## Digital Health Strategy 2018-2022

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DANISH MINISTRY OF HEALTH
FEBRUARY 2019



### AGENDA

- 1. A brief introduction to the Danish health care system
- 2. Background for the digital health strategy
- 3. Focus areas of the strategy and initiatives

#### THE DANISH HEALTH CARE SYSTEM

### KEY PRINCIPLES

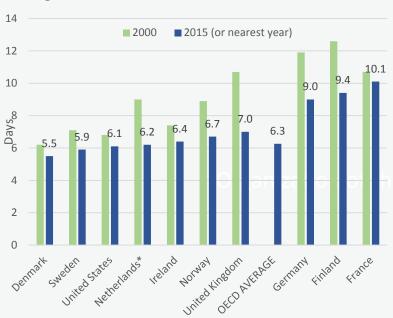
Universal coverage

Free & equal access

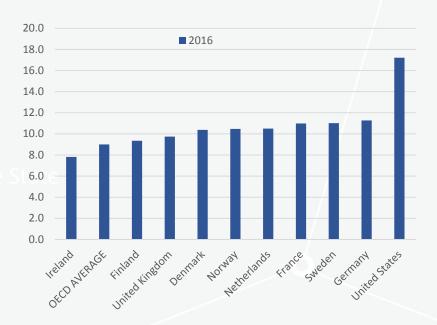
Financed by general taxes

A high degree of decentralization

### The average length of stay in hospitals is below OECD average...



### ...and the share of GDP spent on health care is comparable to similar countries



#### THE DANISH HEALTH CARE SYSTEM

### BASIC STRUCTURE

#### National Level



Determining national health policies
Preparing legislation
Setting overall economic framework
Developing guidelines
Performing control
General planning within the health system

### 5 regions

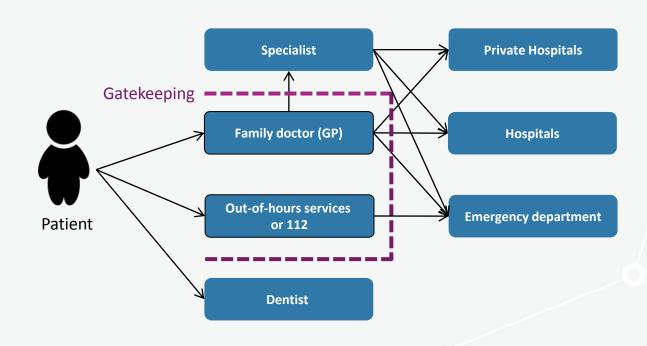


Hospital and psychiatric care General Practitioners (family doctors) Private practicing specialist doctors Adults dental services

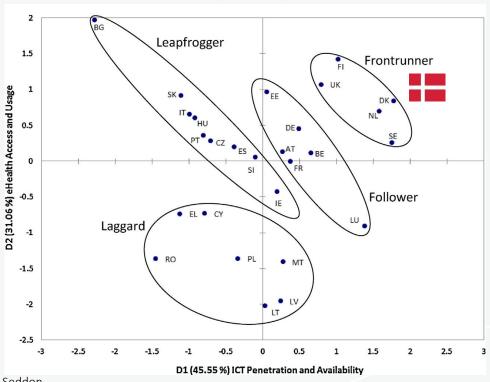
### 98 Municipalities



Elderly care
Preventive care and health
promotion
Rehabilitation outside hospital
Treatment of alcohol and drug
abuse
Child nursing



#### DENMARK AS A FRONTRUNNER IN E-HEALTH



Kilde: Currie, Wendy L., and Jonathan JM Seddon.

<sup>&</sup>quot;A cross-national analysis of eHealth in the European Union: Some policy and research directions.

<sup>&</sup>quot;Information & Management 51.6 (2014): 783-797

### DANISH HEALTH CARE IS EXTENDEDLY DIGITAL

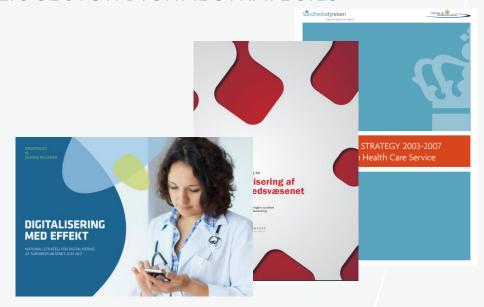
- Electronic health records at hospitals, GP's and municipalities (elderly care, rehabilitation)
- All referrals and laboratory results are digital
- The Shared Medication Record (SMR) between hospitals, GP's, municipalities and pharmacies
- Patients access health data at sundhed.dk



Sundhed.dk is the official portal for the public Danish Healthcare Services and enables citizens and healthcare professionals to find information and communicate. The portal facilitates patient-centered digital services that provide access to and information about the Danish healthcare services.

### A TRADITION OF COMMON PUBLIC SECTOR DIGITAL STRATEGIES











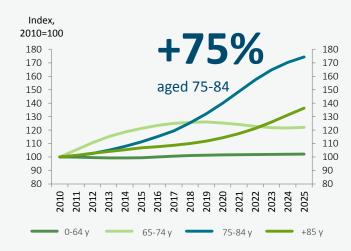


### A CHANGE IN OUR DEMOGRAPHY

#### The population is getting older

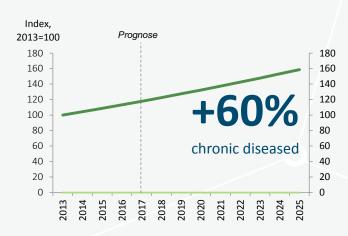
In 2025 the number of citizens aged 0-64 will be the same as in 2010.

- but the number om citizens aged 75-84 will have increased by 75 percent.
- → Less tax payers and fewer health care workers



### - and more people will suffer from chronic diseases

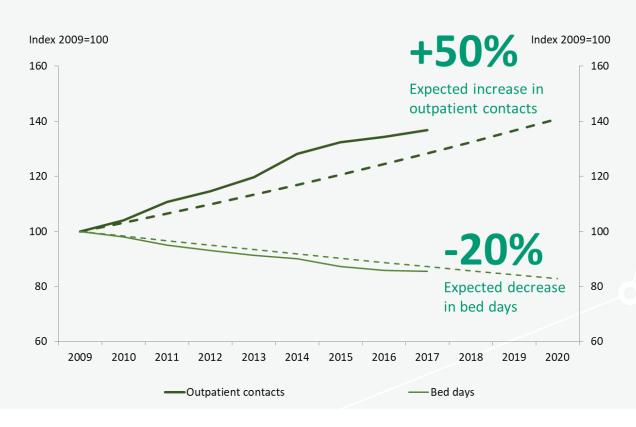
From 2013 to 2025 the number of citizens living with the most common chronic diseases is expected to increase by 60 pct.



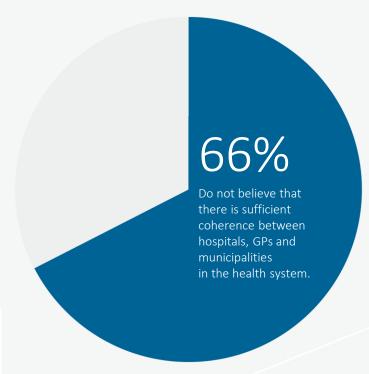
### A CHANGE IN OUR STRUCTURING OF HOSPITALS



### A CHANGE IN HOSPITALISATION AND TECHNOLOGY



# FOR DANES, COHERENCY IN HEALTH CARE IS THE PRIMARY CONCERN



Source: In a 2015 survey conducted by Trygfonden and Mandag Morgen among Danish respondents, almost two-thirds responded that there is inadequate coherence between the various segments of the health system. In the same survey, respondents cite better coherence as the most important key feature of an improved health system. Only 25% expect cooperation between the hospital and the municipal health service to function satisfactorily to a great or very great degree.



### A COMMON SECTOR STRATEGY WITH FIVE FOCUS AREAS:











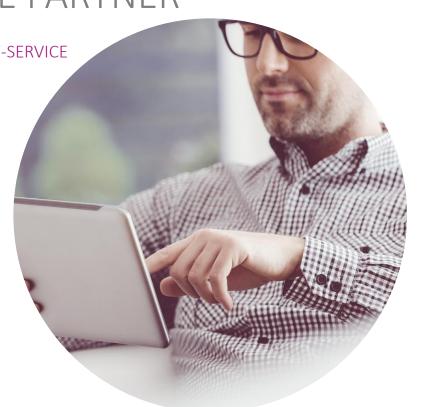


### 1. THE PATIENT AS AN ACTIVE PARTNER

PROACTIVE INVOLVEMENT IN EVERY DAY LIFE – AND MORE SELF-SERVICE



Example: Patient Reported Outcome data (PRO)

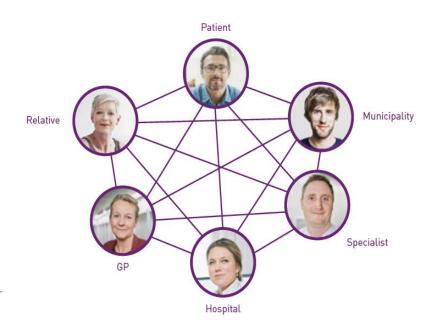


### 2. KNOWLEDGE ON TIME

THE RIGHT DATA ABOUT THE PATIENT SHOULD BE AVAILABLE WHENEVER NEEDED

Patients interact with healthcare professionals who have prior insight into the patient's pathway

Healthcare professionals will spend less time obtaining relevant information about the patients to whom they are providing treatment and care



#### **KNOWLEDGE ON TIME**

### Coordinated care with integrated it-systems



### Today: The shared medication record

One national database containing updated information about prescription medicine for all patients in Denmark

Access for all doctors, nurses, dentists, pharmacists at hospitals from local it-system

Viewing access for citizens (own data) on sundhed.dk and the app "Medicinkortet"

### In 2020: One complete patient overview

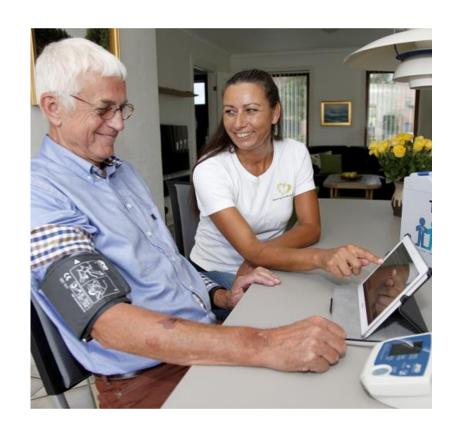
Schedules and appointments, master data (e.g. contact information for relatives, language and housing conditions) an care plans ... and more to come

### 3. PREVENTION

### EARLIER AND MORE TARGETED TREATMENT

Local and less intrusive management of illness by the use of digital solutions for home monitoring

Example: national dissemination of telemedicine for COPD-patients



Government under pressure after NHS crippled in global cyber attack as weekend of chaos looms





### 4. TRUSTWORTHY AND SECURE DATA

THE RIGHT DATA, AT THE RIGHT TIME – AND IN THE RIGHT HANDS

Patients must have confidence regarding the use of their health data

Cooperation on cyber- and information security and a risk-based approach for the security level of digital solutions

### **Mail**Online



All of the UK's 200 NHS trusts have FAILED cyber security checks in the wake of North Korean-led WannaCry attack



# 5. PROGRESS AND SHARED BUILDING BLOCKS

DEVELOPING AN ECOSYSTEM OF SHARED SERVICES AND COMPONENTS

One national infrastructure between hospitals, GP's and municipalities – not one it-system (EHR)

A challenge to get significant progress in development across providers and gets past the "not invented here" logic



An ecosystem refers to a complex system where loosely connected components – common building blocks – work together and support each other.

## THE FIVE FOCUS AREAS – OVERVIEW OF 27 EFFORTS

### 0

#### FOCUS AREA 1

#### The patient as an active partner

- 1.1 The doctor in your pocket A GP app for patients
- 1.2 Ask the patient –
  Patient Reported Outcome (PROs)
- 1.3 Digitally supported rehabilitation
- 1.4\* A complete presentation of the patient's health data
- 1.5\* A guide to health apps
- 1.6 Decision support tools for cancer patients
- 1.7\* Digital pregnancy tool

#### FOCUS AREA 2



### Knowledge on time

- 2.1 Better, faster and more secure digital communication across the sector
- 2.2 A complete overview of a patient's care and treatment
- 2.3 Digital workflows at GPs and more targeted communication with other parts of the health care sector
- 2.4 Safer medication at residential care centres and substance abuse rehab centres
- 2.5 Better overview by having structured care records in the municipalities

#### FOCUS AREA 3



#### Prevention

- 3.1 Digitally supported early detection in municipal elderly care
- 3.2\* Data-driven technologies for automation, prediction and decision support
- Digital decision support for prescribing medication
- Continued roll-out of telemedical home monitoring
- 3.5 Digitally supported care plans for patients with chronic illness
- 3.6\* Better follow-up on vaccination and cancer screening programmes

#### FOCUS AREA 4



#### Trustworthy and secure data

- 4.1 Patient access to log information from hospitals
- 4.2 Improved digital security joint initiatives aimed at better cyber and data security across the health care sector
- 4.3\* Better patient control of information shared across the health care sector
- 4.4 IT security at the General Practitioner
- 4.5\* Modernisation of IT security standards in the health system

#### FOCUS AREA 5



### Progress and common building

- 5.1 Digital welfare solutions distributed to patients
- 5.2 Long-term vision for the common IT infrastructure
- 5.3 Better overview of organisational units in the health care sector
- 5.4 Establishment of a national substitute Civil Registration System (e-CPR) solution

SPECIALISED KNOWLEDGE AND A STRONGER PRIMARY SECTOR

# Hospitals as fortresses or lighthouses?

