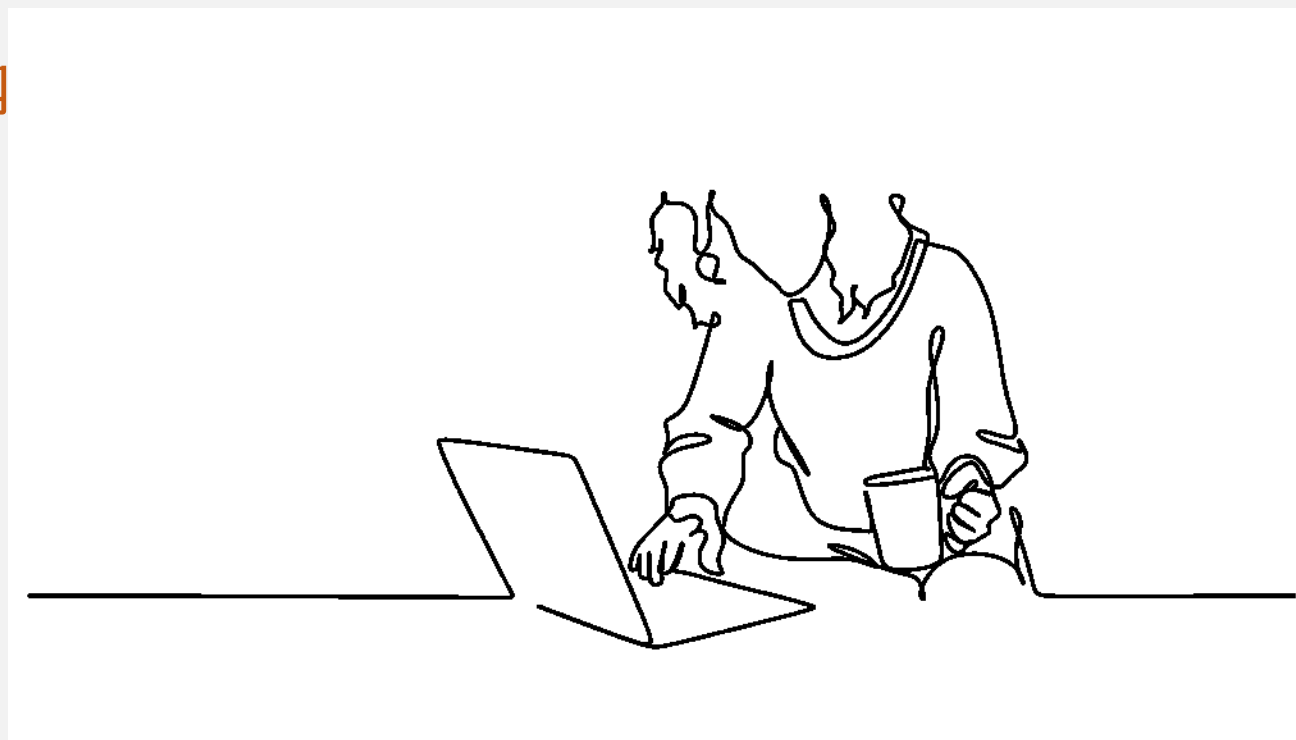


IT parathed og brystkræft

Hvem er parate til at modtage dig sundhedsinformation?

Hvad kan forhindre parathed?





Marianne Hansen

Sygeplejerske, master i rehabilitering
Brystkirurgisk afdeling, Odense Universitets Hospital Danmark



Martin Sollie

Reservelæge, Ph.D. Plastik og Bryst AUH
Plastikkirurgisk afdeling OUH

Plan

- Digitalisering af patientinformation
- Aktuelle problemstillinger
- Studie – Health Technology Readiness





Baggrund

- Brystkirurgisk Center OUH
- Ca. XX nyhenviste patienter på mistanke om brystkræft pr år
- Screening og begrundet mistanke

Patientgruppen - utfordringer

Livsperspektiv fra rask til syg

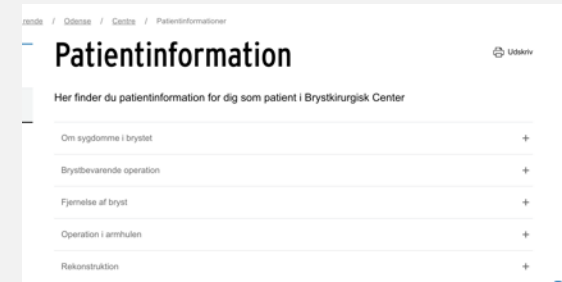
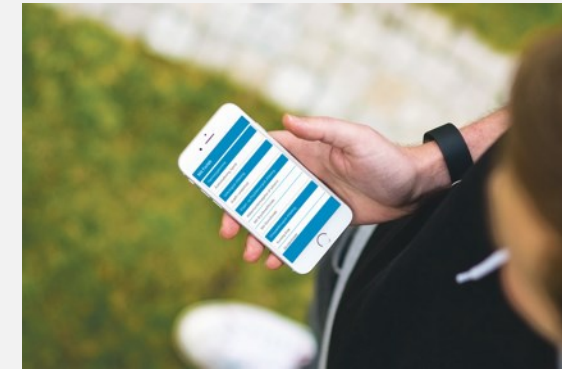
CHOK



Mange beslutninger skal
tages hurtigt

Ressourcer

Patientinformation

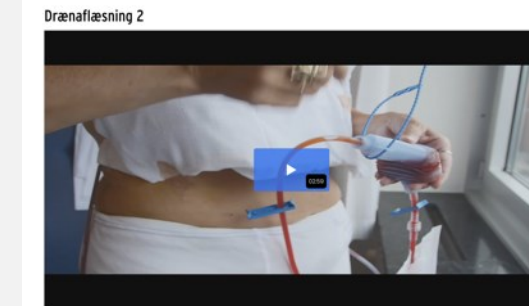
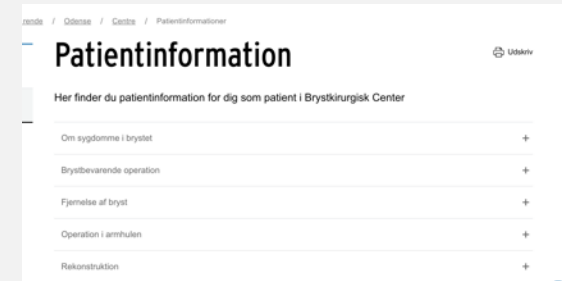
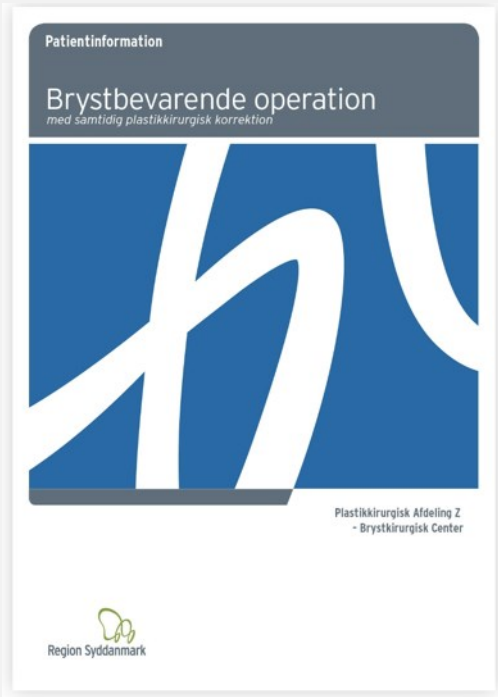


Fordele



Ulemper

Patientinformation

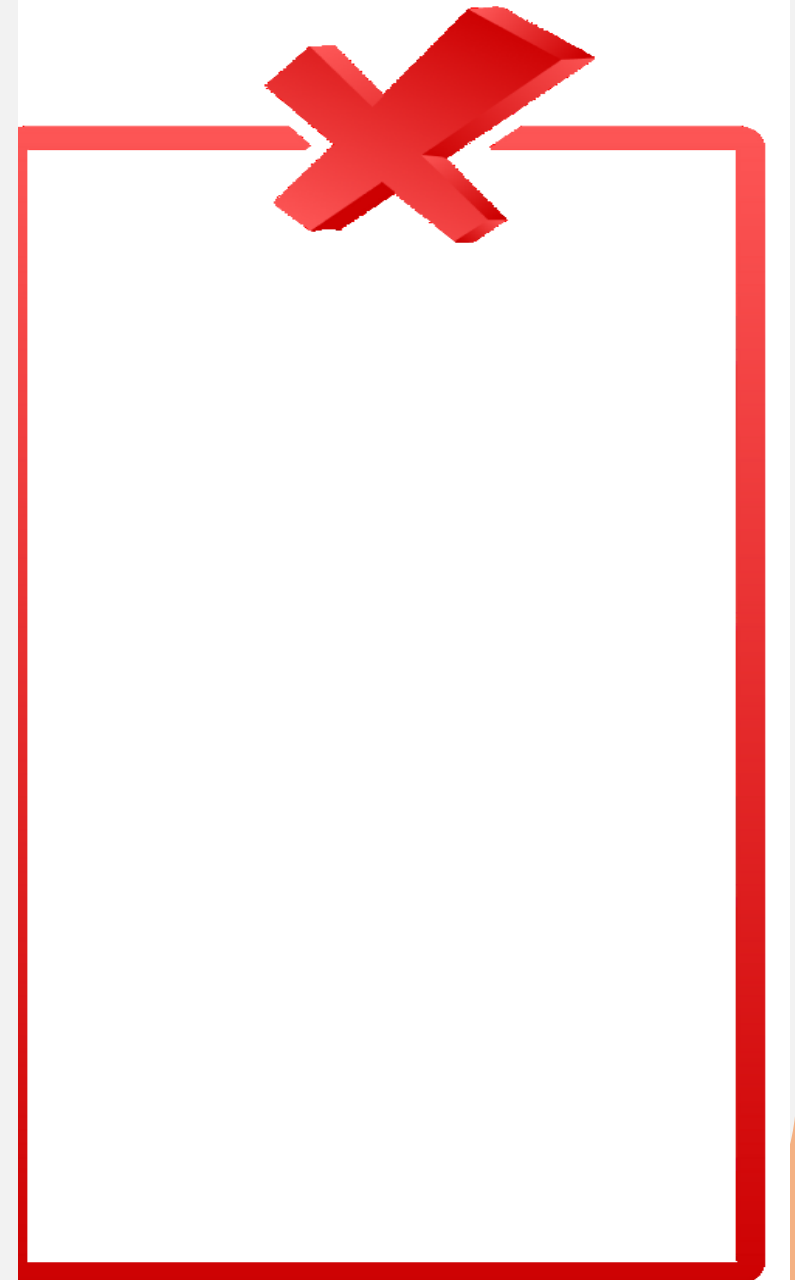
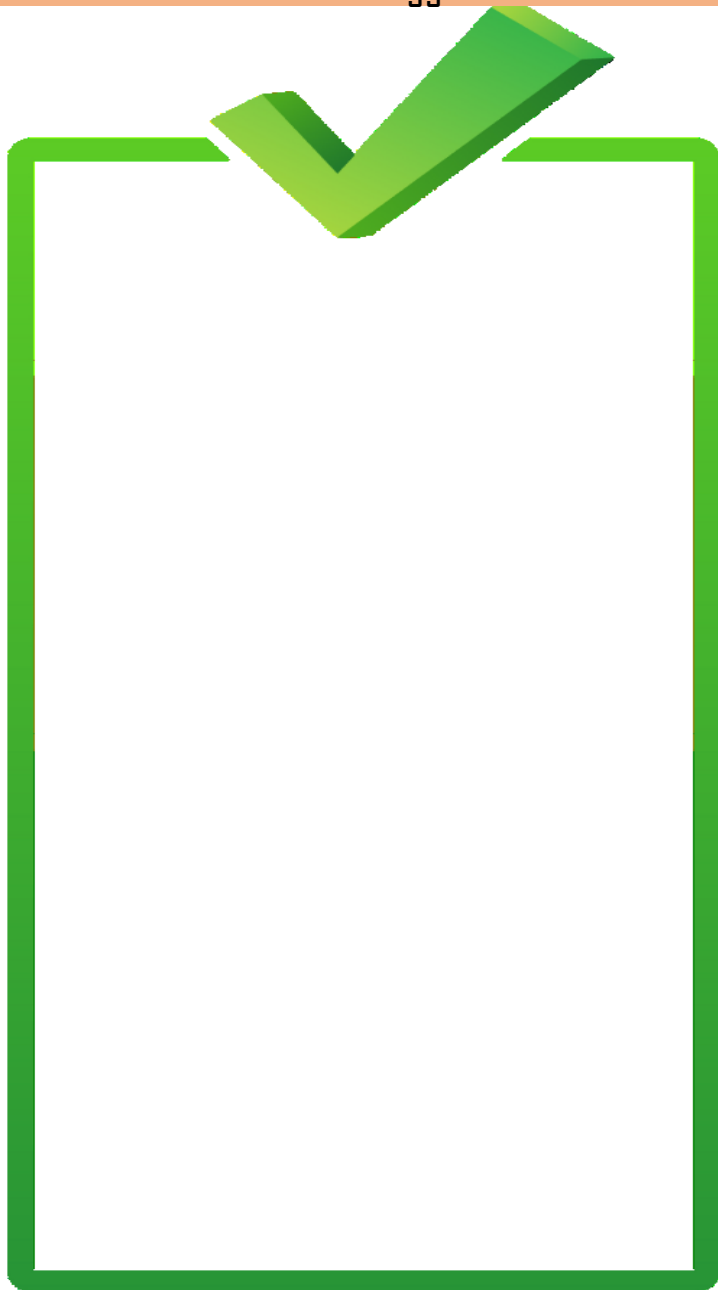


Baggrund

Metode

Resultater

Konklusion



Vores problem

Er vores patienter parate til at modtage al denne information elektronisk?

Kan de selv tilegne sig de rigtige informationer?





Health Technology Readiness

Parathed for sundhedsteknologi, herunder brugerens viden, færdigheder og holdninger til sundhedsteknologi, deres egenhåndtering af sygdom og deres sociale kontekst.

Sundhedsteknologiparathet

JOURNAL OF MEDICAL INTERNET RESEARCH

Thorsen et al

[Original Paper](#)

Health Technology Readiness Profiles Among Danish Individuals With Type 2 Diabetes: Cross-Sectional Study

Ida Kær Thorsen¹, MSc; Sine Rossen², MSc, PhD; Charlotte Glümer³, MD, PhD; Julie Midtgaard^{4,5}, MSc, PhD; Mathias Ried-Larsen¹, MSc, PhD; Lars Kayser⁵, MD, PhD

¹The Centre for Physical Activity Research, University of Copenhagen, Copenhagen, Denmark

²Copenhagen Centre for Cancer and Health, Municipality of Copenhagen, Copenhagen, Denmark

³Center for Diabetes, Municipality of Copenhagen, Copenhagen, Denmark

⁴The University Hospitals' Centre for Health Research, Rigshospitalet, Copenhagen, Denmark




⁵Department of Public Health, University of Copenhagen, Copenhagen, Denmark

Published on 12.2.2019 in Vol 21, No 2 (2019): February

✦ Preprints (earlier versions) of this paper are available at <https://preprints.jmir.org/preprint/10377>, first published March 15, 2018.



Development of the Multidimensional Readiness and Enablement Index for Health Technology (READHY) Tool to Measure Individuals' Health Technology Readiness: Initial Testing in a Cancer Rehabilitation Setting

Lars Kayser¹ ; Sine Rossen^{2,3} ; Astrid Karnoe⁴ ; Gerald Elsworth⁵ ; Jette Vibe-Petersen⁶ ; Jesper Frank Christensen^{2,3} ; Mathias Ried-Larsen^{2,3} ; Richard H Osborne^{1,5} 

Sundhedsteknologiparathed afhænger af:

ALDER

BOSITUATION

ANTALLET KRONISKE SYGDOMME

BRUG AF TEKNOLOGI

SMARTPHONE, COMPUTER

JOURNAL OF MEDICAL INTERNET RESEARCH

Thorsen et al

Original Paper

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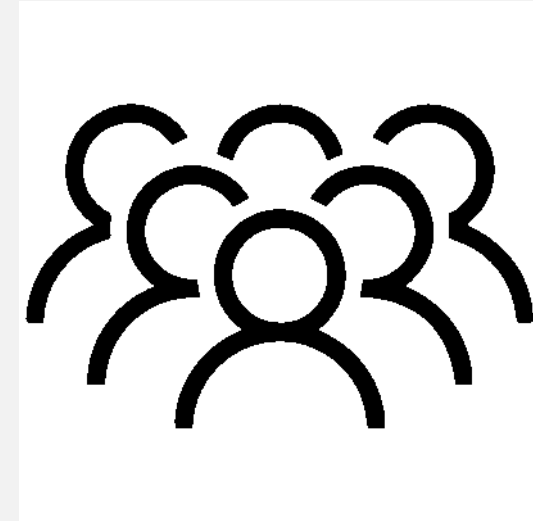
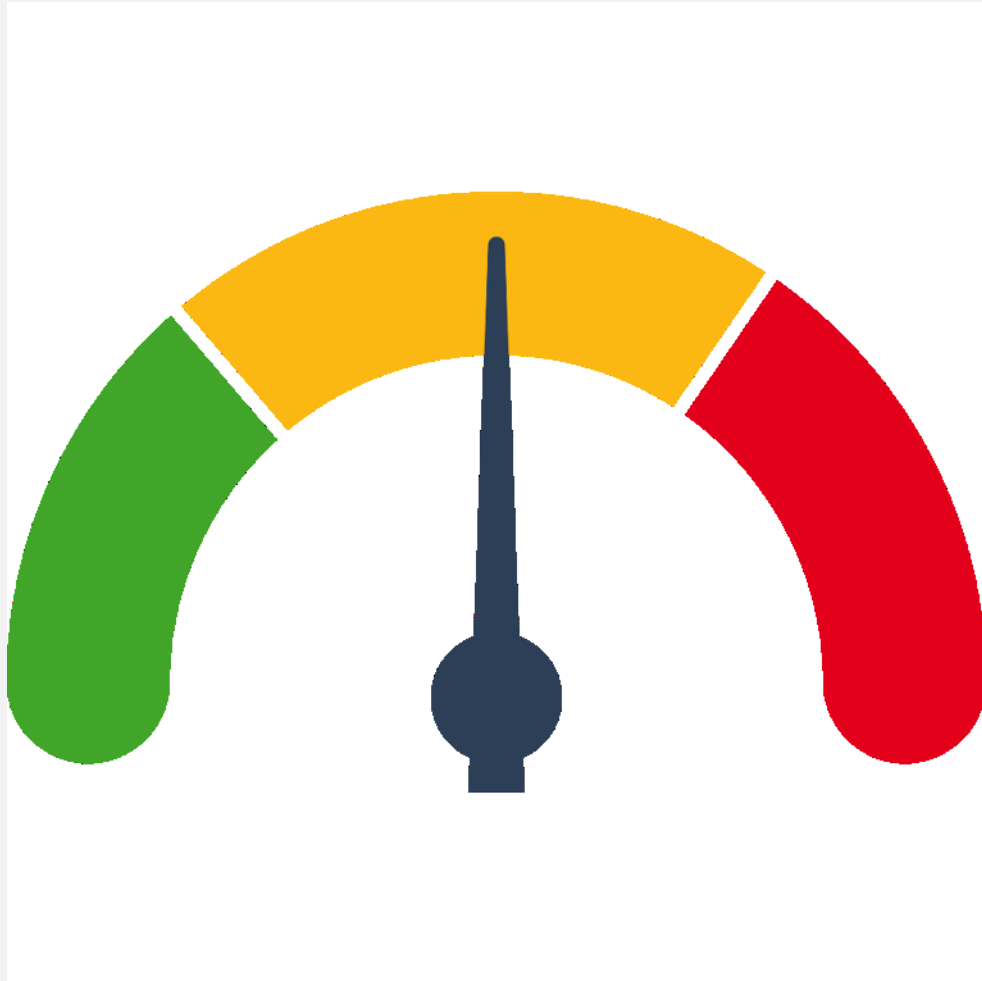
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Vores mål

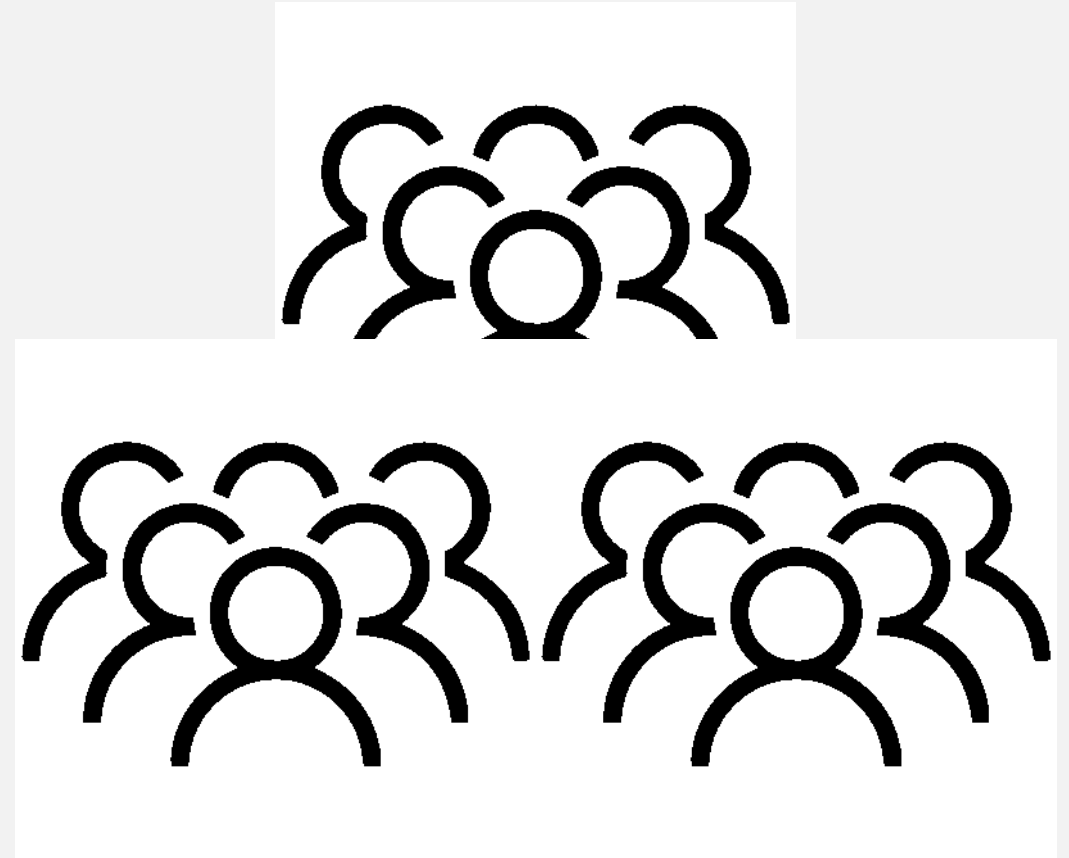
Hvordan er teknologiparatheden blandt de kvinder som bliver henvist på mistanke om brystkræft?



Vores mål

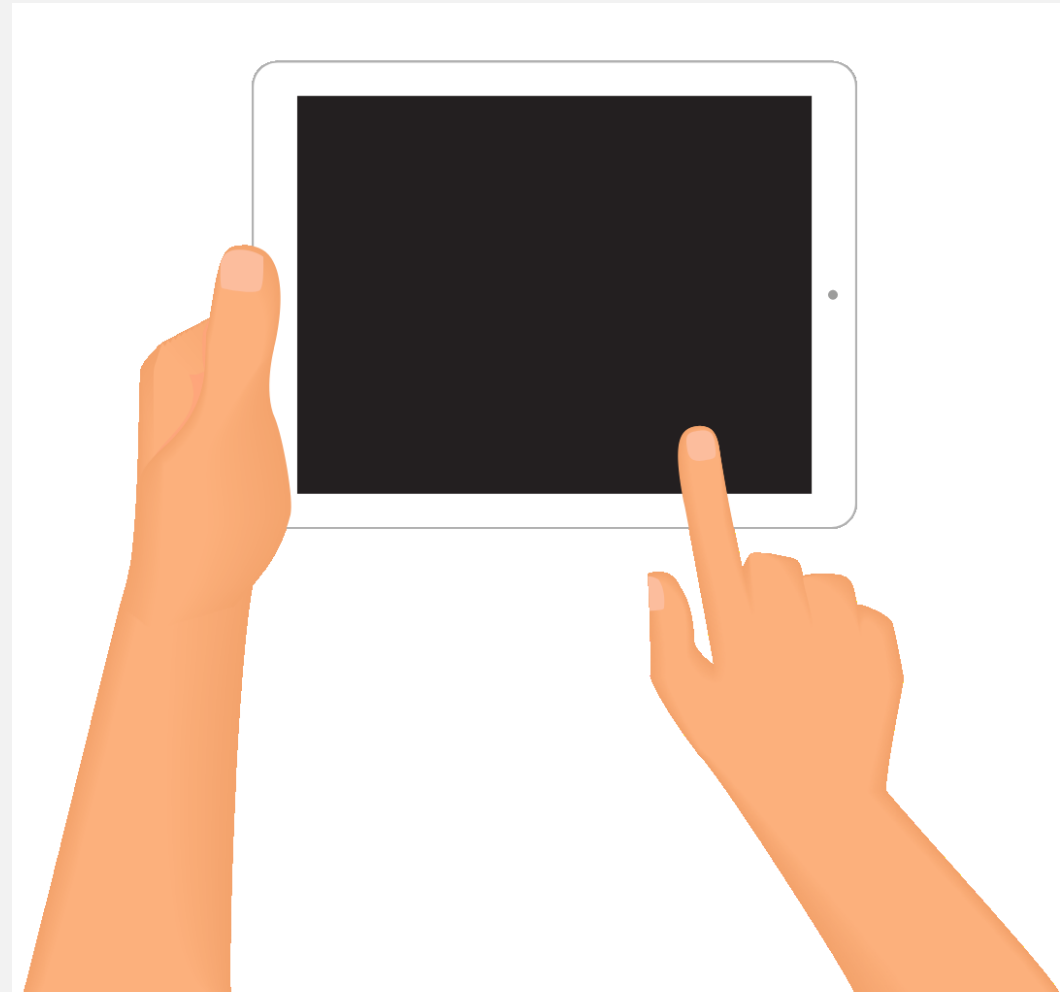


Vores mål



Metode

- Tværsnitstudie
- Population:
 - Kvinder henvist med begrundet mistanke om brystkræft
- Intervention:
 - Digital Patientinformation
- Outcome:
 - Ready



Ready Questionnaire

- Spørgeskema udviklet af KU, Swinburne University og University of Melbourne
- Består af tre spørgeskema samlet i ét:



Ready Questionnaire

- Spørgeskema udviklet af.
- Består af tre spørgeskema samlet i ét:



READY



In this section there are 21 questions which relate to your ability to manage your health.

Check a box by crossing it like this:

| | Please indicate how strongly you disagree or agree with each of the following statements | Strongly disagree | Disagree | Agree | Strongly agree |
|---|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1 | As well as seeing my doctor, I regularly monitor changes in my health. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | I often worry about my health. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | I know what things can trigger my health problems and make them worse. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



In this section there are 9 questions which relate to how you feel supported by family, friends and health professionals.

Check a box by crossing it like this:



| | Please indicate how strongly you disagree or agree with each of the following statements | Strongly disagree | Disagree | Agree | Strongly agree |
|---|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1 | I can get access to several people who understand and support me. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | When I feel ill, the people around me really understand what I am going through. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | I have at least one healthcare provider who knows me well. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



eHLQ



In this section there are 35 questions which relate to your eHealth:

Check a box by crossing it like this:



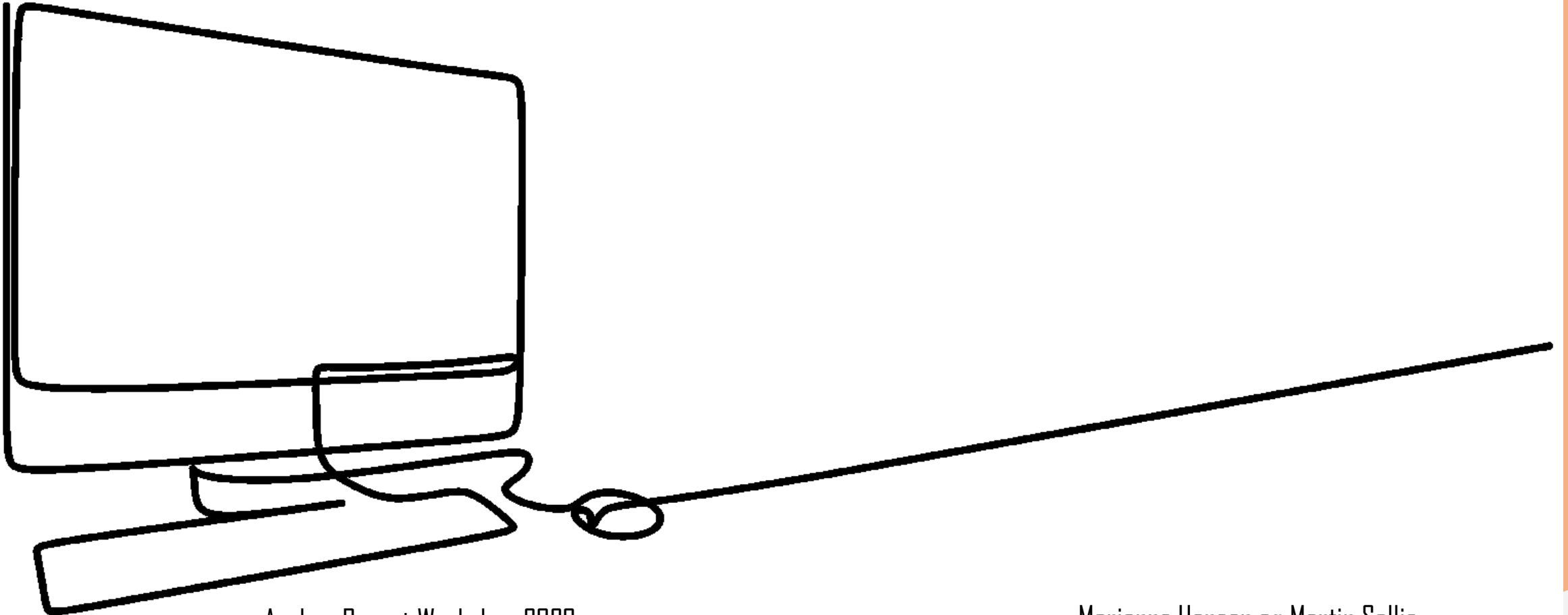
| | Please indicate how strongly you disagree or agree with each of the following statements | Strongly disagree | Disagree | Agree | Strongly agree |
|---|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 1 | I am sure that my health data are being used only by those who are supposed to use it. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | Technology makes me feel actively involved with my health. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | Information about my health is always available to those who need it. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Hvordan løste vi det rent praktisk?

- Hvem blev spurgt om at deltage?
- Hvornår skulle de udfylde?
- Hvordan skulle de udfylde?



Deltagere:



Resultater

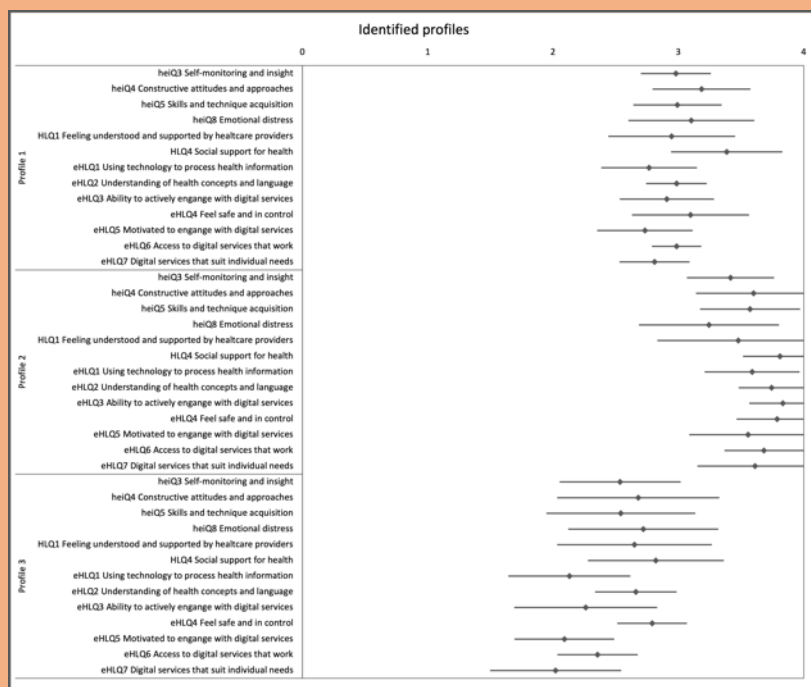
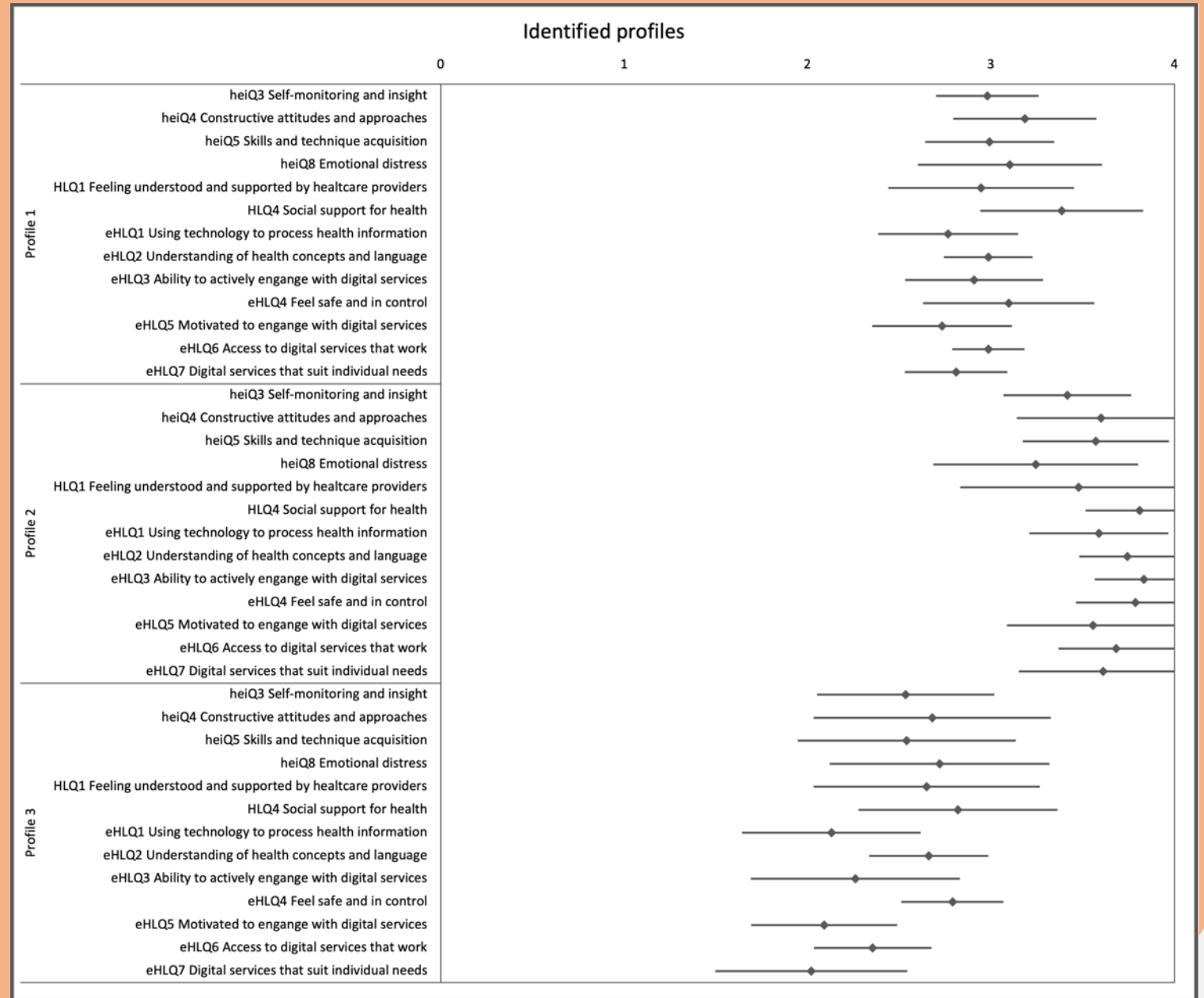


Figure 2 - Heat map of mean values of the individual profiles

| Scales | Profile 1 | Profile 2 | Profile 3 |
|---|-----------|-----------|-----------|
| heiQ3 Self-monitoring and insight | 3,0 | 3,4 | 2,5 |
| heiQ4 Constructive attitudes and approaches | 3,2 | 3,6 | 2,7 |
| heiQ5 Skills and technique acquisition | 3,0 | 3,6 | 2,5 |
| heiQ8 Emotional distress | 3,1 | 3,2 | 2,7 |
| HLQ1 Feeling understood and supported by healthcare providers | 2,9 | 3,5 | 2,7 |
| HLQ4 Social support for health | 3,4 | 3,8 | 2,8 |
| eHLQ1 Using technology to process health information | 2,8 | 3,6 | 2,1 |
| eHLQ2 Understanding of health concepts and language | 3,0 | 3,7 | 2,7 |
| eHLQ3 Ability to actively engage with digital services | 2,9 | 3,8 | 2,3 |
| eHLQ4 Feel safe and in control | 3,1 | 3,8 | 2,8 |
| eHLQ5 Motivated to engage with digital services | 2,7 | 3,6 | 2,1 |
| eHLQ6 Access to digital services that work | 3,0 | 3,7 | 2,4 |
| eHLQ7 Digital services that suit individual needs | 2,8 | 3,6 | 2,0 |

Heat map illustrating the difference in means between the identified READHY profiles. The colour ranging from green tones to red tones illustrates the range of means from low to high on the READHY score.

Resultater



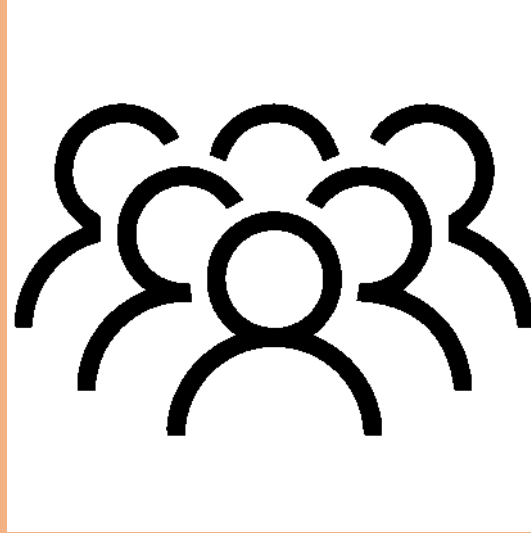
Resultater

Figure 2 - Heat map of mean values of the individual profiles

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| heiQ8 Emotional distress | 3,1 | 3,2 | 2,7 |
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| eHLQ1 Using technology to process health information | 2,8 | 3,6 | 2,1 |
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| eHLQ3 Ability to actively engage with digital services | 2,9 | 3,8 | 2,3 |
| eHLQ4 Feel safe and in control | 3,1 | 3,8 | 2,8 |
| eHLQ5 Motivated to engage with digital services | 2,7 | 3,6 | 2,1 |
| eHLQ6 Access to digital services that work | 3,0 | 3,7 | 2,4 |
| eHLQ7 Digital services that suit individual needs | 2,8 | 3,6 | 2,0 |

Heat map illustrating the difference in means between the identified READHY profiles. The colour ranging from green tones to red tones illustrates the range of means from low to high on the READHY score.

Resultater



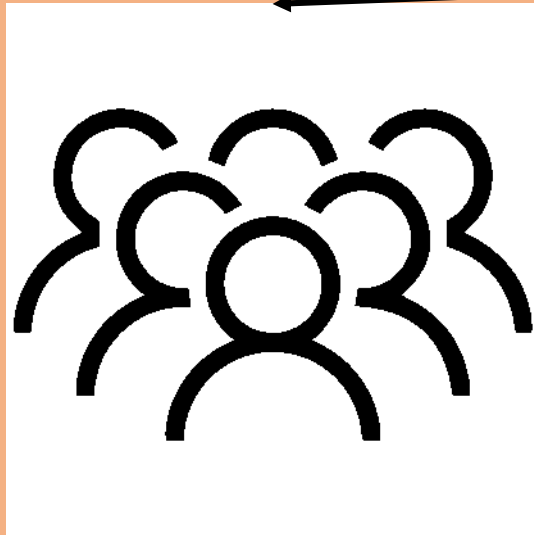
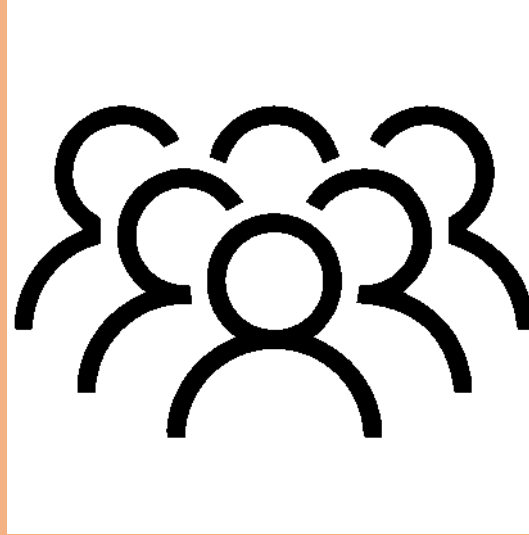
Baggrund

Metode

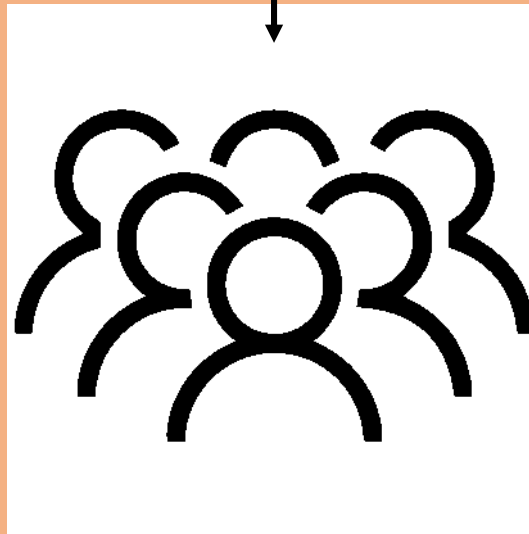
Resultater

Konklusion

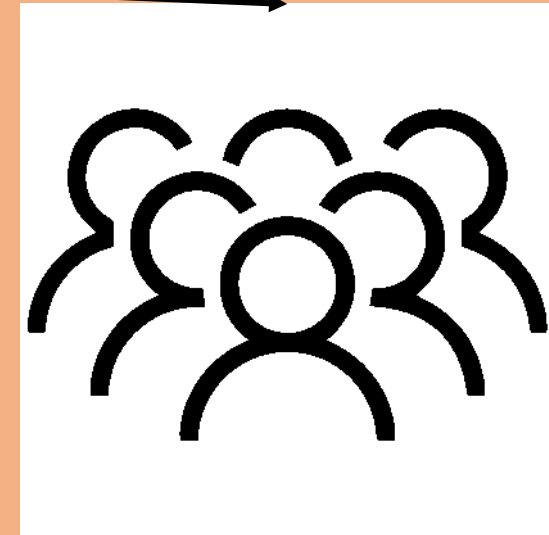
Resultater



MIDDEL



HØJ



LAV

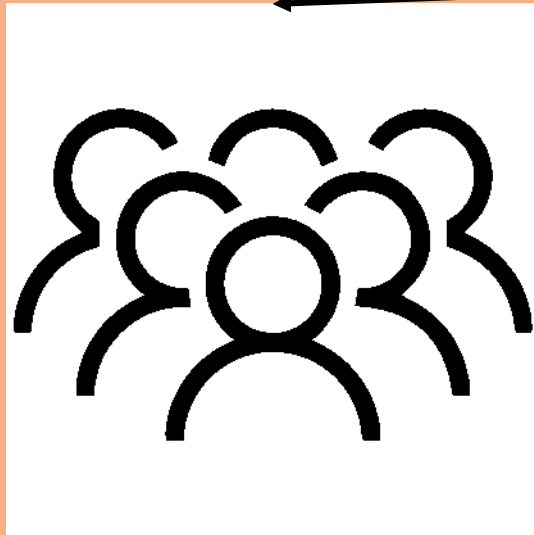
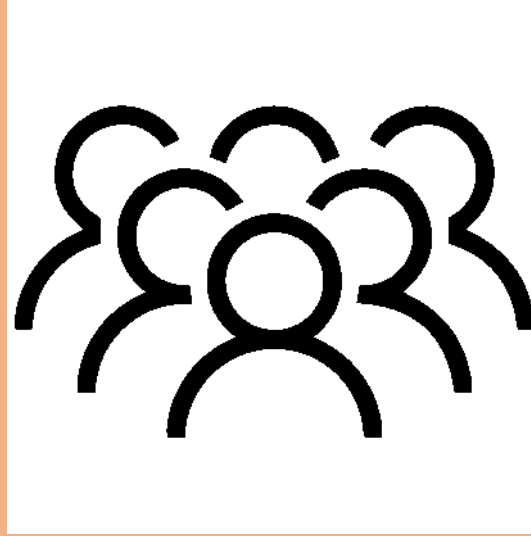
Baggrund

Metode

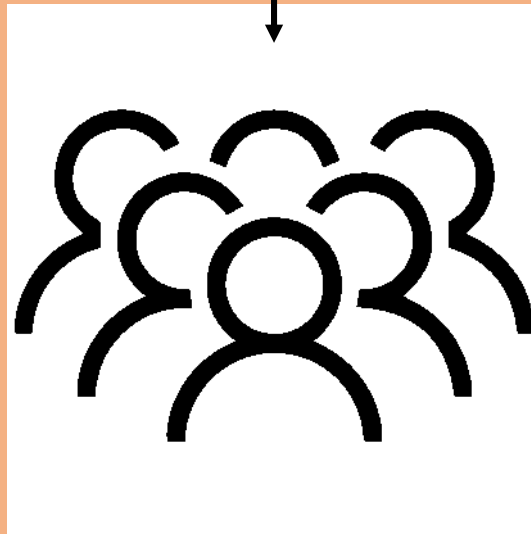
Resultater

Konklusion

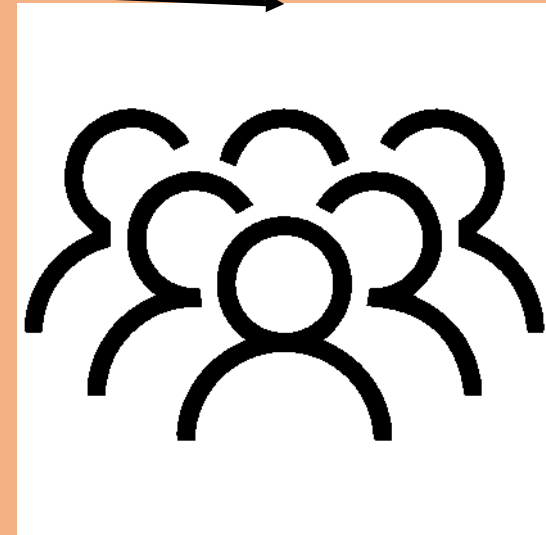
Resultater



LAV



MIDDEL



HØJ

Resultater

TABLE 1: Sociodemographic characteristics and access to technology of participants (N=92) across profiles. Data are presented as mean (SD) for continuous variables and number (proportions) for frequencies.

| Characteristics | Total (N=92) | Profile 1 (N=54) | Profile 2 (N=18) | Profile 3 (N=20) | P-value |
|--|--------------|------------------|------------------|------------------|---------|
| Age, mean (SD) | 63.1 (12.4) | 62.5 (11.9) | 57.9 (12.7) c | 69.5 (11.1) b | 0.013 |
| Highest attained level of education, n (%) | | | | | 0.277 |
| Comprehensive school | 16 (17.4) | 8 (14.8) | 1 (5.6) | 7 (35.0) | |
| Short education (2-3 y) | 40 (43.5) | 25 (46.3) | 8 (44.4) | 7 (35.0) | |
| Medium education (3-4 y) | 34 (37.0) | 20 (37.0) | 8 (44.4) | 6 (30.0) | |
| Long education (4+ y) | 2 (2.1) | 1 (1.9) | 1 (5.6) | 0 (0.0) | |
| Cohabitation status, n (%) | | | | | 0.451 |
| Living alone | 23 (25.0) | 13 (24.1) | 3 (16.7) | 7 (35.0) | |
| Living with spouse and/or children | 69 (69.0) | 41 (75.9) | 15 (83.3) | 13 (65.0) | |
| Source of income | | | | | 0.650 |
| Salary | 38 (41.3) | 25 (46.3) | 10 (55.6) | 3 (15.0) | |
| Retirement pension | 11 (11.9) | 6 (11.1) | 1 (5.6) | 4 (20.0) | |
| Public income support/ no incomes | 43 (46.7) | 23 (42.6) | 7 (38.8) | 13 (65.0) | |
| Do you own any of these IT aids? | | | | | 0.845 |
| Smartwatch? | | | | | |
| YES | 13 (14.3) | 8 (14.8) | 3 (16.7) | 2 (10.0) | |
| NO | 79 (85.8) | 46 (85.2) | 15 (83.3) | 18 (90.0) | |
| Smartphone? | | | | | 0.006 |
| YES | 85 (92.3) | 53 (98.1) c | 17 (94.4) | 15 (75.0) a | |
| NO | 7 (7.6) | 1 (1.9) c | 1 (5.6) | 5 (25.0) a | |
| Computer? | | | | | 0.130 |
| YES | 77 (83.7) | 46 (85.2) | 17 (94.4) | 14 (70.0) | |
| NO | 15 (16.3) | 8 (14.8) | 1 (5.6) | 6 (30.0) | |
| Tablet? | | | | | 0.030 |
| YES | 64 (69.5) | 40 (74.1) c | 16 (88.8) c | 8 (40.0) a,b | |
| NO | 28 (30.4) | 14 (25.9) c | 2 (11.1) c | 12 (60.0) a,b | |
| How do you use technology in your daily life? | | | | | 0.006 |
| Excercise? | | | | | |
| YES | 17 (18.5) | 8 (14.8) b | 8 (44.4) a,c | 1 (5.0) b | |
| NO | 75 (81.5) | 46 (85.2) b | 10 (55.5) a,c | 19 (95.0) b | |
| Work? | | | | | 0.005 |
| YES | 38 (41.3) | 23 (42.6) c | 12 (66.7) c | 3 (15.0) a,b | |
| NO | 54 (58.7) | 31 (57.4) c | 6 (33.3) c | 17 (85.0) a,b | |
| Seeking information? | | | | | 0.009 |
| YES | 76 (82.6) | 47 (92.2) c | 17 (94.4) c | 12 (60.0) a,b | |
| NO | 16 (17.4) | 7 (13.7) c | 1 (5.6) c | 8 (40.0) a,b | |
| Communication? | | | | | 0.496 |
| YES | 77 (83.7) | 46 (85.2) | 16 (88.9) | 15 (75.0) | |
| NO | 15 (16.3) | 8 (14.8) | 2 (11.1) | 5 (25.0) | |
| Entertainment? | | | | | <0.001 |
| YES | 62 (67.4) | 39 (72.2) c | 17 (94.4) c | 6 (30.0) a,b | |
| NO | 30 (32.6) | 15 (27.8) c | 1 (5.6) c | 14 (70.0) a,b | |

a) Different than profile 1

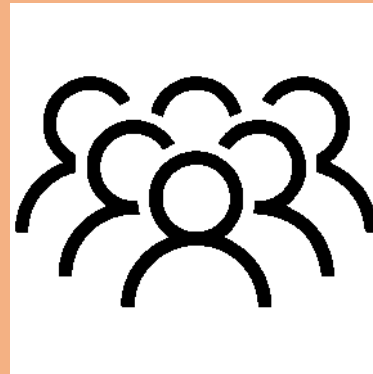
b) Different than profile 2

c) Different than profile 3

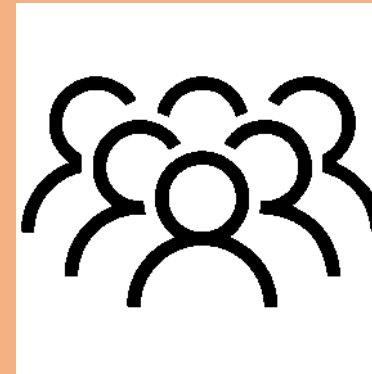
Alder*



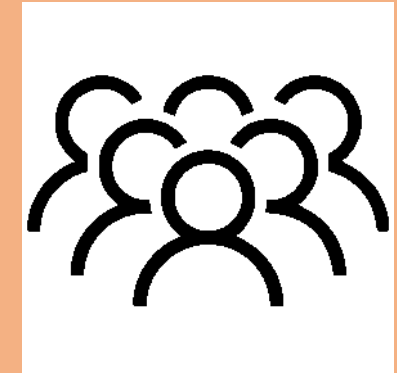
LAV



MIDDEL



HØJ



69.5

63.1

62.5

P= 0.013

Uddannelse

- Folkeskole
- Kort videregående uddannelse
- Mellemlang videregående uddannelse
- Lan videregående uddannelse



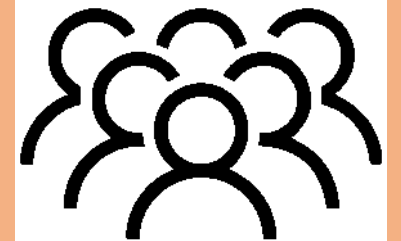
HØJ



MIDDEL



LAV



Bostatus



Indtægt?

Løn

Indtægt

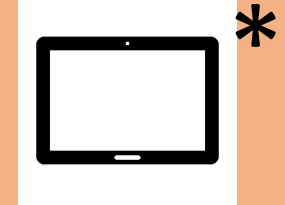
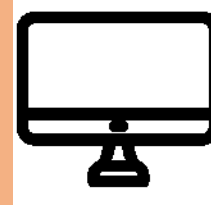
Offentlige
ydelser/ Ingen
indtægt

Baggrund

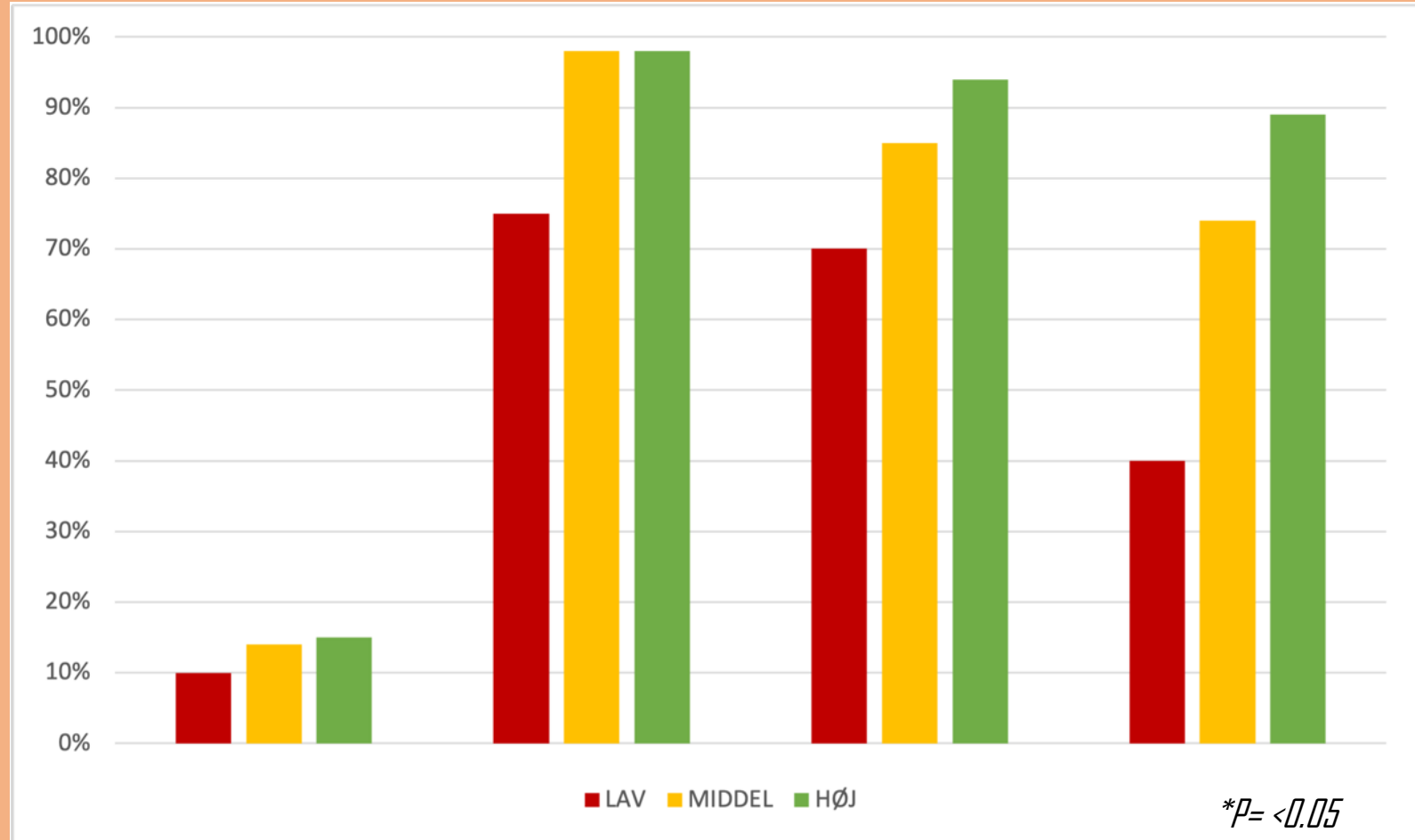
Metode

Resultater

Konklusion



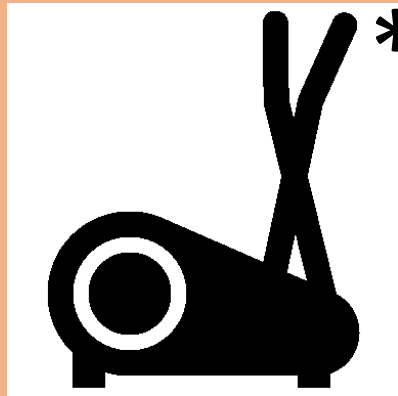
Teknologiske hjælpemidler?



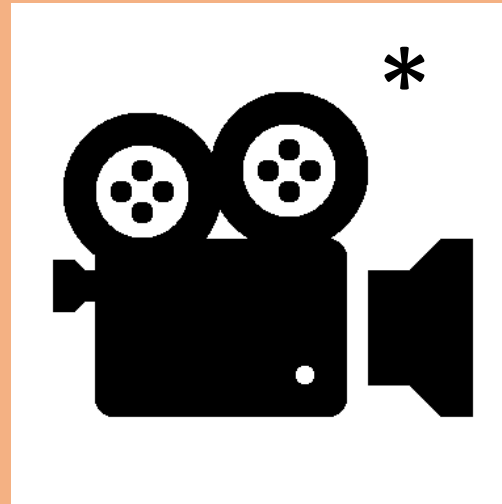
Hvad anvender du IT til?



Kommunikation



Træning



Underholdning



Informationssøgen

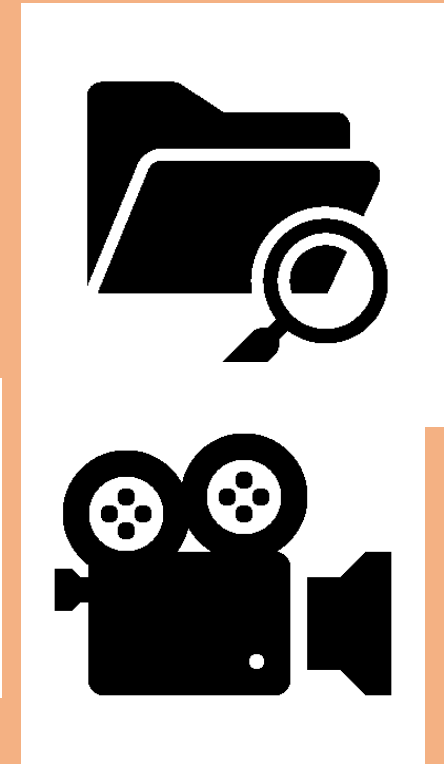
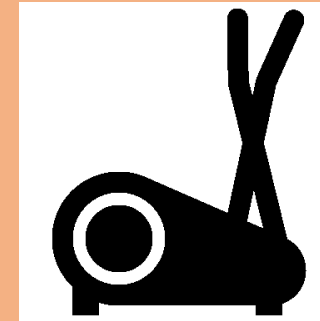
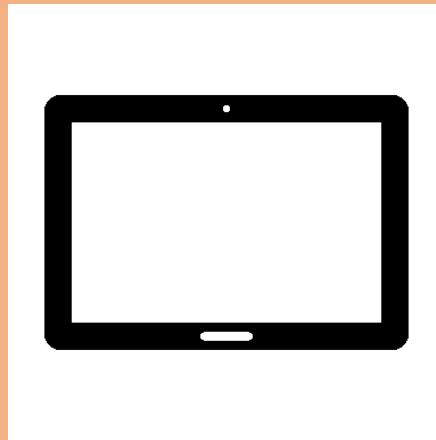


Arbejde

**P= <0.05*

Resultater - Opsummering

Resultater - Opsummering



Begrænsninger

- Tværsnitsstudie → øjebliksbillede
- Kun 92 patienter
- Har de forstået informationen? Patienten scorer lavere - men betyder det noget?



Konklusioner

Hvem er parate til at modtage digital sundhedsinformation?

- Langt de fleste af vores patienter

80%

- Lille gruppe af patienter med markant lavere svore

20%

Hvad kan forhindre parathed?



Hvad kan forhindre parathed?



”

..men da patienterne udgør en heterogen gruppe, kan dialog og samarbejde med patienterne være vigtigere end screening af disse få variabler alene

”



The end

Spørgsmål?