

# Current status for e-health in North Norway and the road ahead

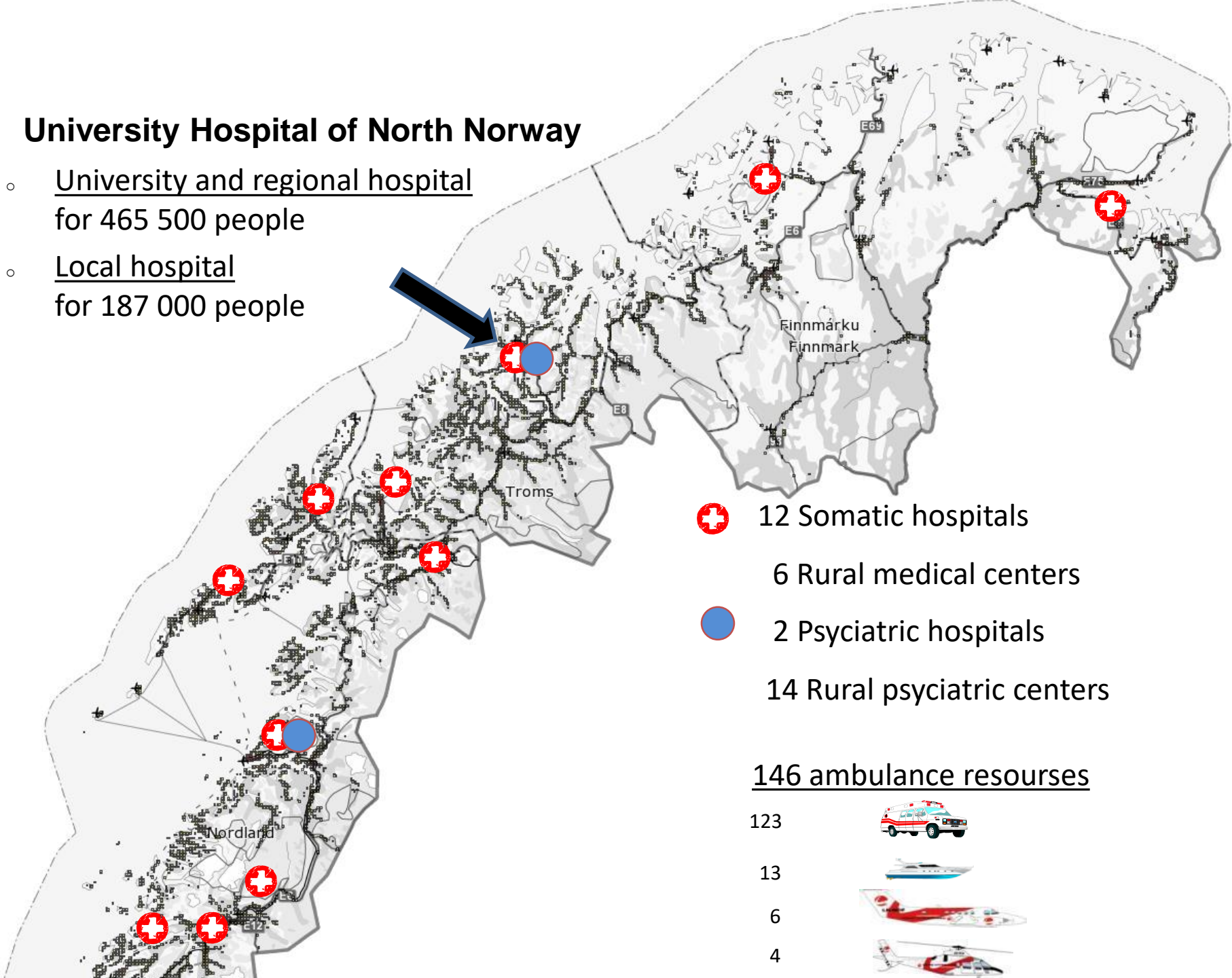
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Department manager

# University Hospital of North Norway

- University and regional hospital  
for 465 500 people
- Local hospital  
for 187 000 people



- ⊕ 12 Somatic hospitals
- 6 Rural medical centers
- 2 Psychiatric hospitals
- 14 Rural psychiatric centers

## 146 ambulance resources

123



13



6



4



# Status in North Norway

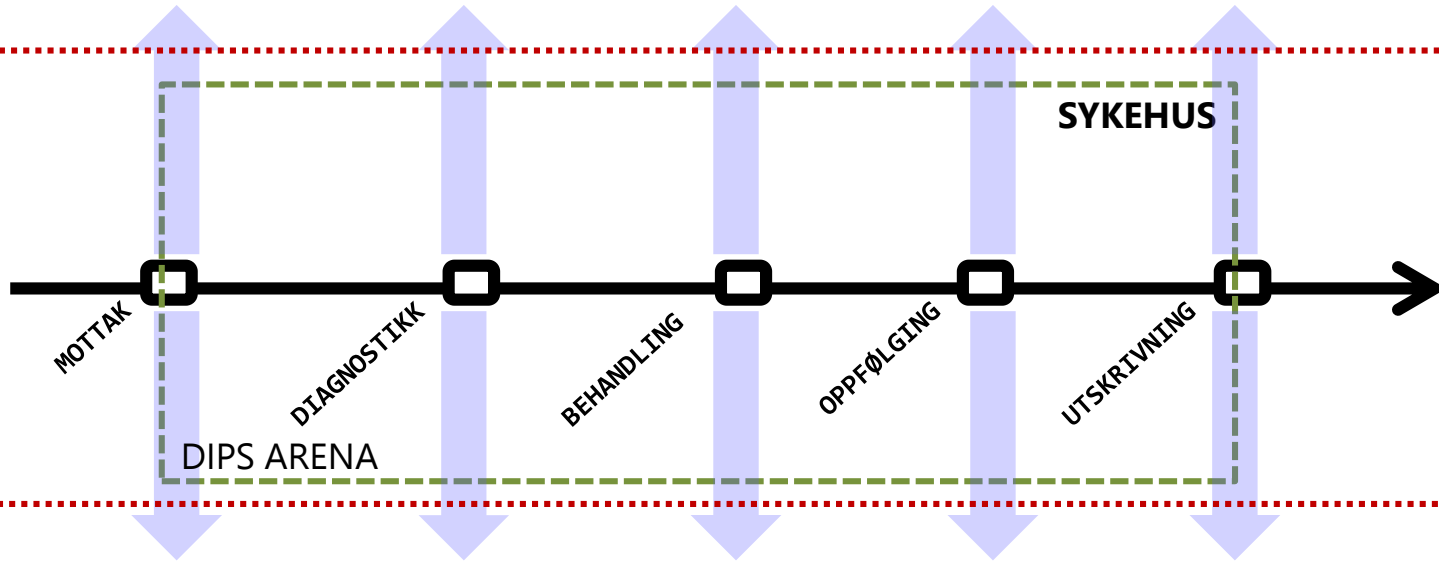
- Shared EMR in 1 DB
- Shared PACS, Pathology,
- Common Electronic requisition system
- Closed secure network
- Patient have electronic access to own EMR
- Online communication with Skype4Business



# Next generation EHR: DIPS ARENA

The image displays two overlapping screenshots of the DIPS ARENA EHR system. The background screenshot shows the patient profile for PASILUSK, Pjusk (Arm Sin Pasient), 46 years old, female. The interface includes a navigation menu on the left with options like 'Daglig koordinering', 'DIPS Classic', 'Inntaksplanlegging', '80 oppgaver 0 private', 'Pasientliste', and 'Sengepostliste'. The main content area shows a 'Beslutningsnotat operasjon/prosedyre' (Operasjonsforordning) with fields for 'Hastegrad', 'Hoveddiagnose', 'Indikasjon', 'Omsorgsnivå', and 'Operasjonstype'. The foreground screenshot shows the patient profile for KANE, Lars Morgan, 46 years old, male. This interface features a 'Historikk og planer' timeline, a 'Legeredler (4)' list, a central patient body diagram with vital signs (Heart rate: 178, Temp: 37, Blood pressure: 140/90), and a grid of document icons for 'Blod', 'Inntak', and 'Utskrift'. The bottom of the interface includes the text 'ENABLING EFFICIENT HEALTHCARE'.

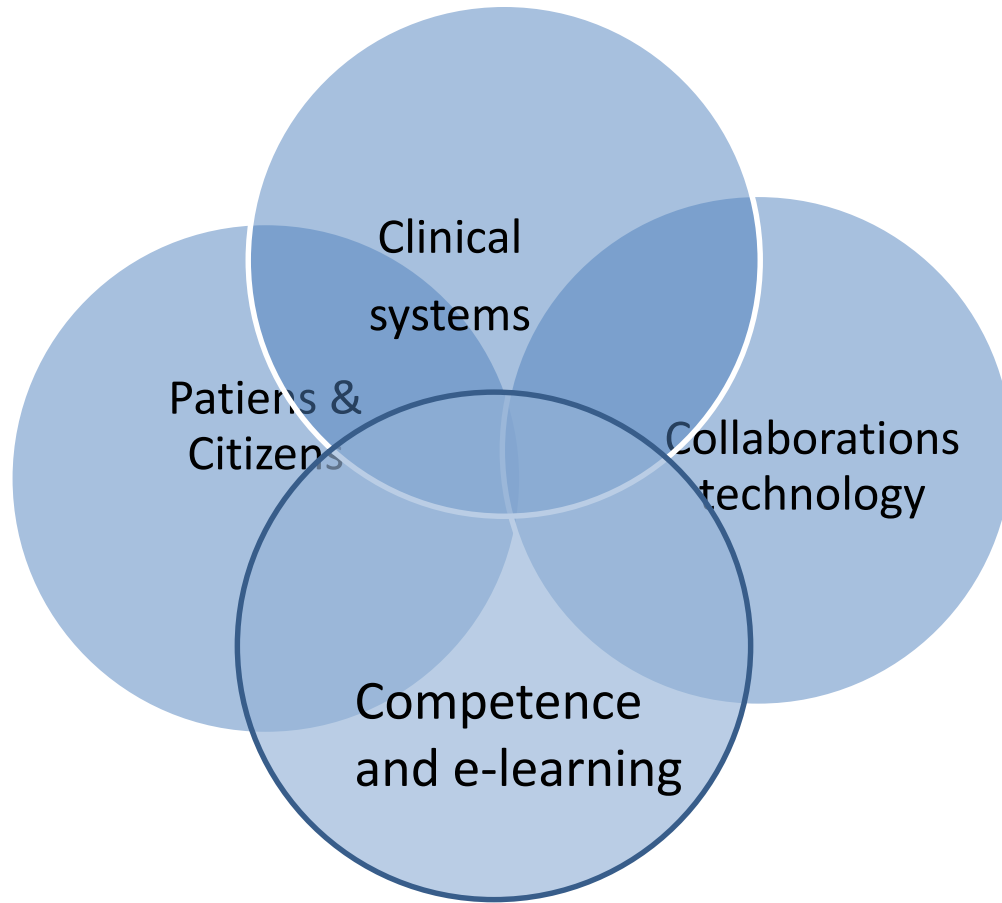
**PRIMÆRHELSETJENESTEN**



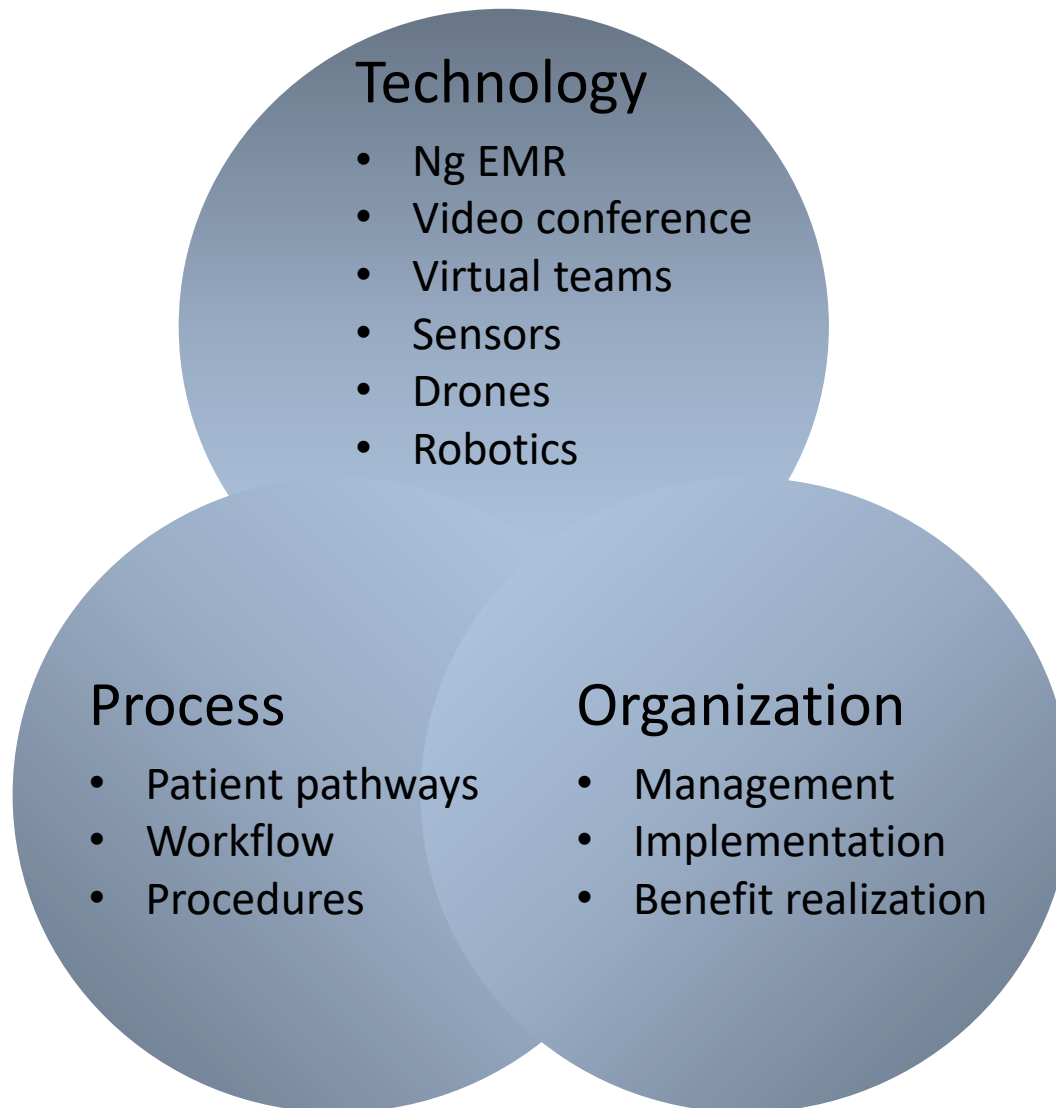
**PASIENTER**



# Portfolio





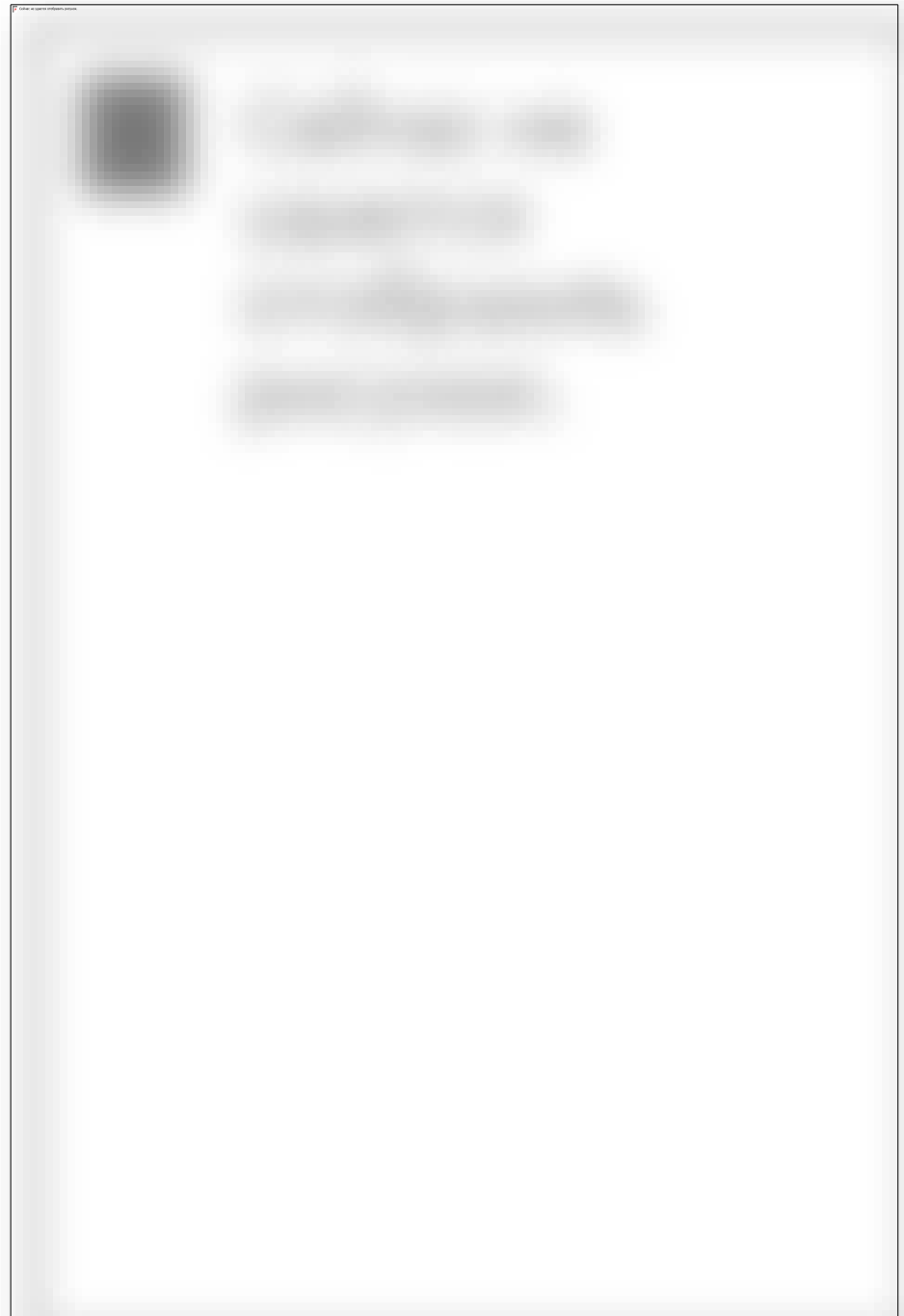


Success = Need x Solution x Team x Driving force x Ownership



# Apps

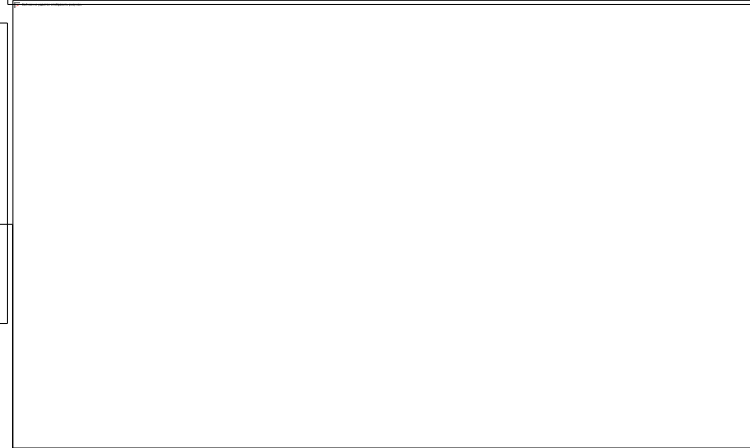
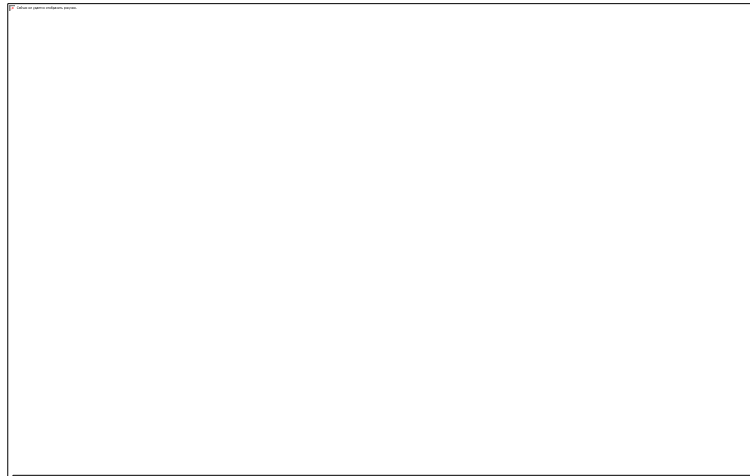
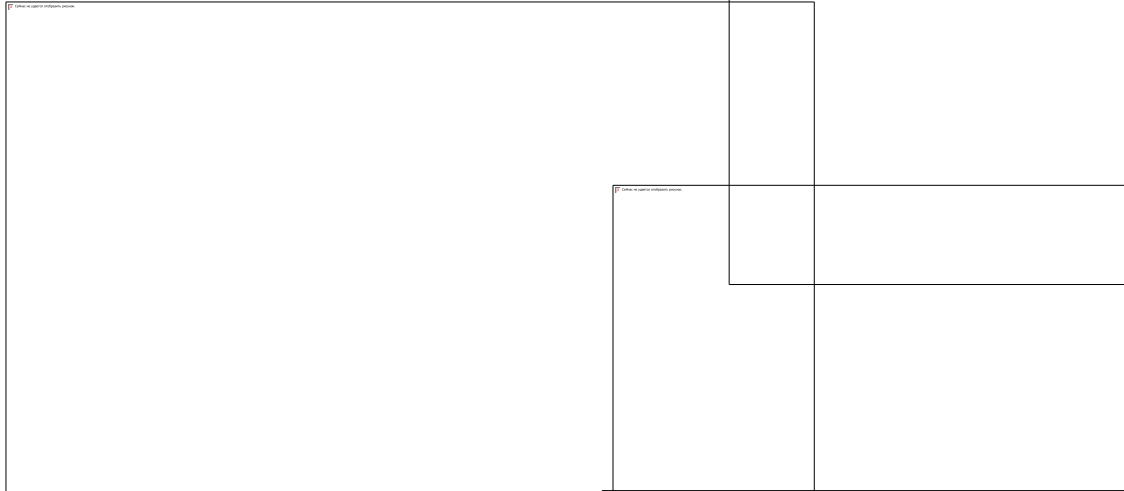
- Self help
  - Diabetes
  - Overweight
  - COPD
  - CHF
  - ...
- Tailored public health
  - Activity
  - Smoking
- E-learning



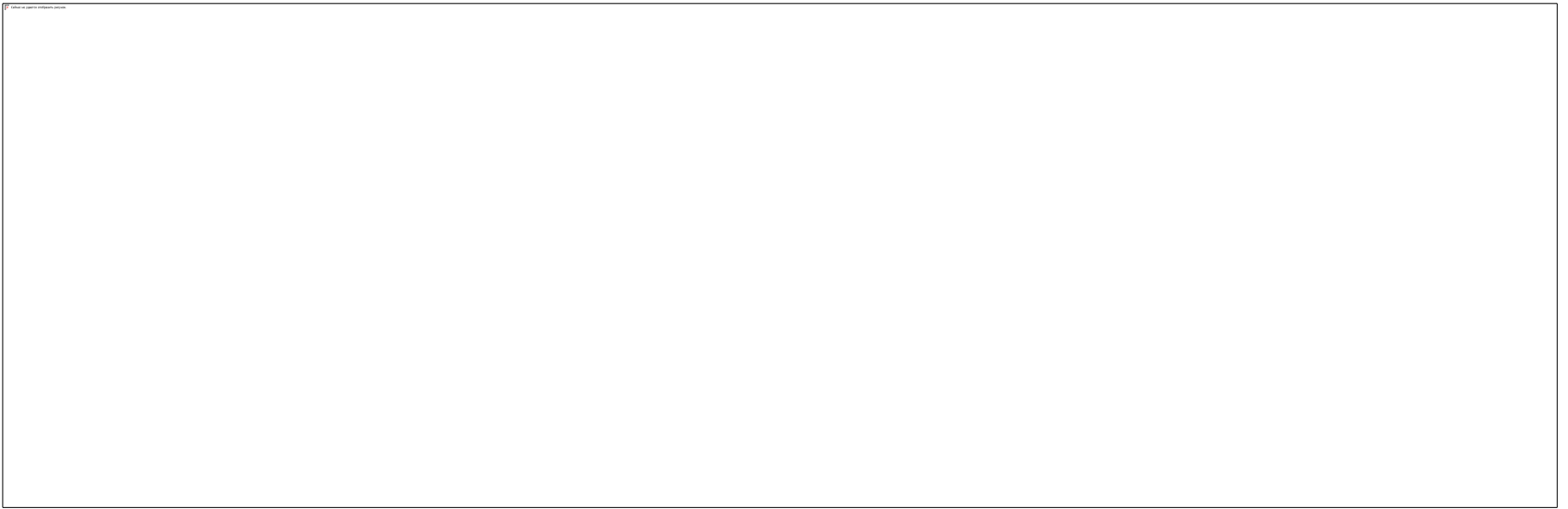


Source: Michael N. Liebman, PhD, Executive Director Windber Research Institute

# Individual and populationbased monitoring



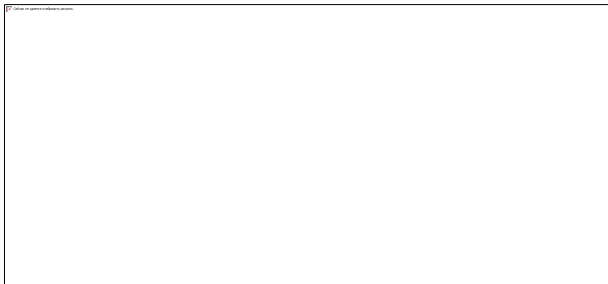
# Telementoring

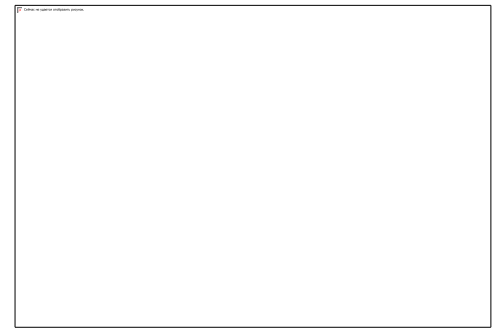
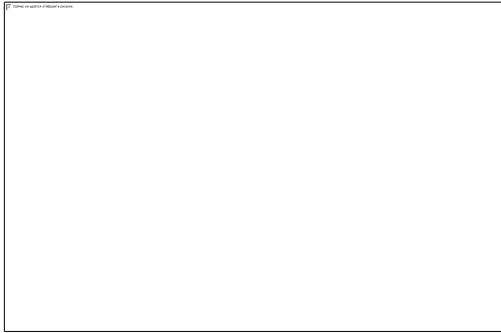


Realtime guidance under surgery

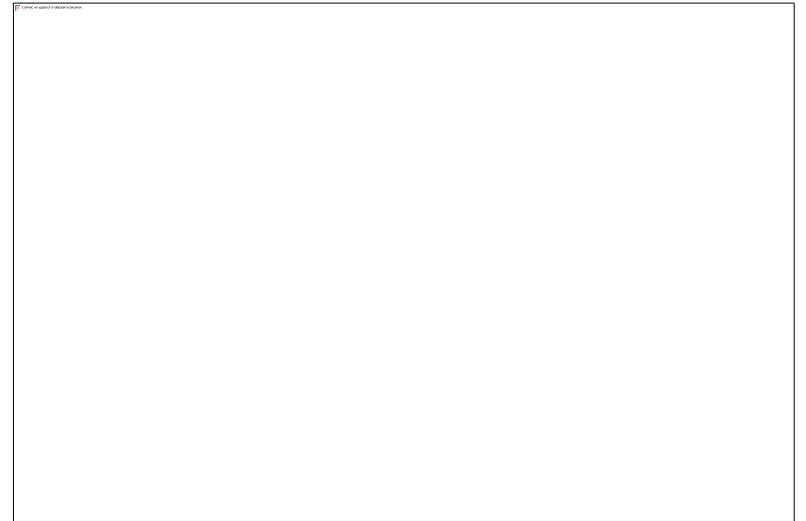
# Mercy Virtual Care

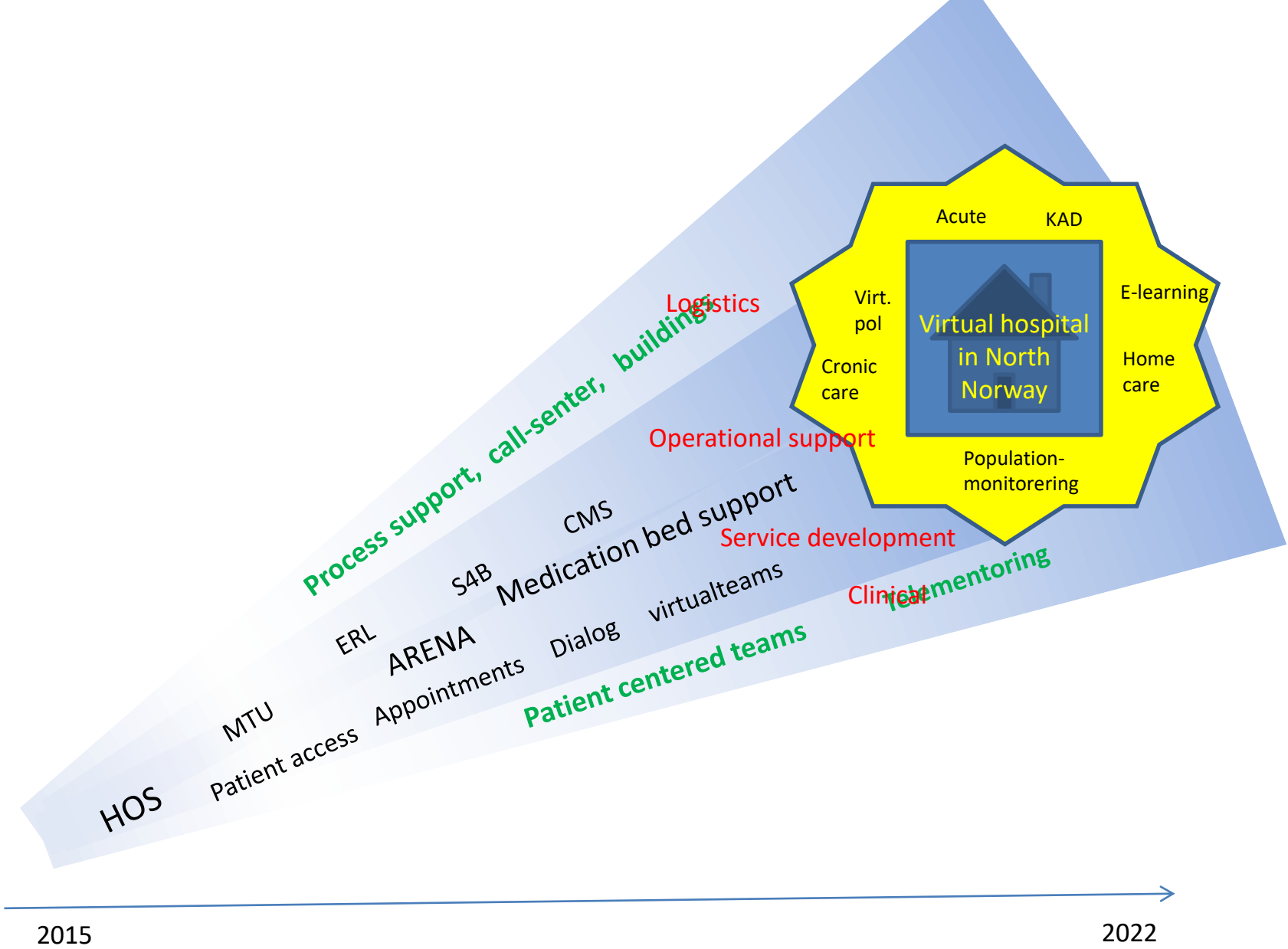
- 11.000 m<sup>2</sup>
- 300 employees
- 24/7
- 75 telemed. services





- SafeWatch ICU
- TeleStroke
- Pediatric Cardiology
- Teleradiologi
- Nurse on call
- Home Monitoring
- Telesepsis



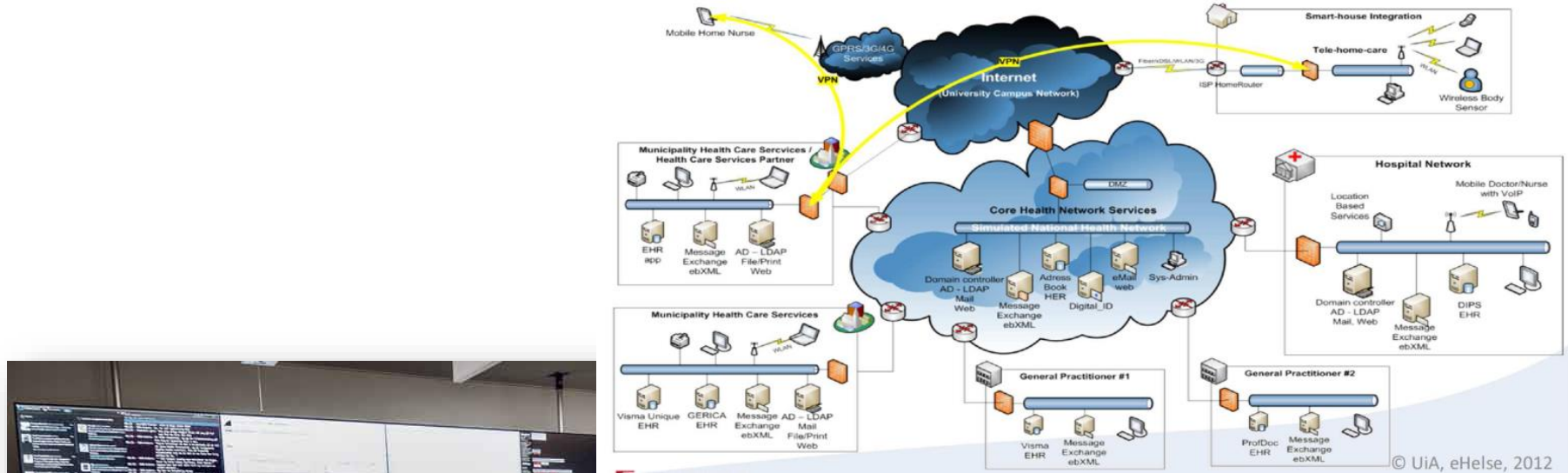


# Use of Drones





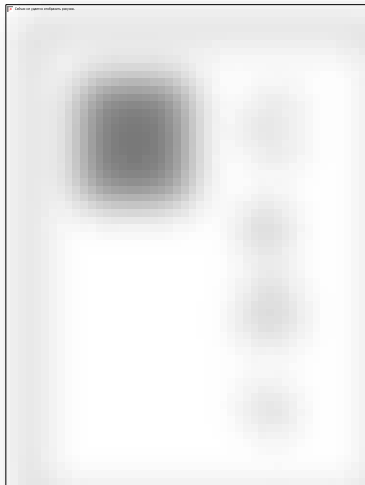
# Norwegian Health Net



**A secure health network for all healthcare providers**

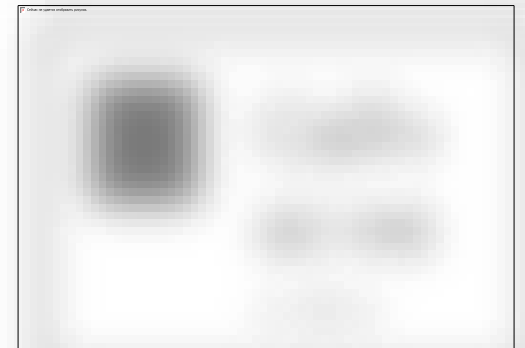
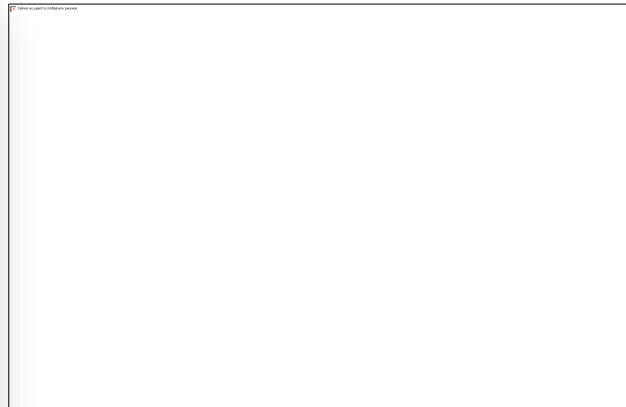
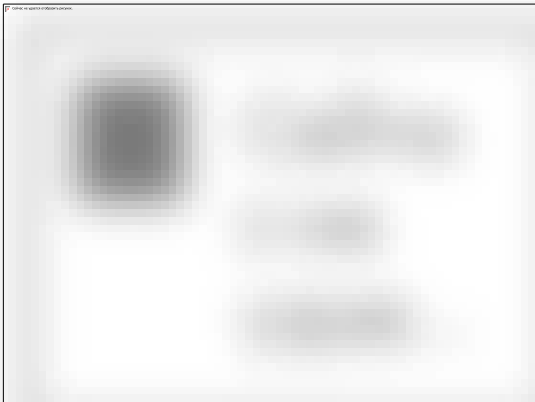
# Acute telemedicine

- Virtuet team
  - Transfer of reall time video and vital signs
- Prehospital trombolysis
  - Transfer og ECG from ambulance
- Stroke – time is brain!
  - Virtual CT centres
- Psykiatry



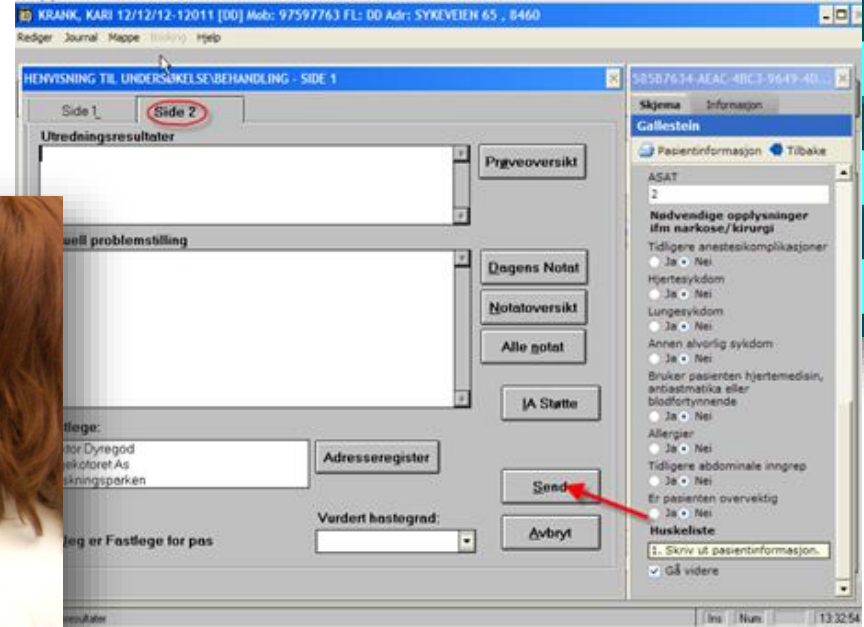
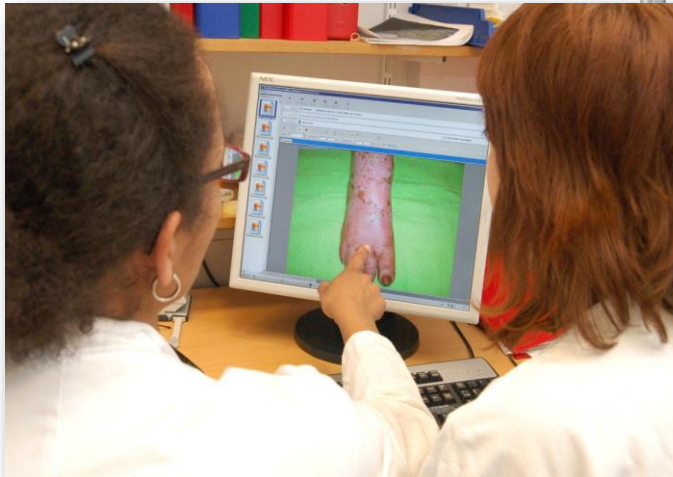
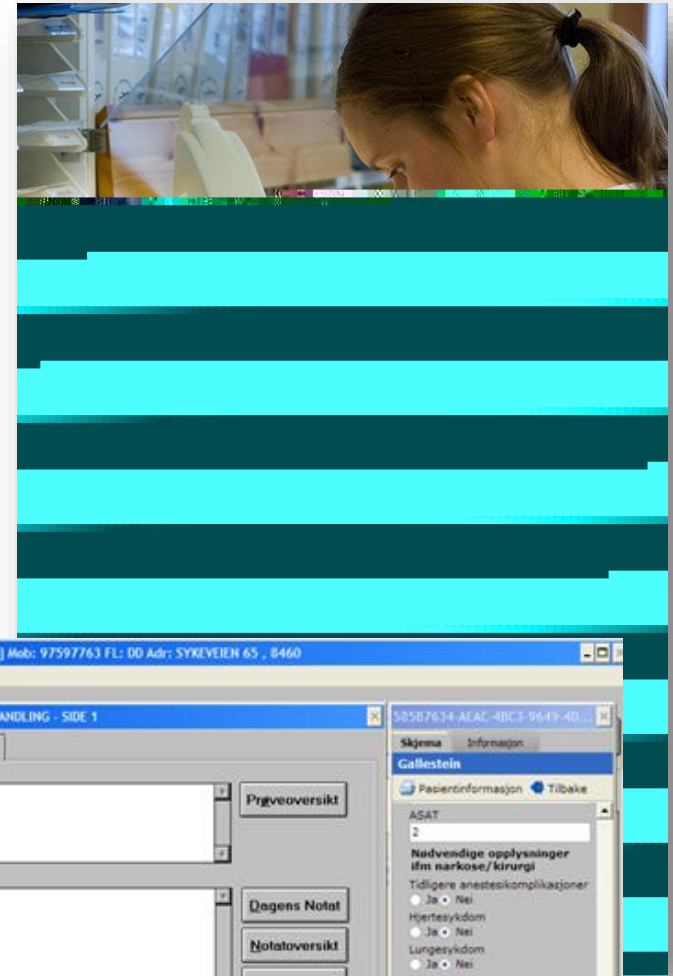
# Controls and follow-up

- Routine checkups
  - Stoma, orthopedics, eye
- Polyclinical consultations
  - Dermatology
  - Child psykiatry
  - Dialysis



# Collaboration

- Electronic messaging
  - Lab request and report
  - Referrals & discharge letters
  - E-Prescriptions
- Multimedia



# Virtual teams

- Professional network
  - Geriatrics
  - Cancer
  - E-Prescriptions
- Referral and discharge meetings



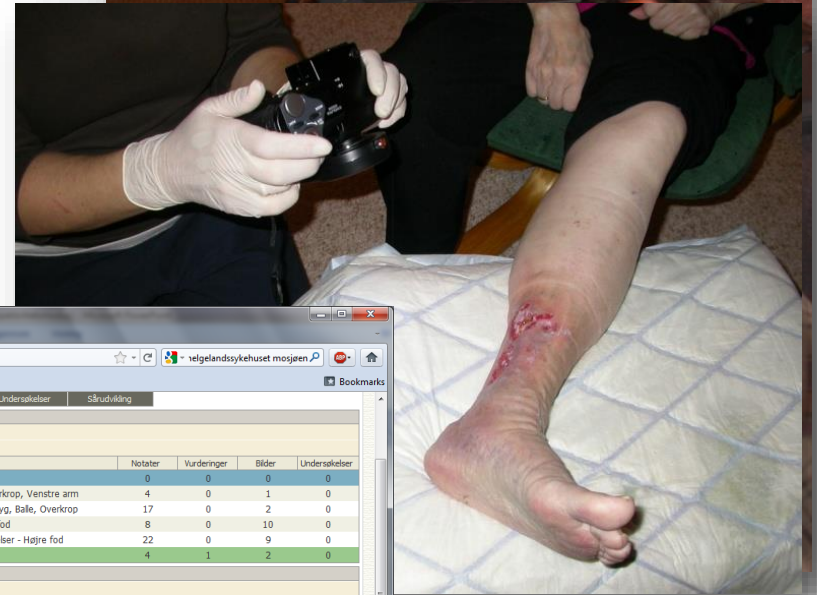
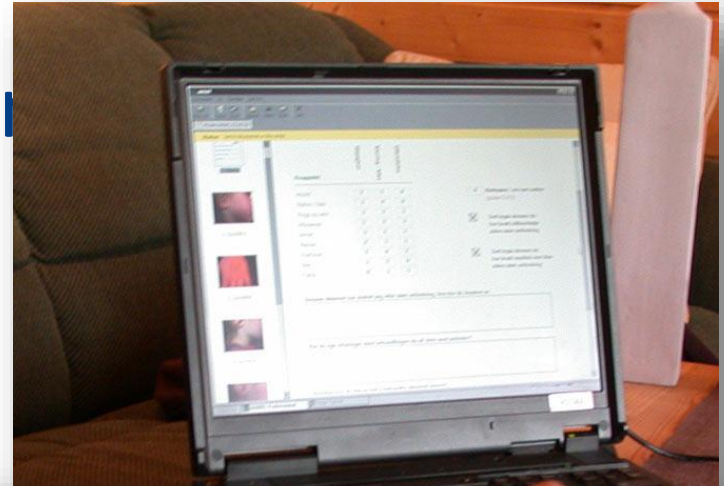
# Hospital at home

- Mobil radiology
- Home dialysis
- COPD
- CHF
- AAL



# Web based collaboration

- Wounds, ulcers
- Cancer
- Psychiatry



Firefox

Notater

https://www.pleie.net/ShowPatientEntries.asp?PatientID=2911

Mest besøkt Kom i gang Siste nyheter

Skr anamnese Notater 5 Bilder Vurderinger Undersøkelser Sårudvikling

Patient

Fødselsnummer 121212-37952

Navn **Kalle Krank**

Skr	Notater	Vurderinger	Bilder	Undersøkelser
Indbakke (Usortert indhold)	0	0	0	0
R 69 Ujente og uspesifiserte sykdomsårsaker - Ryg, Overkropp, Venstre arm	4	0	1	0
Skr R 69 Ujente og uspesifiserte sykdomsårsaker - Hoved, Ryg, Balle, Overkropp	17	0	2	0
R 69 Ujente og uspesifiserte sykdomsårsaker - Venstre fod	8	0	10	0
E 10.5 Diabetes mellitus type 1 med perifere sår,forstyrrelser - Højre fod	22	0	9	0
I 87.2 Venøs insuffisiens (kronisk/perifer) - Venstre ben	4	1	2	0

Vurdering

Vurdering  Patient  Diagnose  Notat

126.209	Ons 21. Sep 2011 15:23	Ada Steen	Svar	<input type="checkbox"/> Utdriv	Lest
Patient: Kalle Krank					
Diagnose: I 87.2 Venøs insuffisiens (kronisk/perifer) - Venstre ben					
Notat: Håper dette nå er leselig for deg. Fikk du det siste jeg skrev?					
126.195	Man 19. Sep 2011 15:32	Eva Skipenes	Svar	<input type="checkbox"/> Utdriv	Slet
Patient: Kalle Krank					
Diagnose: I 87.2 Venøs insuffisiens (kronisk/perifer) - Venstre ben					
Notat: Såret har forverret seg. Har du forslag til hva jeg kan gjøre?					
126.190	Man 19. Sep 2011 11:16	Ada Steen	Svar	<input type="checkbox"/> Utdriv	Lest
Patient: Kalle Krank					
Diagnose: I 87.2 Venøs insuffisiens (kronisk/perifer) - Venstre ben					
Notat: Såret ser sik ut i dag ved oppstart av veledningen					

