

Value Based Healthcare in Denmark

Atenció sanitària basada en valor (VBHC) Llums i ombres.

Aarhus University Hospital

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Agenda

- **Presentation of Aarhus University Hospital**
 - Facts about Aarhus University Hospital
- **The Danish Healthcare System**
- **How is Value Based Healthcare Integrated in Patient Care?**

The New Hospital City

AUH is committed to treatment, education and research with a whole-person approach

- Local hospital for the 350,000+ citizens of Aarhus. Specialised hospital for the region with 1.3M and in some cases national hospital for 5.7M citizens
- All medical specialties at the same location, including psychiatry
- AUH hosts the only national facility offering particle therapy (proton beam radiotherapy) in Denmark
- Largest workplace in Aarhus with > 10,000 full time staff
- Close collaboration with Aarhus University



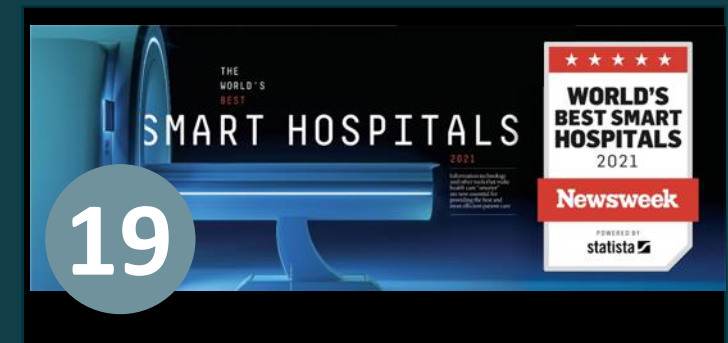
Aarhus University Hospital

Facts:

Number of beds	857
Admissions	83.000
Outpatient visits	890.000
Births	5.000
Full-time employees	10.600
Doctors	1.700
Nurses	3.750
Budget	1 billion euro
Average length of stay	3.6 days
Size sq m	460,000m ²



Aarhus University Hospital Rankings





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The Danish Healthcare System

Division of Labour in the Healthcare System

National Level



Ministry of Health:

- Legislation
- National health policies
- National targets
- Overall economic framework
- Structural planning
- Planning of medical specialties across regions and hospitals
- Clinical guidelines
- Auditing (patient safety etc.)

Regional Level



5 regions:

- Hospitals
- Psychiatric care
- General practitioners (family doctors)
- Adult dental care
- Other private practitioners

Local Level



98 municipalities:

- Preventive care and health promotion
- Elder care
- Non-hospital rehabilitation
- Treatment of alcohol and drug abuse
- Child nursing

Values and Principles

– get to know the Danish healthcare system

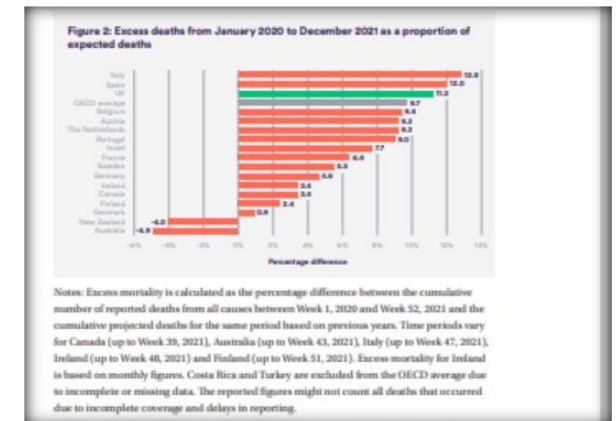
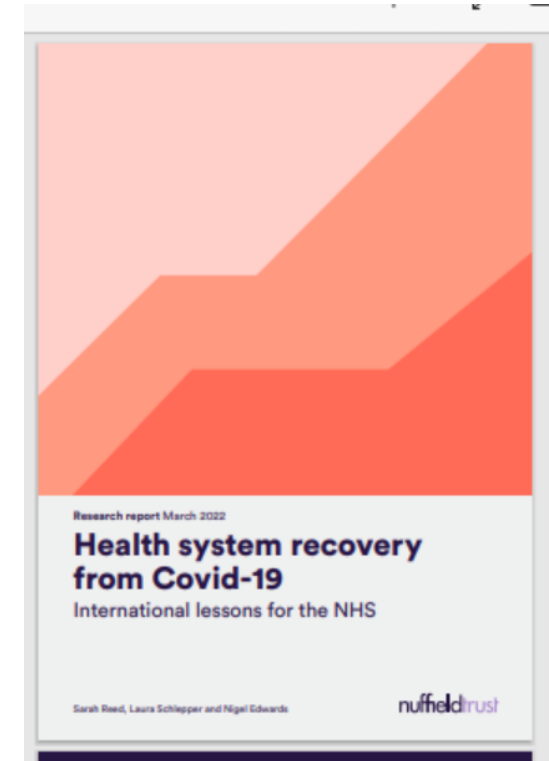
We are on a mission based on:

- Universal coverage
- Free and equal access
- Financed by general national taxes – run by 5 regions
- A high degree of decentralisation – but specialised treatment granted by National Board of Health
- Only few small private hospitals, primarily radiology and orthopedics

Covid-19

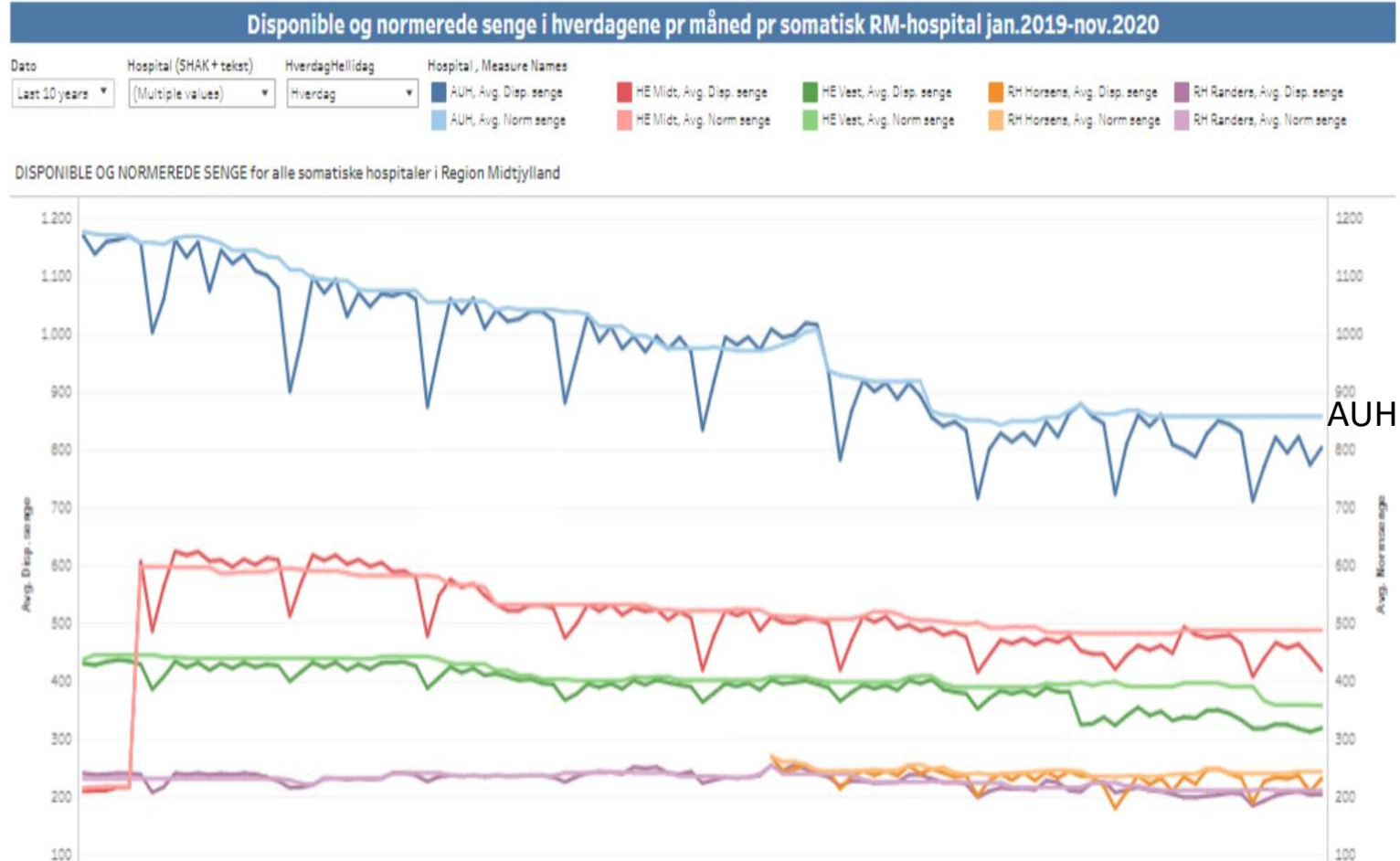
- Early government decision: lockdown **11.3.2020**
- High degree of testing: 126M = **21 test per citizen**
- Vaccination completed: **82,3%**
- Deaths: **0.2% = 6,000 citizens**
- Confirmed cases: **2.9M out of 5,8M = 50%**

We were at high risk due to low number of beds and short length of stay – but were saved by relatively few cases



[Health system recovery from Covid-19 \(nuffieldtrust.org.uk\)](https://nuffieldtrust.org.uk)

Number of beds in Denmark and at our hospital - last 20 and 10 years



Nationally:

Since 2000, a **44%** reduction in number of beds

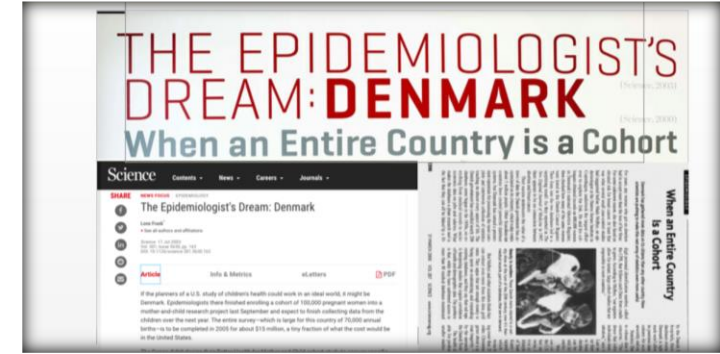
Aarhus University Hospital:

Since 2012, a reduction from 1.176 til 857 (319) beds in the last 10 years = **27%**

The Digital Transformation of Healthcare

Communication, coordination and coherent treatment

Common IT standards has enabled the digitisation of communication between healthcare sectors and partners




Type	Digital, pct
GPs keep electronic health records (EHRs)	100
Exchange of the records between GPs	98
Laboratory test results from the hospitals to GP	100
Prescriptions to the pharmacies	99
Coverage of EHR at hospitals (2-4 systems)	100
Referrals to hospitals	97
Referrals to medical specialists and psychologists	100

Electronic health records in hospitals

100 %

From 4 to 2 systems

National Data Agency



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Søg på sundhedsdatastyrelsen.dk 🔍

BORGER

STRATEGIER OG PROJEKTER

RAMMER OG RETNINGSLINJER

REGISTRE OG SERVICES

AFREGNING OG FINANSIERING

FIND TAL OG ANALYSER

🏠 > English

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English

Health data and registers ▾

Digital health solutions ▾

Cyber and information security ▾


Health finance

About us ▾

The Danish Health Data Authority


We work to ensure better health through the use of data and digital coherence in the healthcare sector.

> Health data and registers




Danish health data is collected, stored and managed in national health registers at The Danish Health Data Authority.

> Digital health solutions



The Danish Health Data Authority develops digital solutions for the Danish healthcare sector.

> Cyber security



The Danish Health Data Authority coordinates cyber and information security in the Danish healthcare sector.

Clinical Databases – Made by Clinicians

- 86 National Clinical Registries
- Oldest: 1978. Youngest: to be established in 2022
- **Examples:**
 - Danish Ocular Oncology Database – 75 patients a year
 - The Danish Database for Acute and Emergency Hospital Contacts - 1.8M hospital contacts
 - The Danish Adult Diabetes Registry - GP and hospital care
 - Danish Cardiac Rehabilitation Database - primary and secondary care
 - Some with focus on implantation safety (The Danish Pacemaker and ICD Register) - others on a procedure (Danish Anesthesia Database) – most disease specific (stroke, depression, lung cancer)



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Management of Healthcare in Denmark

- - 2004
 - 14 counties running hospitals, with taxation ability
 - 5 regions from 2007 without taxation ability

- 2004 – 2018
 - National model DRG (Diagnose Related Group) and normally a yearly demand for a 2% partly unfinanced increase in output

- 2018
 - New model based on national trials – value based goals for healthcare with 8 target areas

Goals of The Danish Healthcare System

NATIONAL GOALS: BETTER QUALITY, CONTINUITY OF CARE, AND GEOGRAPHICAL EQUALITY IN THE HEALTHCARE SYSTEM



BETTER
CONTINUITY OF
PATIENT CARE
IN CLINICAL
PATHWAYS



STRONGER
MEASURES FOR
CHRONICALLY
ILL AND ELDERLY
PATIENTS



HIGHER
SURVIVAL RATE
AND IMPROVED
PATIENT
SAFETY



HIGH QUALITY
TREATMENT



QUICK
ASSESSMENT
AND
TREATMENT



GREATER
PATIENT
INVOLVEMENT



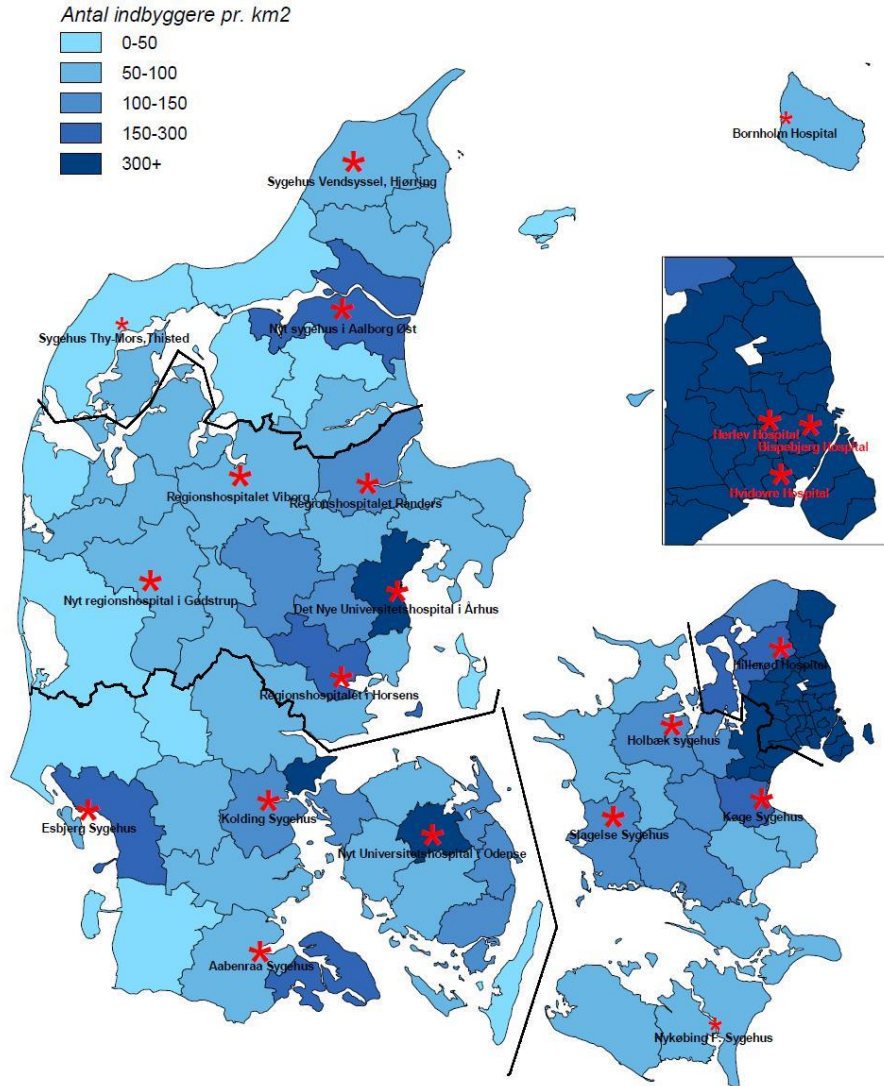
ADDITIONAL
HEALTHY LIFE
YEARS



MORE
EFFICIENT
HEALTHCARE
SYSTEM



2022: New Health Clusters to Ensure Better Coherence



3500
GPs

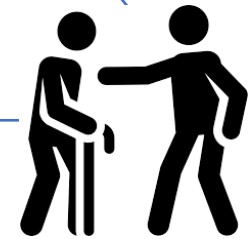


Aim:

Better coherence
Improved continuity
of care



Emergency Care



21 Acute Hospitals

98 Municipalities

Value Based Health Care:

- Ambition
- PREM at AUH
- Benefits and Challenges (Luces y Sombras)
- Recommendations
- Conclusion from Denmark on VBHC



Our Ambition: 24/7 Counselling and Availability



- Our ambition is to be the most demanded provider of evidence-based healthcare information and treatment
 - Health professional and independent counselling 24/7
 - Follow-up and at-home treatment
 - Health data storage provider

Using Data to Improve Health

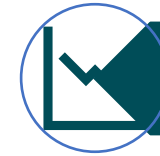


New Governance from 2019

- Fixed budgets replace activity based funding
- A minor proportion of funds app. 1 pct. are depending on new criteria
- The news criterias are supporting the nescesarry transition of the healthcare sector



Reduction in hospital courses



Reduction in hospital visits for patients with chronic diseases



Reduction in readmissions (within 30 days after discharge)



Increase in virtual hospital contacts

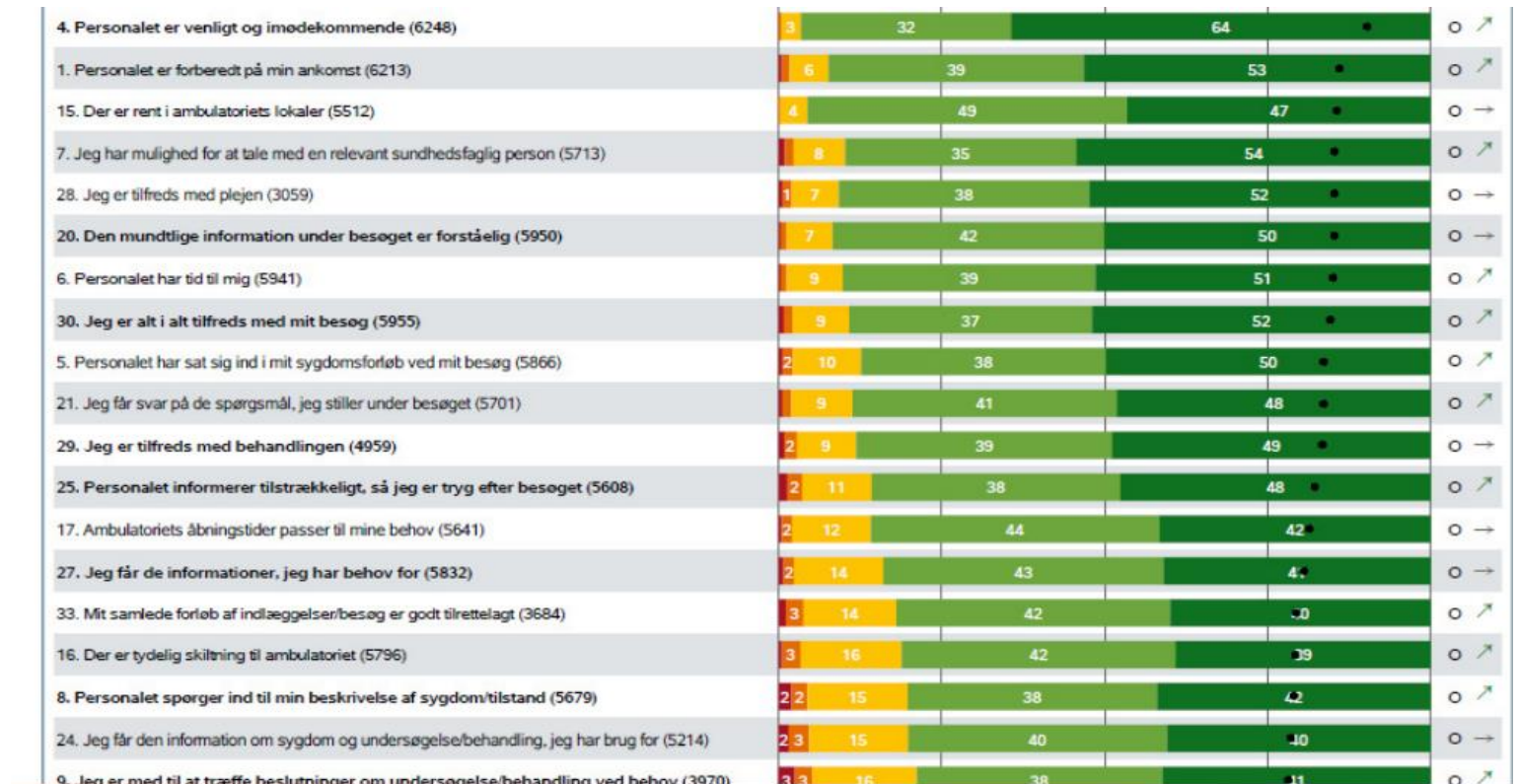
Patient Reported Experience Measures (PREM)

Every second year, nationally, public result, out- and inpatients, all hospitals and departments.

Hospitals leadership discuss results for each department, regional dialogue as well.

Acute patients answered surveys
1.272, response rate 54%

Outpatient answered surveys
6.427, response rate 60%



Value Based Healthcare: Benefits (Iuces)

- New framework for the measurement of value
- Elaborate on quality and the strong culture for improvements
- Actively apply quality data
- Apply PRO – and invite patient involve into the governance
- Build upon the strong culture for comparison and improvements
- It makes sense for clinicians – big engagement
- Supports the cross sectorial work
- Possibility to reduce “waste”
- A new forum for leadership

Value Based Healthcare: Challenges (somboras)

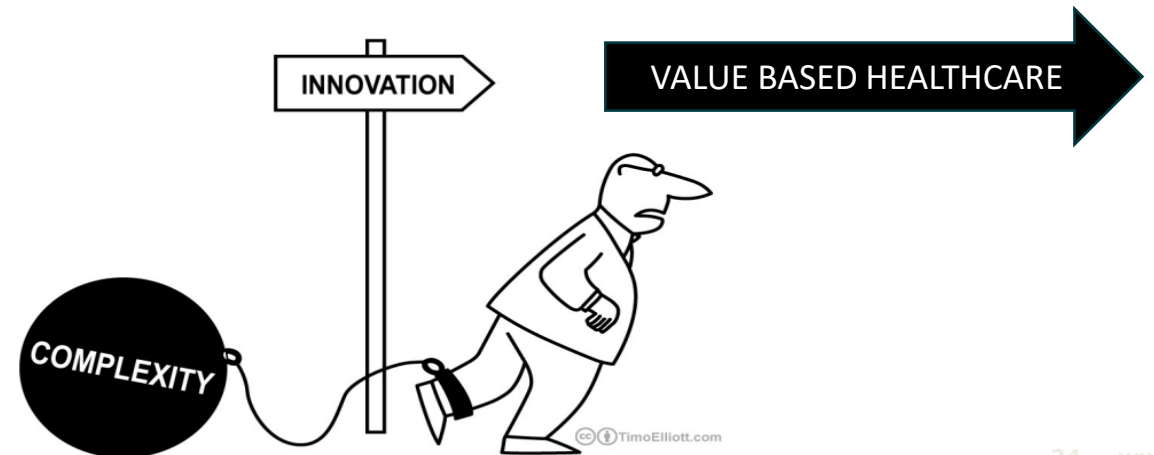
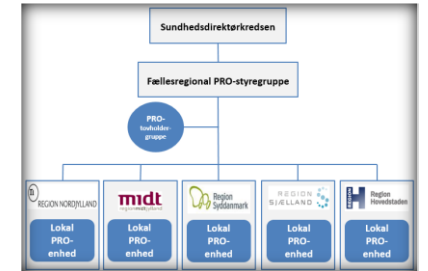
- Few goals and fragmented prioritisation
- Focus on the discussion on methodology
- Danger to create new bureaucratic system
- Effect goals versus possibility to influence the wards
- Barriers in legislation with respect to data sharing
- Quality governance versus financial governance?
- Demonstrate effect within short time frame

Value Based Health Care:

How is VBHC measured and implemented in Denmark?



$$\text{VALUE} = \frac{\text{Outcomes}}{\text{Cost}}$$



**Thank you.
Time for dialogue**

