Diagnostic Centres in Denmark

An overview

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RESEARCH CENTRE FOR CANCER DIAGNOSIS IN PRIMARY CARE

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Agenda

- Danish Cancer Patient Pathways (CPPs)
  - Basics
- Diagnostic centres in Denmark
  - Where
  - Organisational variation
- The Cancer Patient Pathway at Diagnostic Centres (NSSC-CPP)
  - Basics
  - Patients
  - Proces time
  - ”End products” - examples

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A differentiated approach to primary cancer diagnostics

FULL PAPER

BJC

British Journal of Cancer (2015), 1–5 | doi: 10.1038/bjc.2015.44

Keywords: Denmark; diagnosis; health services organisation; access; investigation

A differentiated approach to referrals from general practice to support early cancer diagnosis – the Danish three-legged strategy

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Abstract: When aiming to provide more expedited cancer diagnosis and treatment of cancer at an earlier stage, it is important to take into account the symptom epidemiology throughout the pathway, from first bodily sensation until the start of cancer treatment. This has implications for how primary-care providers interpret the presentation and decisions around patient management and investigation. Symptom epidemiology has consequences for how the health-care system might best be organised. This paper argues for and describes the organisation of the Danish three-legged strategy in diagnosing cancer, which includes urgent referral pathways for symptoms suspicious of a specific cancer, urgent referral to diagnostic centres when we need quick and profound evaluation of patients with nonspecific, serious symptoms and finally easy and fast access to 'No-Yes-Clinics' for cancer investigations for those patients with common symptoms in whom the diagnosis of cancer should not be missed. The organisation of the health-care system must reflect the reality of symptoms presented in primary care. The organisational change is evaluated and monitored with a comprehensive research agenda, data infrastructure and education.

In recent years, many health-care systems have implemented specific strategies to ensure timely cancer diagnosis (Department of Health, 2000; Prades *et al*, 2011). This has been motivated by poor cancer control, public discontent with long waiting times and an symptoms, the GP can suspect cancer and refer urgently to a specific pathway, and the speed and logistics of the diagnostic pathway and the standardisation of treatment within the hospital setting can be improved (Toustrup et al, 2011; Vallverdú Cartié

Red flag symptoms *("easy")*

Organ-specific Cancer Patient Pathway (CPPs)

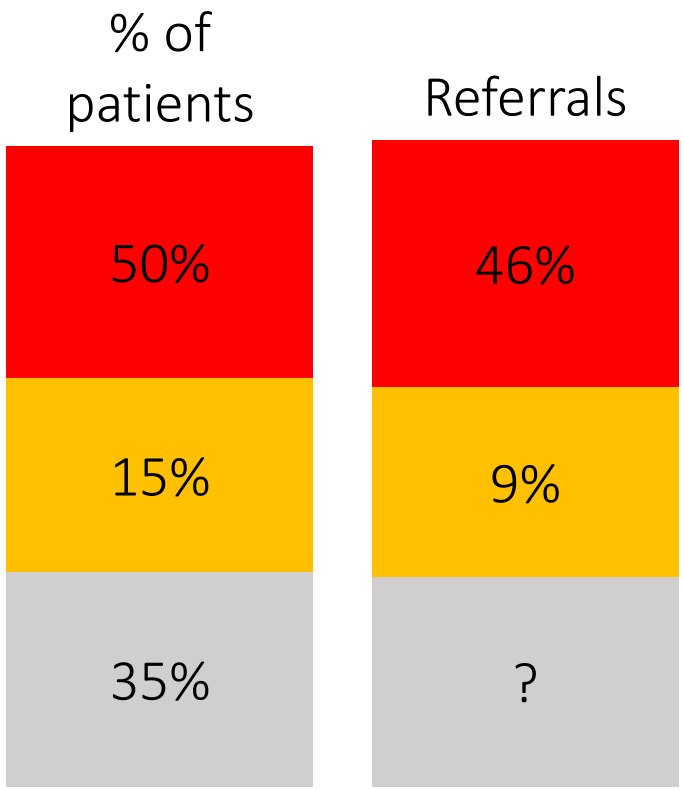
Serious non-specific symptoms *("difficult")*

Diagnostic Centres (NSSC-CPP)

Vague and uncharacteristic symptoms

Easy access to diagnostic testing

Modified – original by prof Peter Vedsted



Hvidberg et al. [under analysis] – CaP6

Vedsted, Olesen, A differentiated approach to referrals from general practice to support early cancer diagnosis – the Danish three-legged strategy. Br J Cancer. 2015

Olesen, Vedsted. Br J Cancer. 2009

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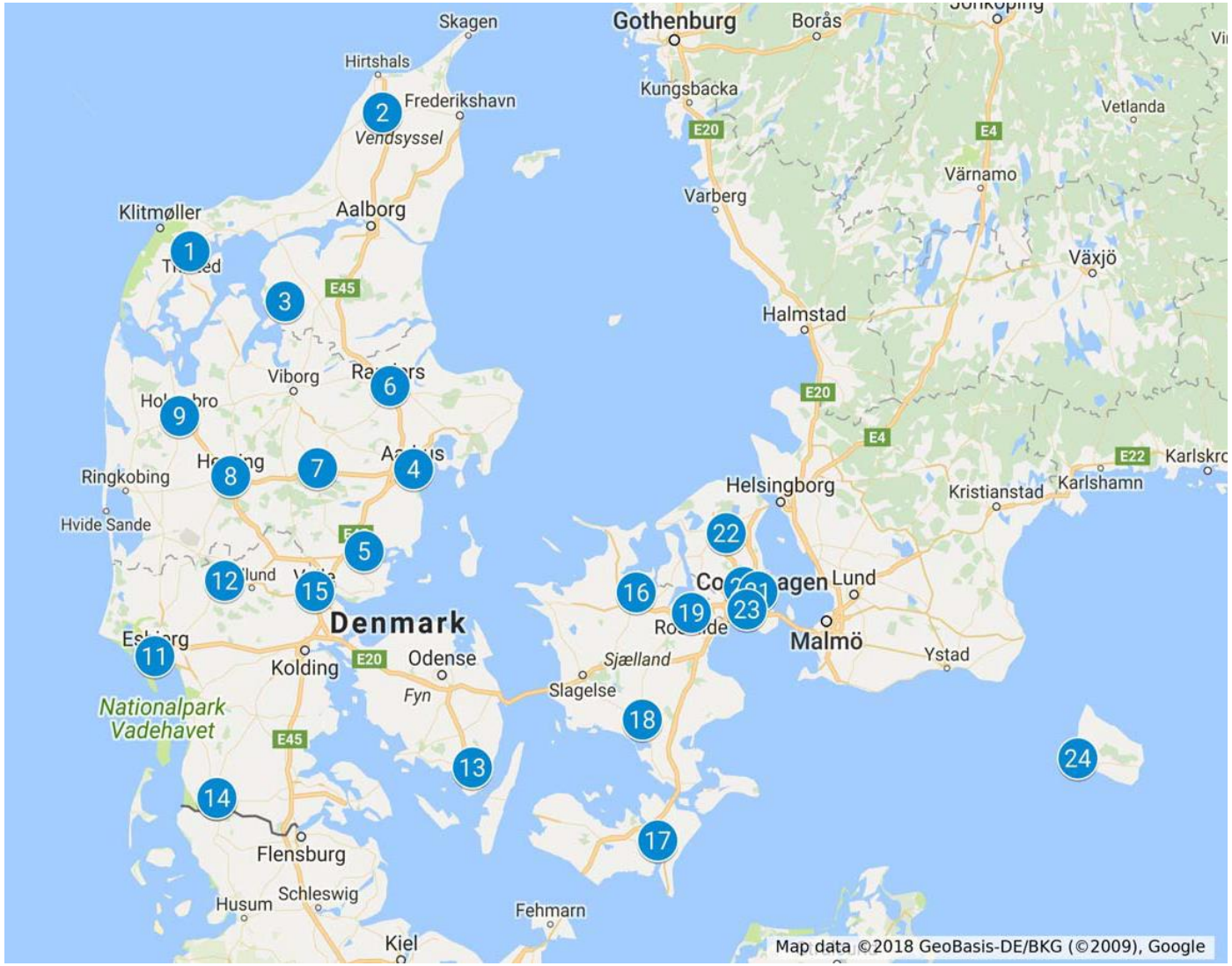
Diagnostic Centres in Denmark



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Organisational variations

Structural level

- Regions
- Hospitals
- Geography
  - Distance
- Filter function

Clinical level

- Medical specialties
  - Radiology
  - Internal medicine
- First line imaging
  - Low dose CT of thorax (e.g.)
  - Full body CT
  - Chest X-ray

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Danish cancer patient pathway for patients with serious non-specific symptoms and signs of cancer

- NSSC-CPP
  - Non-specific Signs and Symptoms of Cancer (NSSC)
  - Cancer Patient Pathway (CPP)
- Introduced 2012
  - Silkeborg startet before
  - Bisbebjerg startet 2012
- Revised 2016

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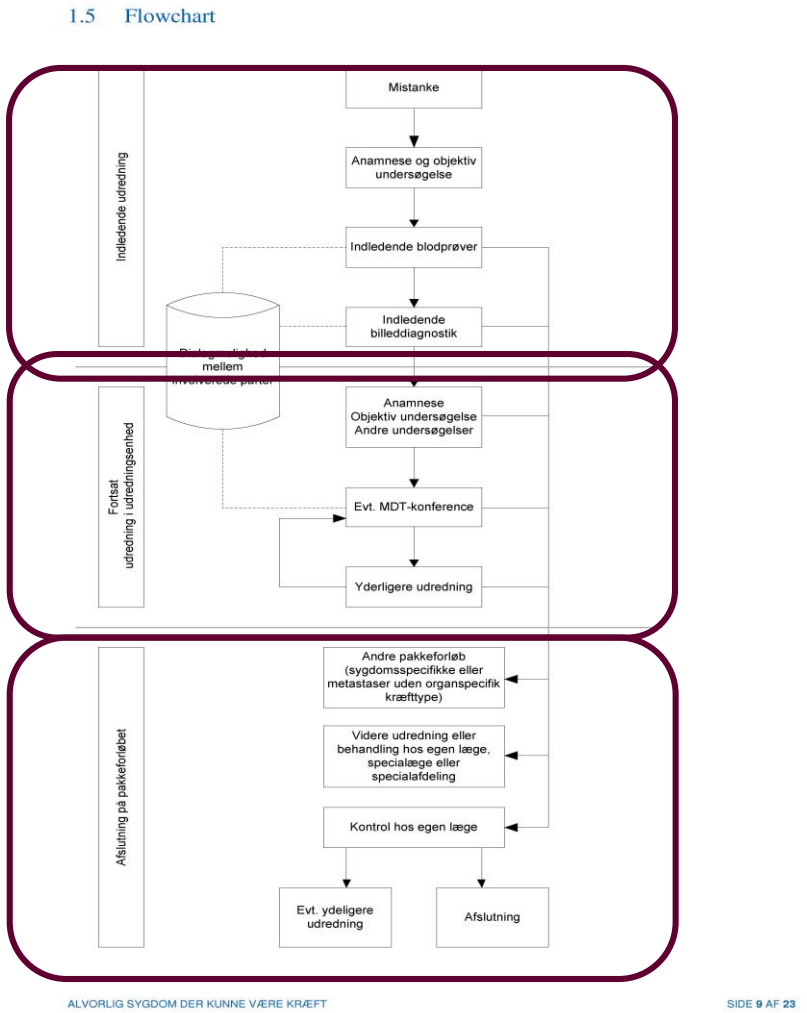
NSSC-CPP flow

- Initial diagnostics (GP)
- Specialised diagnostics (hospital)
- Closure
  - Organ-specific CPP referral
  - Extended diagnostics at hospital
  - Follow-up in general practice



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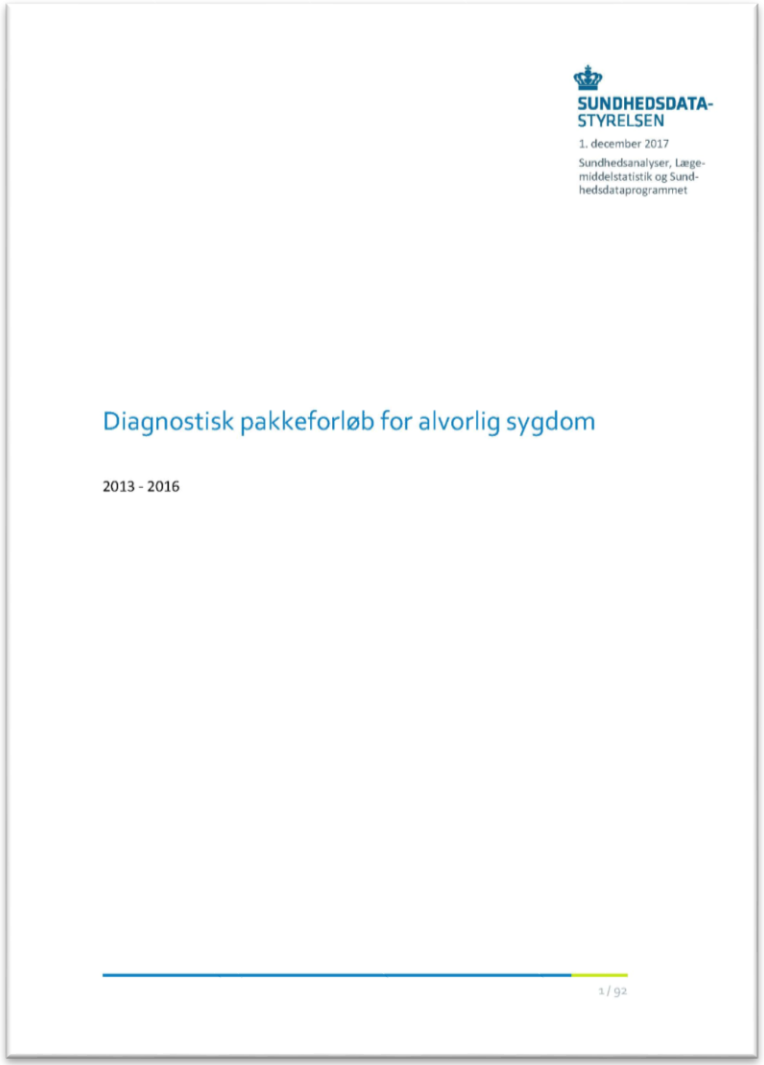
Monitoring

- Sundhedsdatastyrelsen
  - Registry based
- Indicator DF3
  - Starts at time of referral
  - Stops at diagnostic end (clinical decision or patient request)
  - 22 days
- Annual report


SUNDHEDSDATA-STYRELSEN

1. december 2017

Sundhedsanalyser, Lægemiddelstatistik og Sundhedsdataprogrammet

Diagnostisk pakkeforløb for alvorlig sygdom

2013 - 2016

1 / 92

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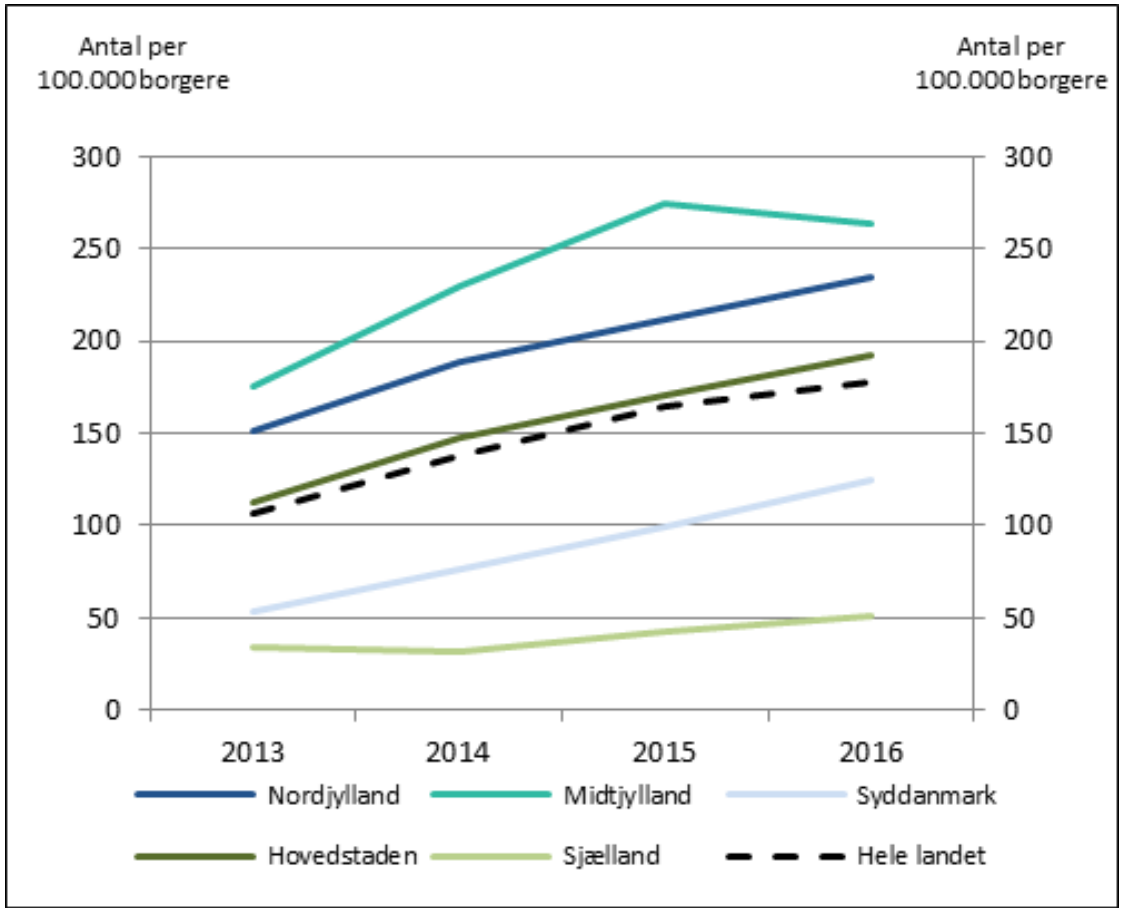
Completed NSSC-CPPs per year

- 2013:
  - 5.963 completed courses
  - 106 / 100.000 citizens
- 2016:
  - 10.166 completed courses
  - 178 / 100.000 citizens



Sundhedsdatastyrelsen. *Diagnostisk Pakkeforløb for Alvorlig Sygdom*. Copenhagen; 2017

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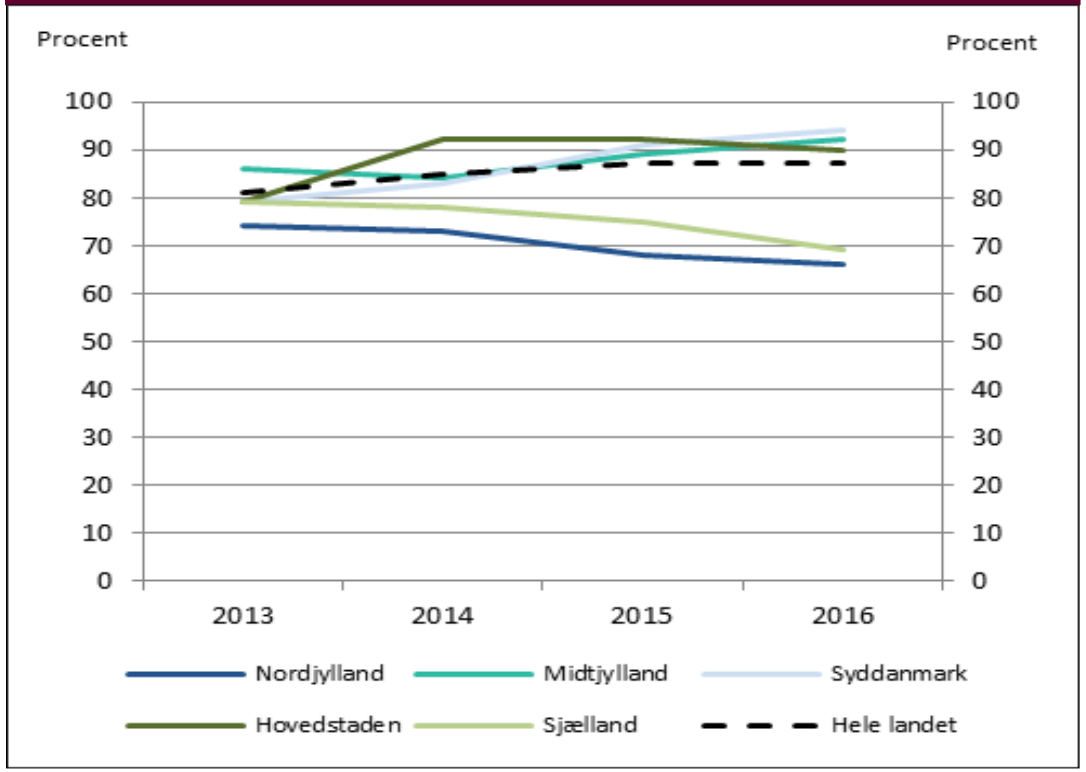
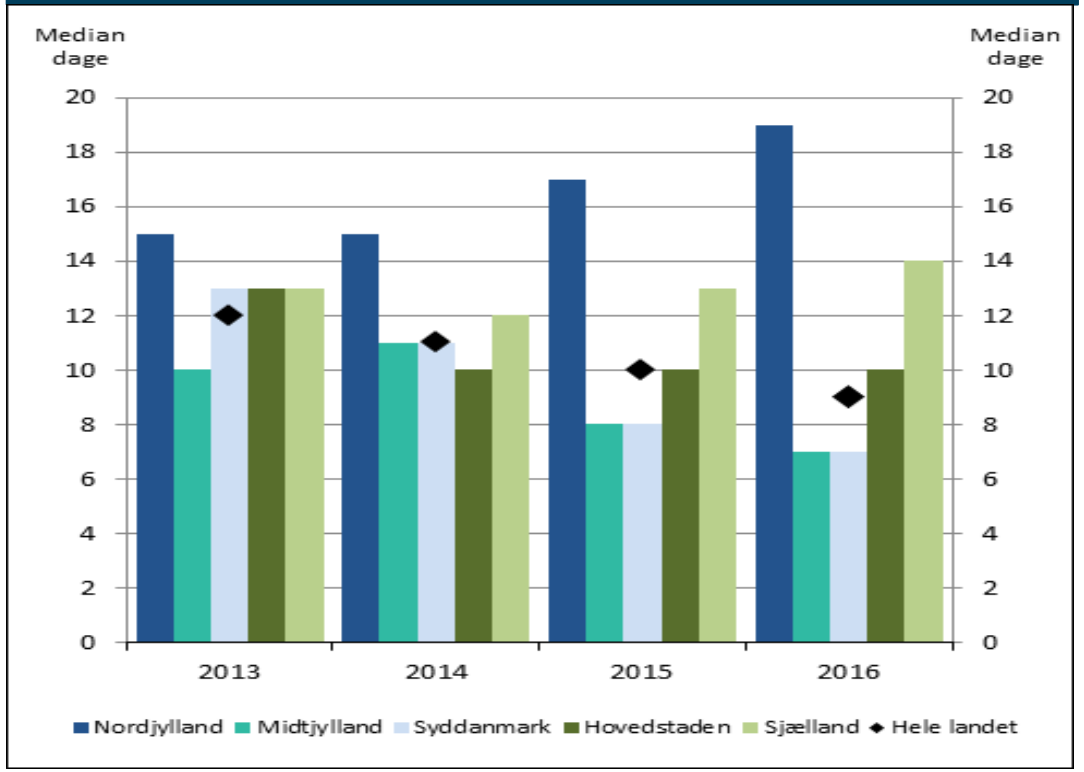
FP3: NSSC-CPP proces time

87% are managed within 22 days



Median time: 18 days (2013) – 15 days (2016)



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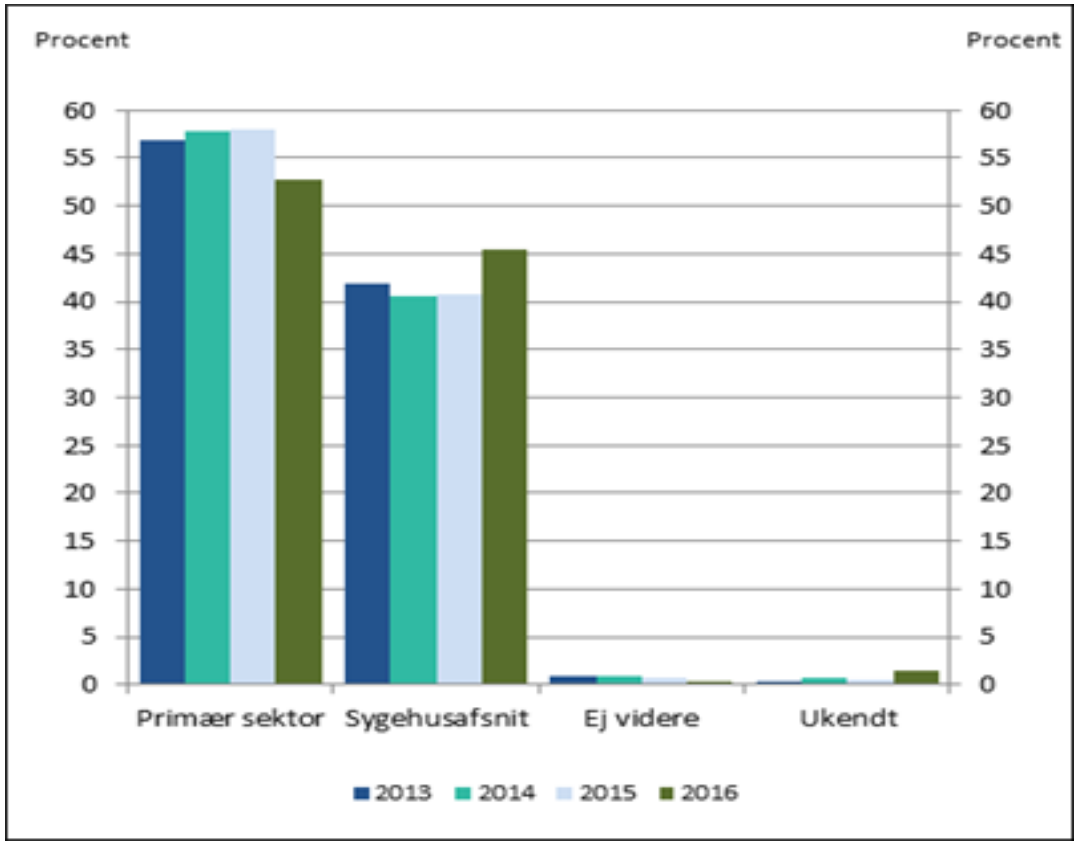
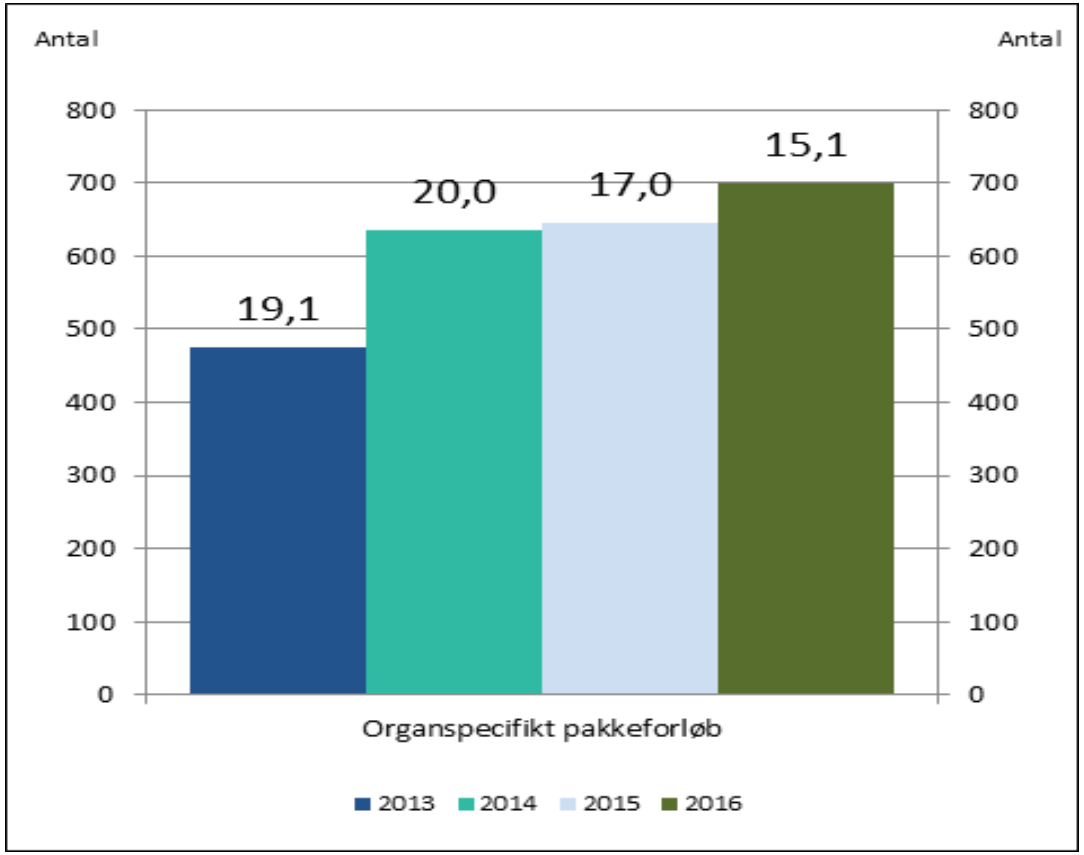
Closure of NSSC-CPP

Referrals - overall



Organ-specifik CPP (of hospital referrals)



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Cancers within 90 days after NSSC-CPP course

How many?

- 16.3% (2016)
  (Sundhedsdatastyrelsen. *Diagnostisk Pakkeforløb for Alvorlig Sygdom*. 2017)

Study results

- Silkeborg DC: ≈12.5%
  (Næser et al, Cancer Epidem, 2017; Ingemann et al, BMC Cancer, 2015; Næser et al, BMC Cancer, 2017).
- Aarhus DC: 18%
  (22% in 2011, 16% in 2013)
  (Bislev et al, Dan Med J, 2015)
- Denmark total: 11%
  (Moseholm & Lindhardt, Cancer Epidemiology, 2017)

Top 10 Cancer types diagnosed

Næser, 2017		Bislev, 2015		Moseholm, 2017	
Haematological	25%	Bowel	26%	Breast	18%
Colorectal	18%	Haematological	25%	Haematological	15%
Kidney	10%	Unknown primary	16%	Melanoma	12%
Lung	9%	Lung	12%	Colorectal	9%
Pancreas	9%	Kidney/bladder	7%	Prostate	6%
Prostate	7%	Prostate	7%	Gyneacologial	6%
Ovarian	6%	Liver/ gallblader/ pancreas	5%	Lung	5%
Upper-GI	5%	Stomach/esophagus	2%	Unspecified	4%
Breast	3	Melanoma	2%	Esophagus, Stomach	3%
Other	7%			Liver	2%

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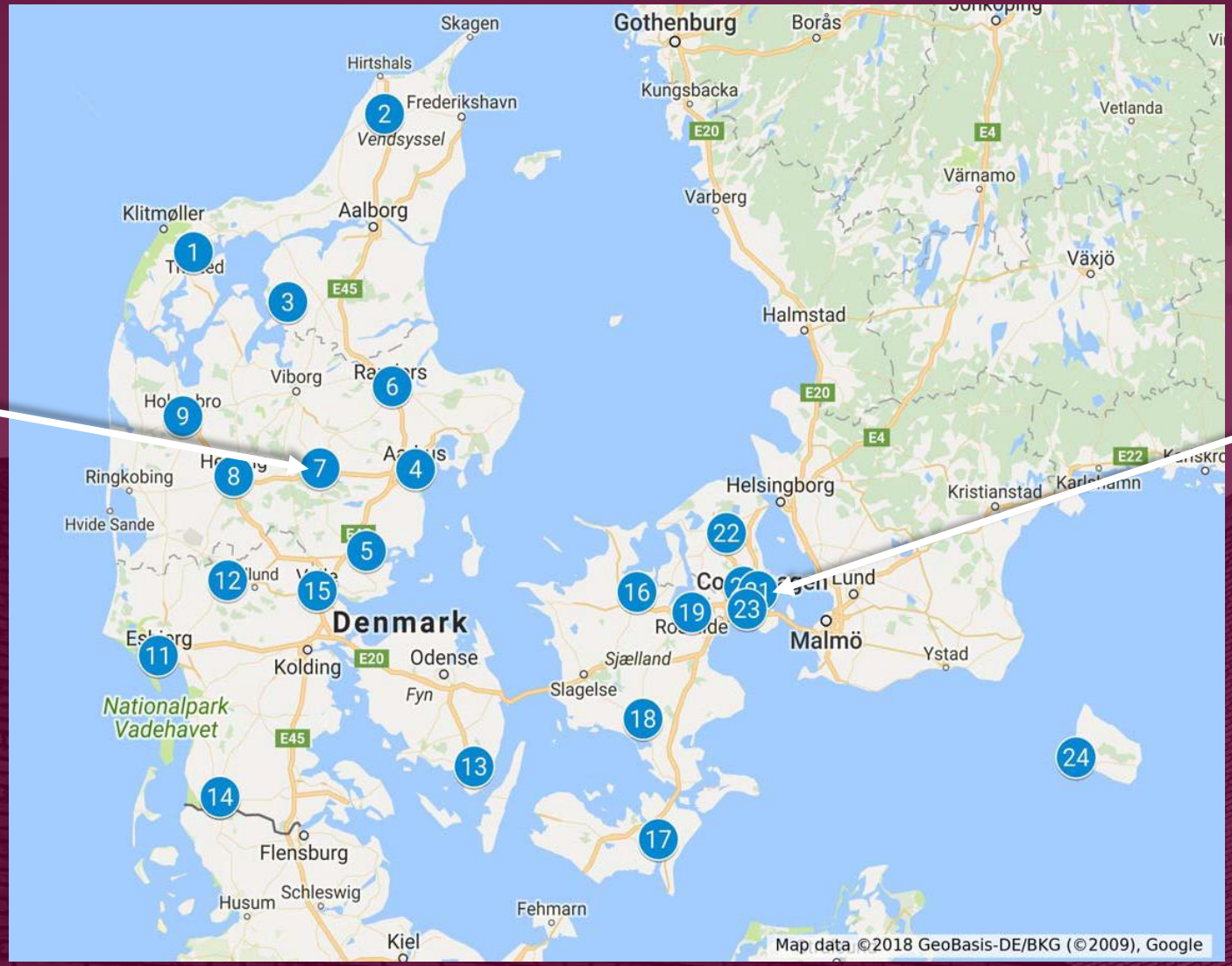
And now…

Silkeborg

Bisbebjerg



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