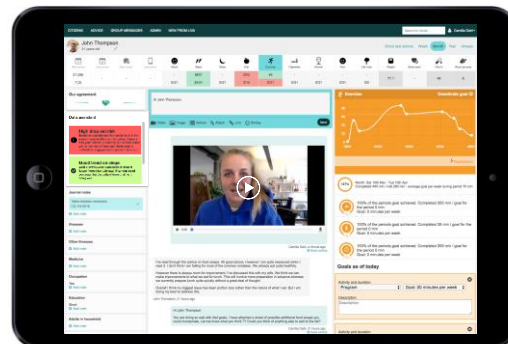
Support community of fellow participants
(peer-2-peer)



Personal lifestyle plan
Each plan is tailored to the individual participant's needs



Personalised content
Motivational material and other content is carefully targeted and timed



Scalable asynchronous e-coaching
Data makes the intervention more personal and the health coach better supported by AI and machine learning



Easy lifestyle and goal tracking
Automatic tracking (e.g., steps) or easy manual tracking (e.g. meal photos)

The Liva coach dashboard – tools to handle 3-500 patients per FTE

Participant overview

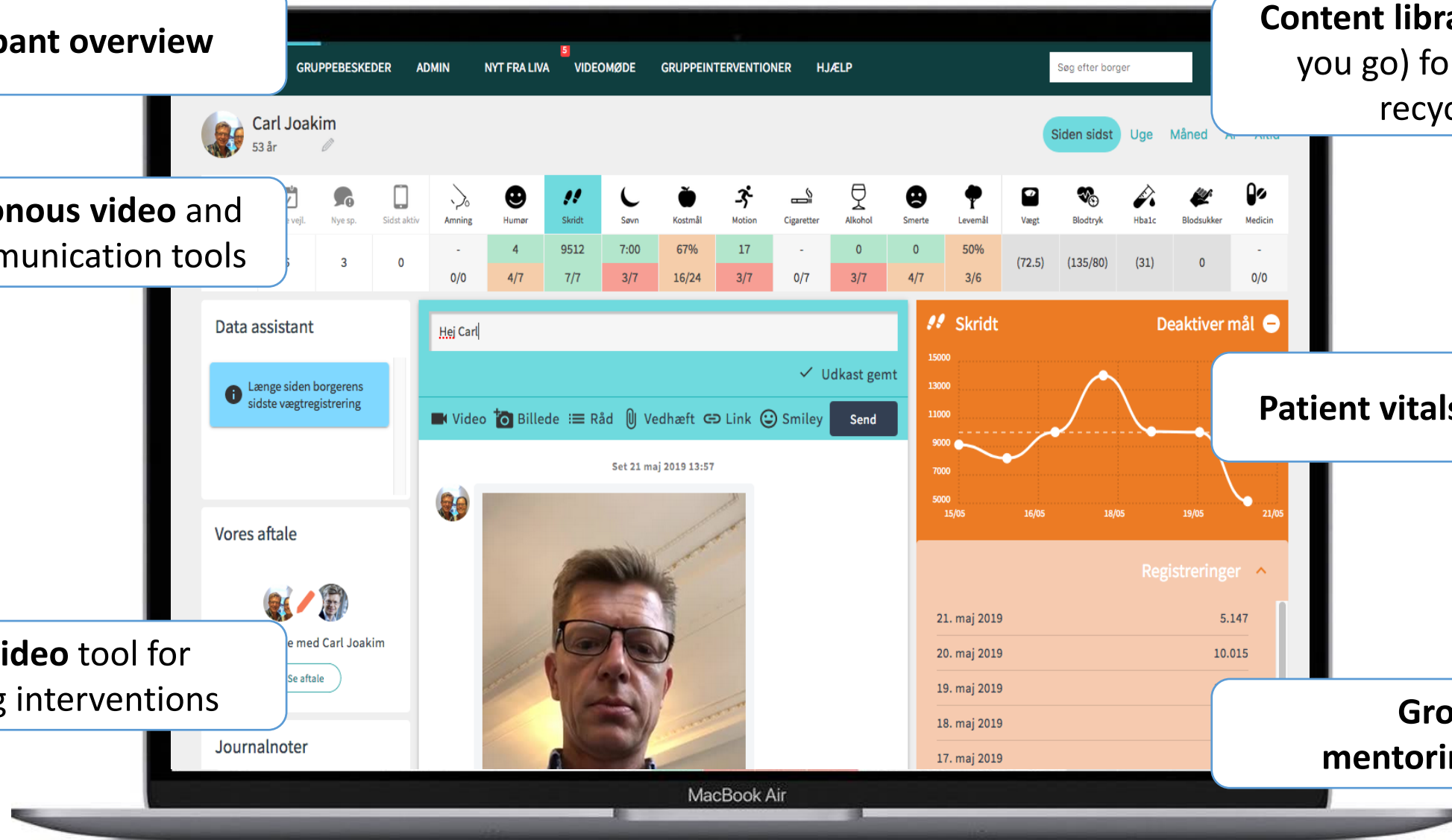
Content library (build as you go) for efficient recycling

Asynchronous video and text communication tools

Patient vitals and charts

Live video tool for ongoing interventions

Group mentoring tools



Liva outcomes with 103 Type 2 diabetes patients

4,8 kg

Average weight loss
in 7,4 months

*Real world Liva data**

6,8 kg

Average weight loss
after 9 months

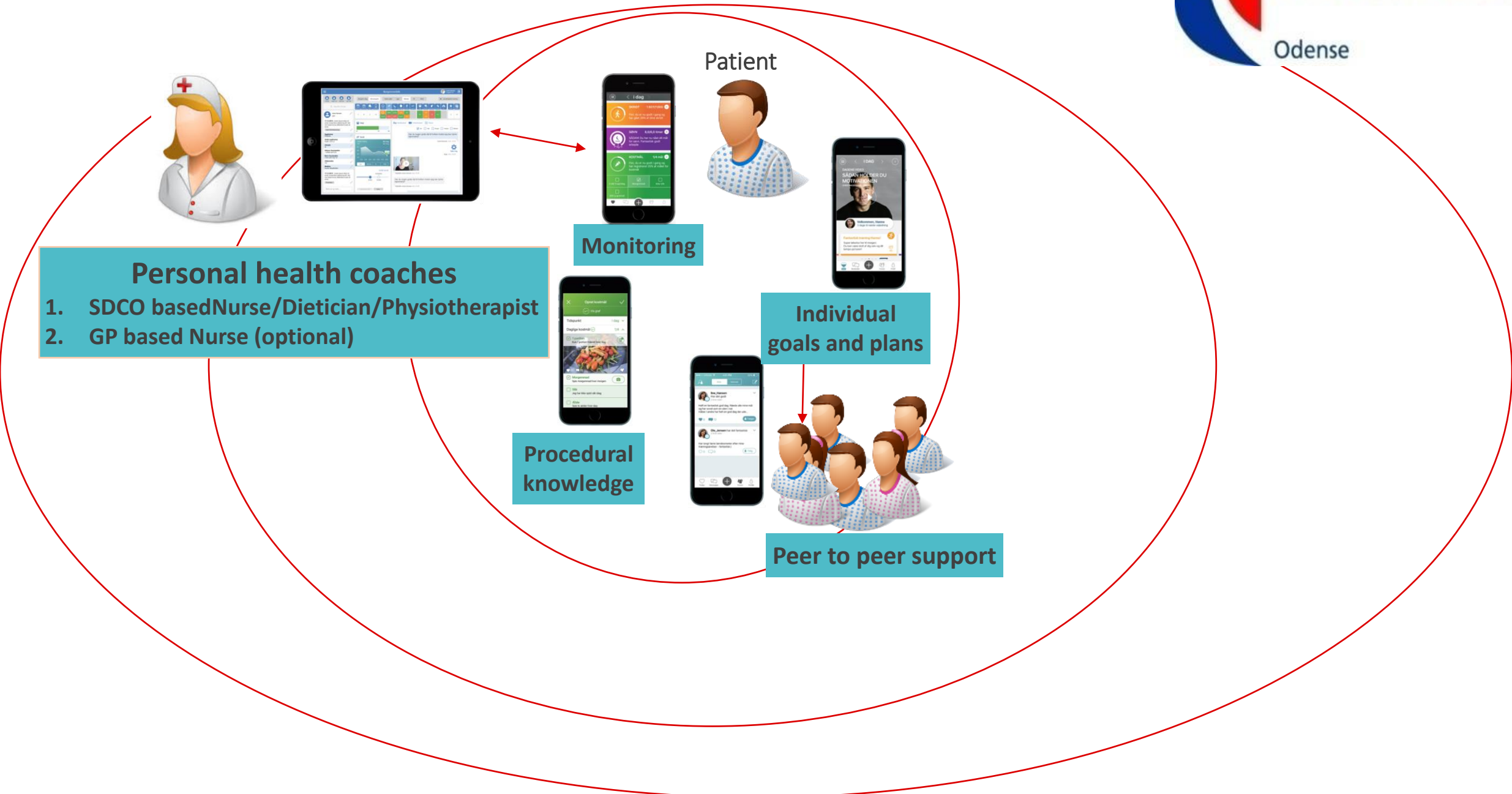
*Real world Liva data**

19.600kr

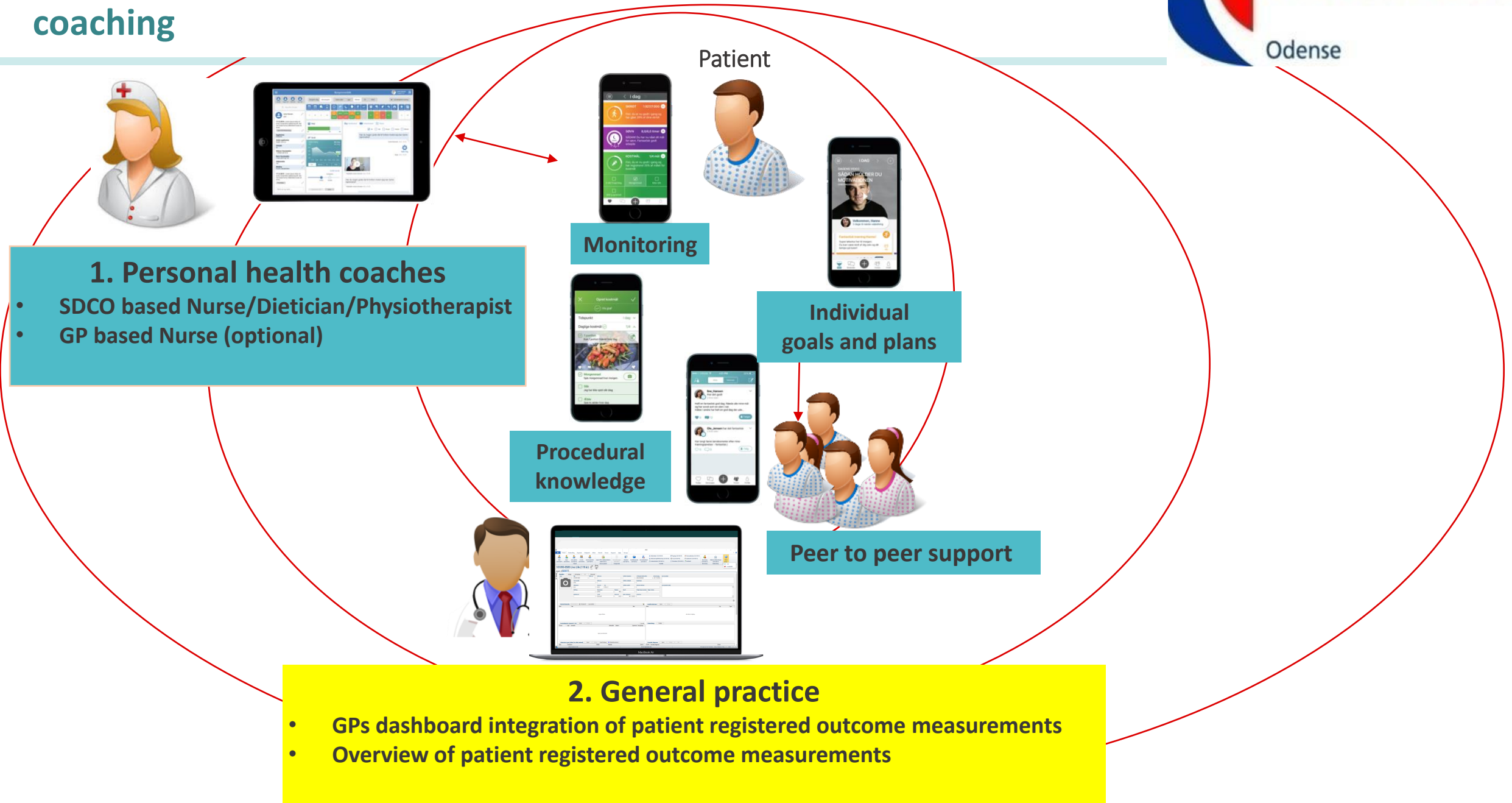
saved per patient per year

*Trend. Real world
Liva data**

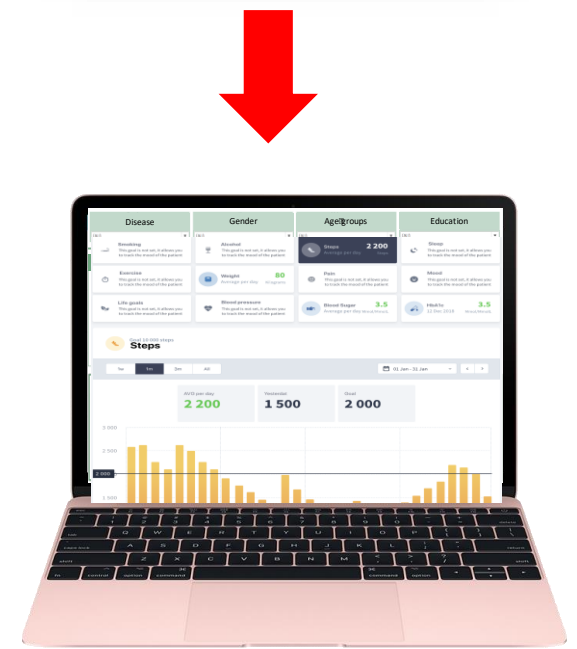
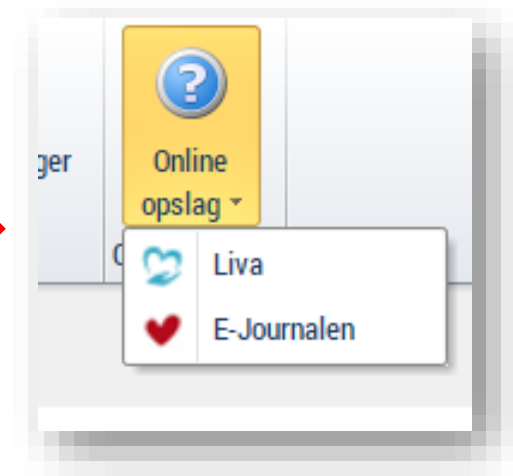
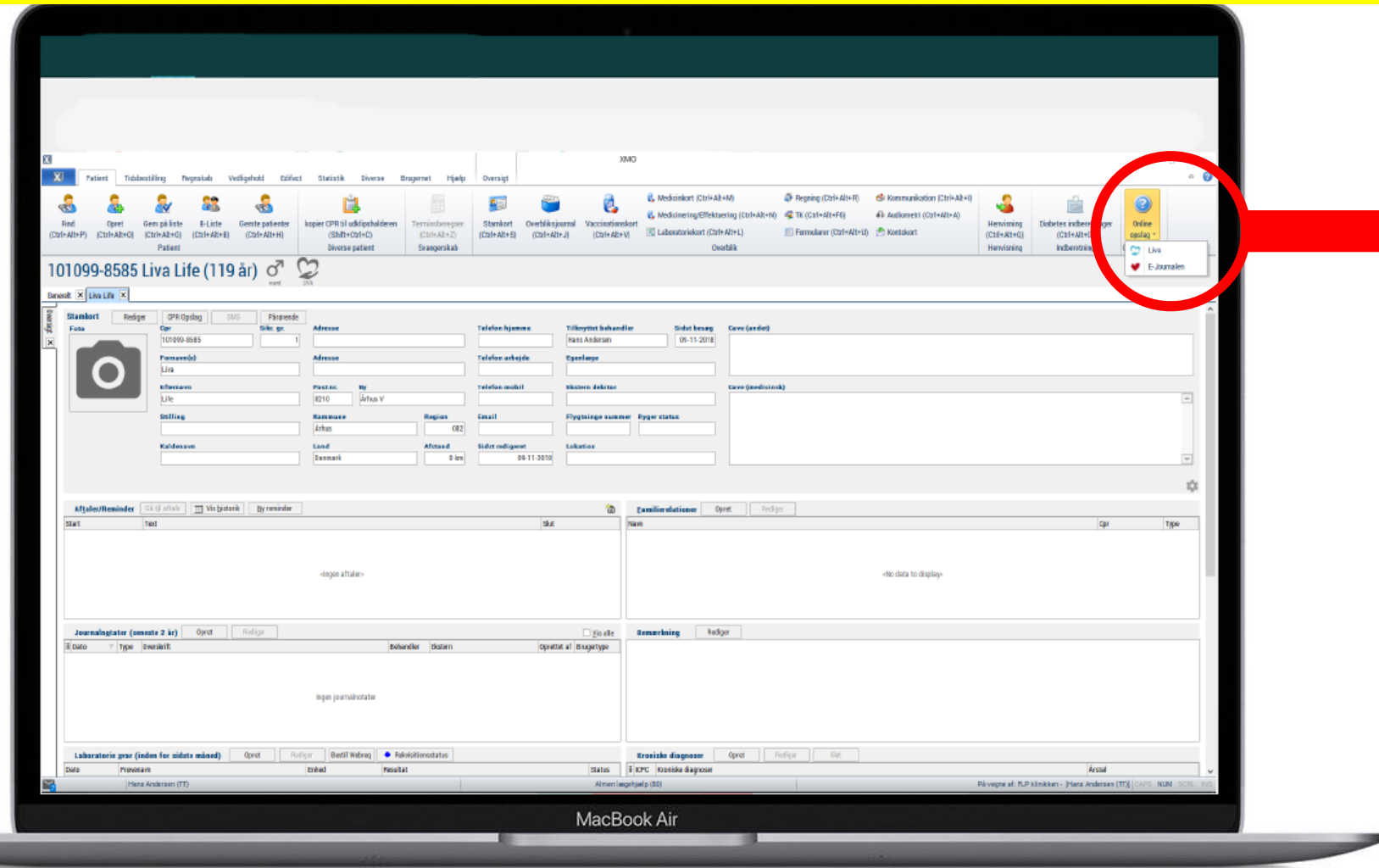
1. Individual digital coaching



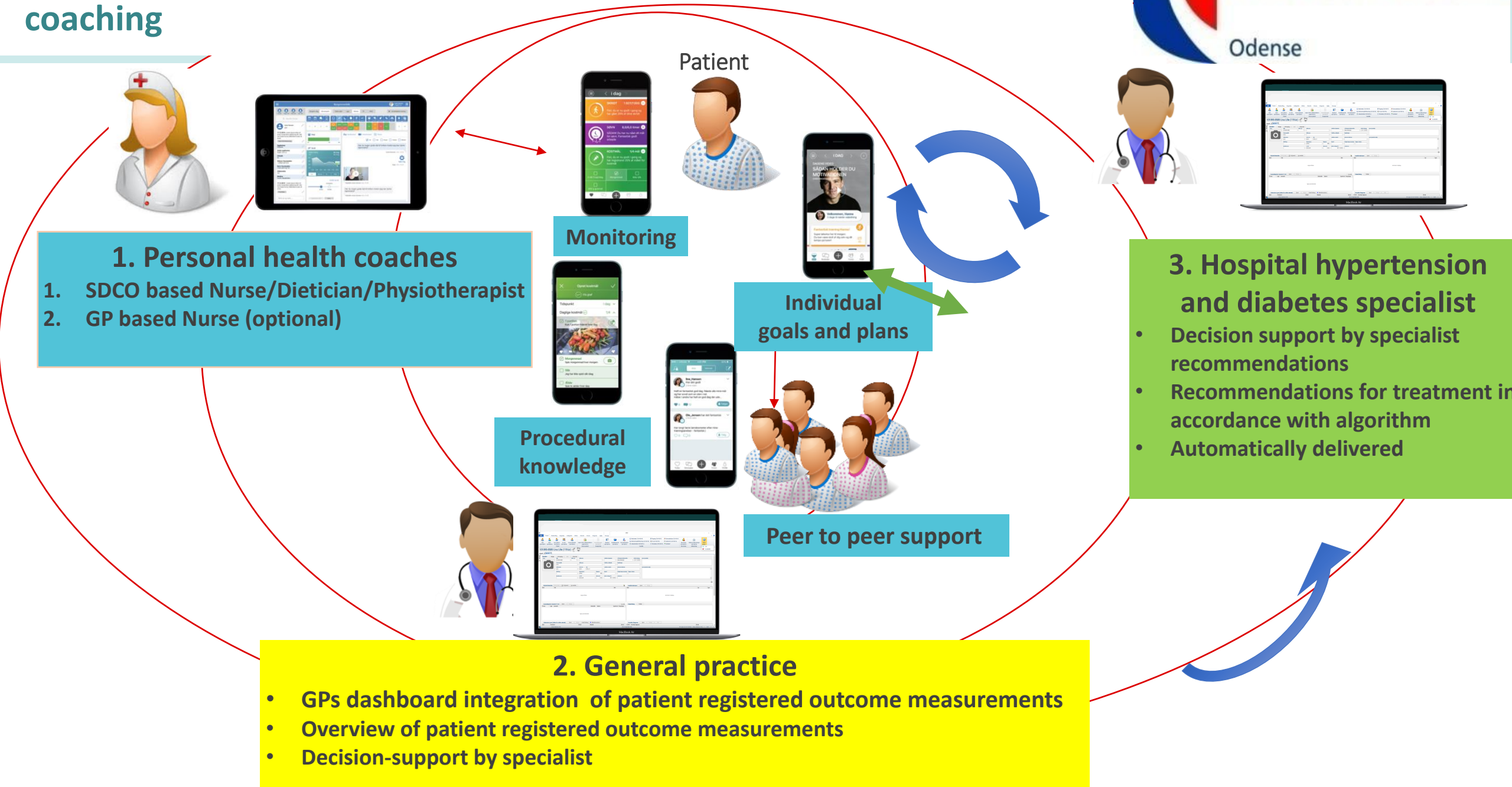
1. Individual digital coaching



2. Integration into GP platform



1. Individual digital coaching



1. Personal health coaches
1. SDCO based Nurse/Dietician/Physiotherapist
2. GP based Nurse (optional)

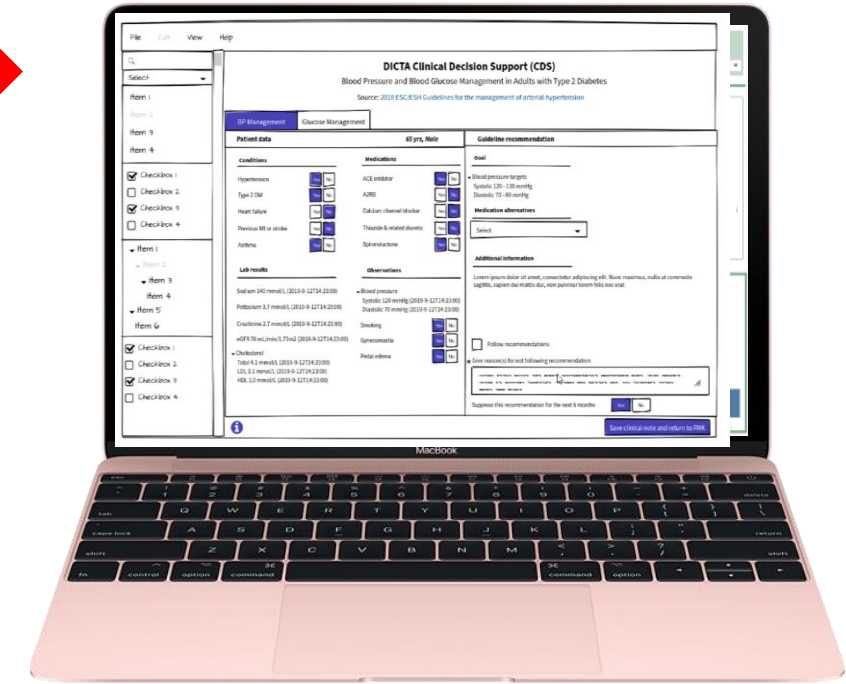
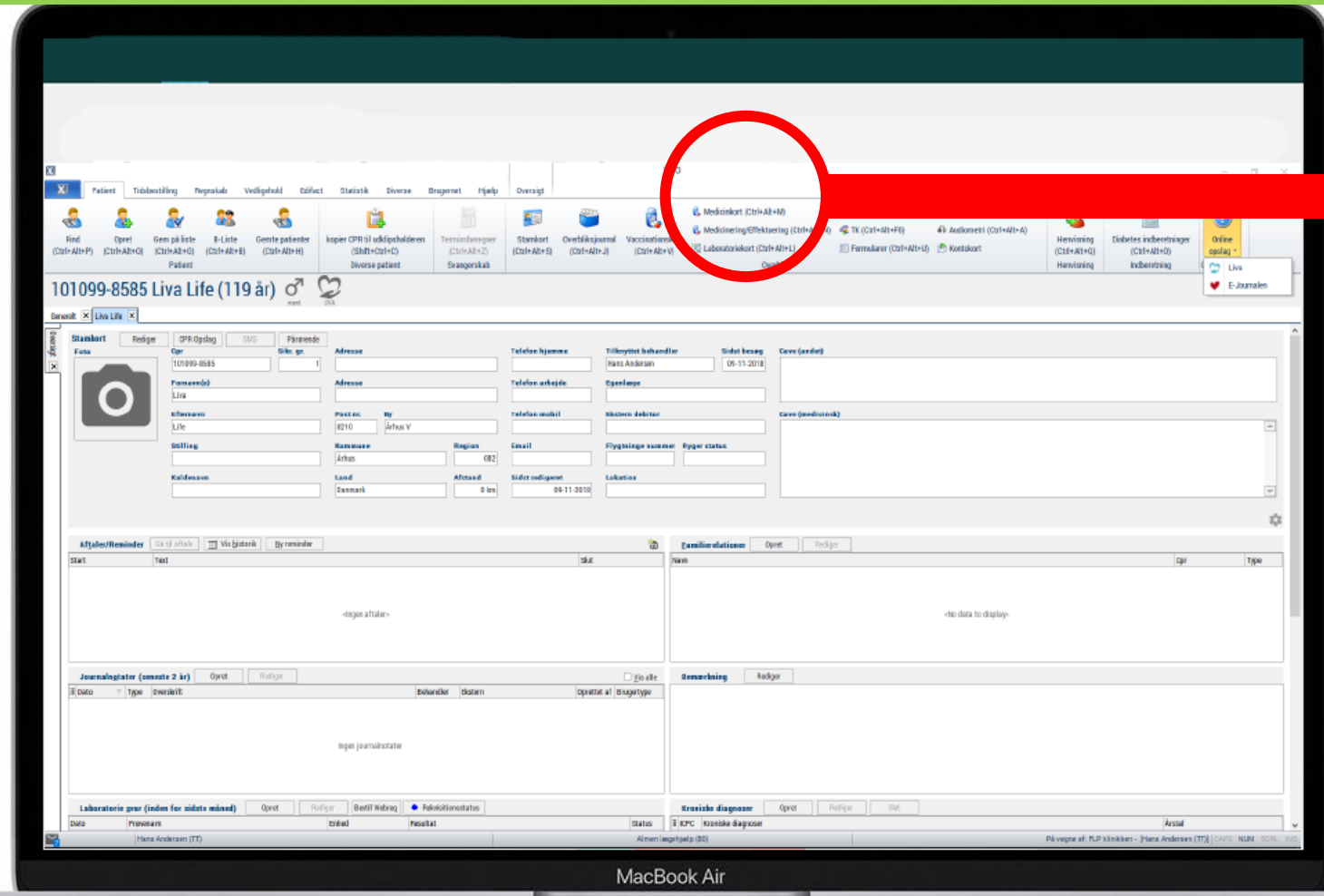
2. General practice

- GPs dashboard integration of patient registered outcome measurements
- Overview of patient registered outcome measurements
- Decision-support by specialist

3. Hospital hypertension and diabetes specialist

- Decision support by specialist recommendations
- Recommendations for treatment in accordance with algorithm
- Automatically delivered

3. Clinical decision support



Thank you for your attention

Carl J. Brandt, PhD GP
Research Unit for General Practice,
Department for public health
University of Southern Denmark

Contact: e-mail: cbrandt@health.sdu.dk
Tel: 20141566

ново
nordisk
fonden