

# Quality of Health Care

Tallinn, 28-30 August 2013

*Seminar in cooperation with University of Tartu, University of Southern Denmark,  
WHO PATH CC Krakow and Estonian Health Insurance Fund*

**Quality registries and cancer;  
Important contribution to improvement  
- if part of an integrated approach to quality**

*Medical Director Paul D. Bartels*



the danish  
clinical registers

a national quality improvement programme

# Quality Registries – Cancer - Scenario

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- Complex patient pathways – several key specialities'
- Wide range of diseases and stages
- Complex diagnostic and treatment modalities
- Range from 'Emergency' to 'Chronic' in terms of clinical problems
- Definite diagnosis by golden histopathology standards
- Good data regarding descriptive epidemiology



# Quality Registries – Cancer - Scenario

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- High priority – clinically and in general



# Cancer DK - registries

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- National cancer registry – covers all patients with cancer since 1940 – very high data quality – limited range of clinical information
- Quality registries – since 2000: Mammary-, colorectal-, lung-, gynecology .... + 15 specific cancer



# Cancer DK – Quality registries: Role and organisation

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- Quality improvement and clinical research within the framework of the DK- National Cancer Plan
- Clinically governed by DMCGs = Danish multidisciplinary Cancer Groups (Surgeons, oncology, radiotherapy, pathology, radiology, palliative care)
- Coupled to creation and maintenance of Clinical Guidelines and planning of clinical research



# A model Registry: Danish Lung cancer registry

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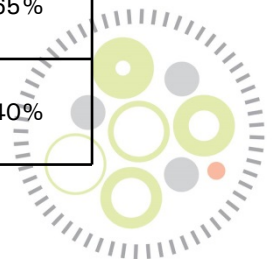
- Created 1999
- Part of NIP 2000
- Main objective: Bringing 5y survival of DK lung cancer patient up to international standard !



# Indicators in the Danish Lung Cancer Registry

*- obs. reference*

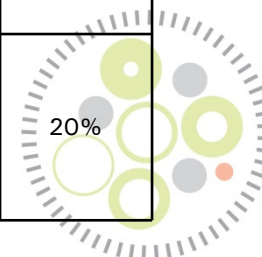
Indicator group	No	Indicator	Type	Threshold
<b>I. Survival, overall</b>	<b>Ia</b>	Rate of patients, surviving <b>1 year</b> from date of diagnosis	Outcome	42%
	<b>Ib</b>	Rate of patients, surviving <b>2 years</b> from date of diagnosis	Outcome	22%
	<b>Ic</b>	Rate of patients, surviving <b>5 years</b> from date of diagnosis	Outcome	12%
<b>II. Survival, after surgery</b>	<b>IIa</b>	Rate of patients, surviving <b>30 days</b> from date of operation	Outcome	97%
	<b>IIb</b>	Rate of patients, surviving <b>1 year</b> from date of operation	Outcome	75%
	<b>IIc</b>	Rate of patients, surviving <b>2 years</b> from date of operation	Outcome	65%
	<b>IId</b>	Rate of patients, surviving <b>5 years</b> from date of operation	Outcome	40%



# Indicators in the Danish Lung Cancer Registry...

- *obs. reference*

<b>III. Waiting times</b>	<b>IIIa</b>	Rate of patients operated within <b>42 days</b> after referral	Structural	85%
	<b>IIIb</b>	Rate of patients starting oncologic treatment within <b>42 days</b> after referral	Structural	85%
	<b>IIIc</b>	Rate of patients starting chemo within <b>42 days</b> after referral	Structural	85%
	<b>IIId</b>	Rate of patients starting radiotherapy within <b>42 days</b> after referral	Structural	85%
	<b>IIIe</b>	Rate of patients starting chemo and radiotherapy within <b>42 days</b> after referral	Structural	85%
<b>IV. Stage classification</b>	<b>IV</b>	Rate of patients with accordance between cTNM and pTNM	Process	80%
<b>V. Resection rate</b>	<b>V</b>	Rate of patients with NSCLC who had a resection	Process	20%





# Variables in DLCR: **Detailed information about**

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Type of operation
Diagnostic procedures
Complications after surgery
Oncologic treatment



# Deep analysis – 4 stages in succession

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1. Access to (surgical) treatment : Delay - and organisation of diagnosis – Creation of bundles
2. Quality of surgery: Short term mortality rates – Changes of patient selection, techniques
3. Diagnostic quality: New imaging techniques
4. Life prolongation by Chemo/Radiotherapy



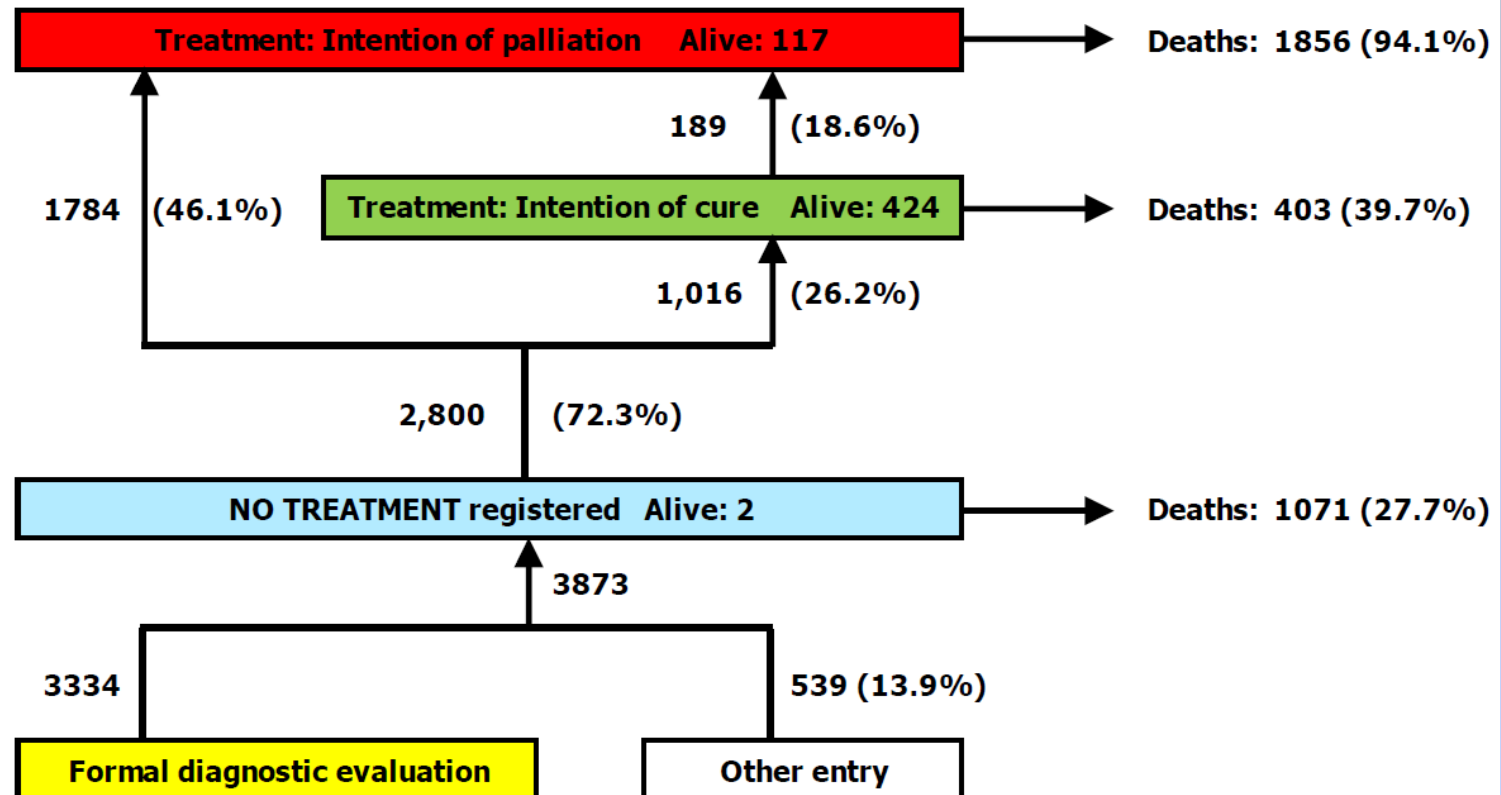
# Pathway model lung cancer

Accessed: Jan 18, 2010

PRIMARY LUNG CANCER IN DENMARK, YEAR OF DIAGNOSIS: 2007

Number of new patients: 3873

Cumulative number of deaths: 3330 (86.0%)

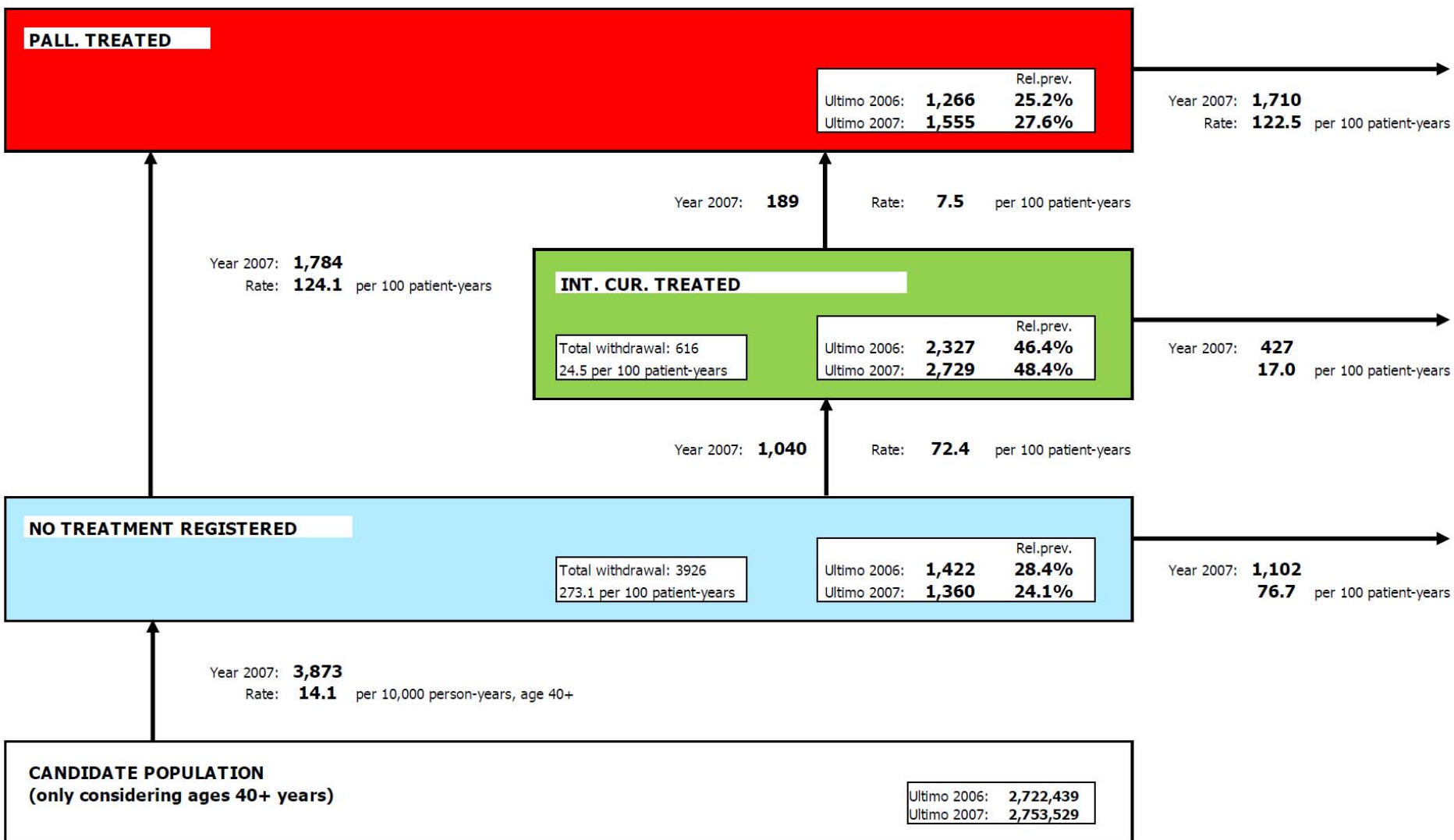


Source: Annual reports from the Danish Lung Cancer Registry. [www.lungecancer.dk](http://www.lungecancer.dk) (in Danish)

## BOX MODEL: PRIMARY LUNG CANCER IN DENMARK, CALENDAR YEAR 2007

Accessed: Jan. 18, 2010

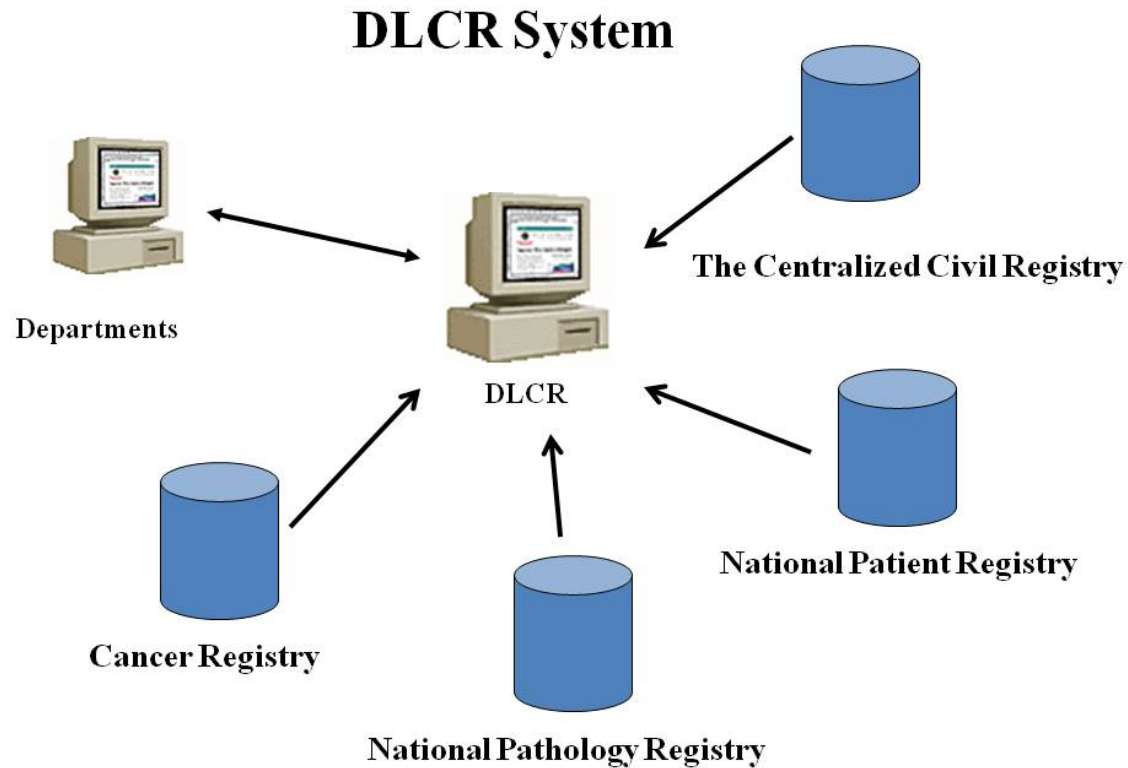
Patients residing outside Denmark excluded



Source: Annual reports from the Danish Lung Cancer Registry. [www.lungecancer.dk](http://www.lungecancer.dk) (in Danish)

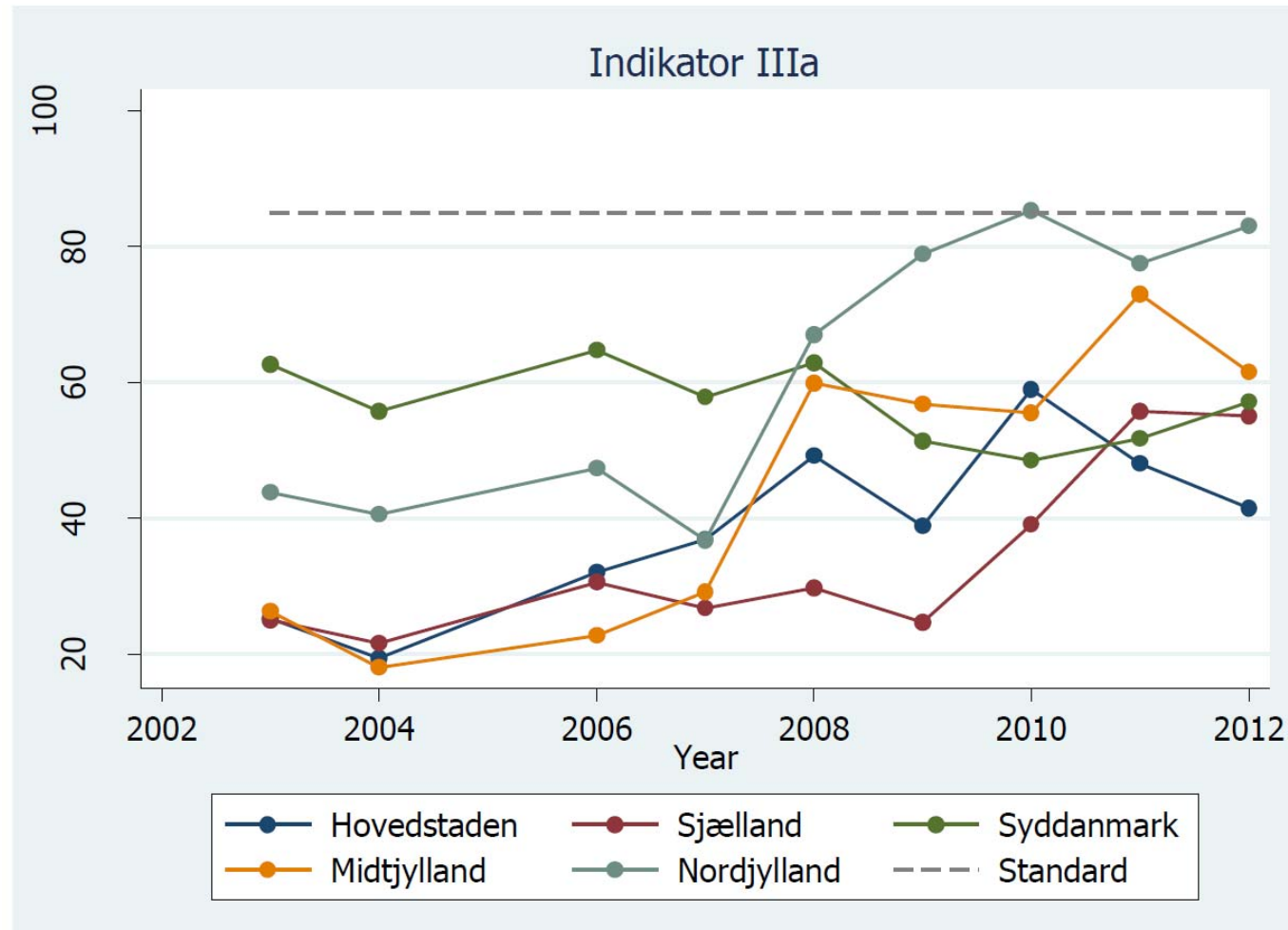
# Danish Lung Cancer Registry system

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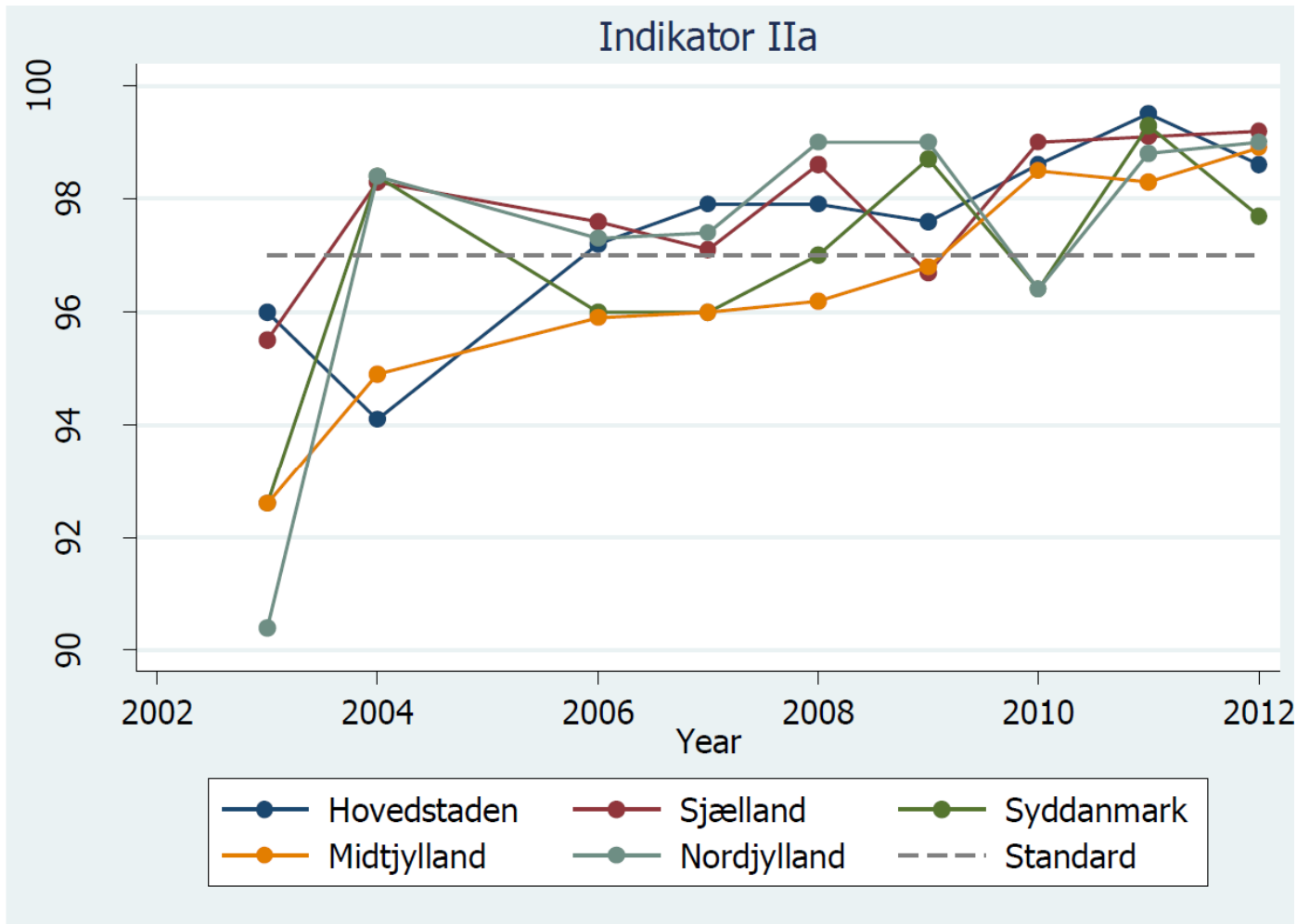
# Fraction waiting less than 6 weeks after first admission

Source: annual report 2012, the Danish Lung Cancer Registry/Group ([www.lungetcancer.dk](http://www.lungetcancer.dk))



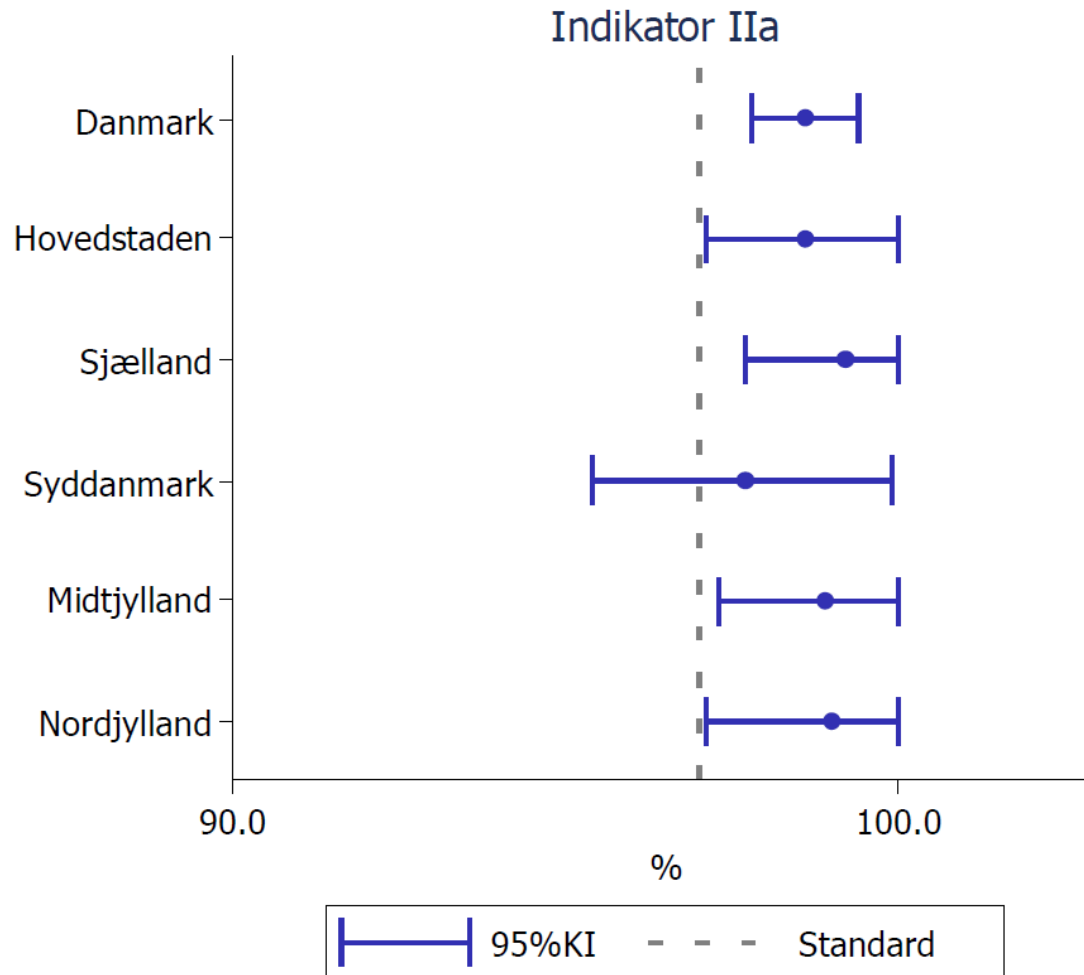
# Trend - 30 days postoperative survival

Source: annual report 2012, the Danish Lung Cancer Registry/Group ([www.lungetcancer.dk](http://www.lungetcancer.dk))



# 30 days postoperative survival

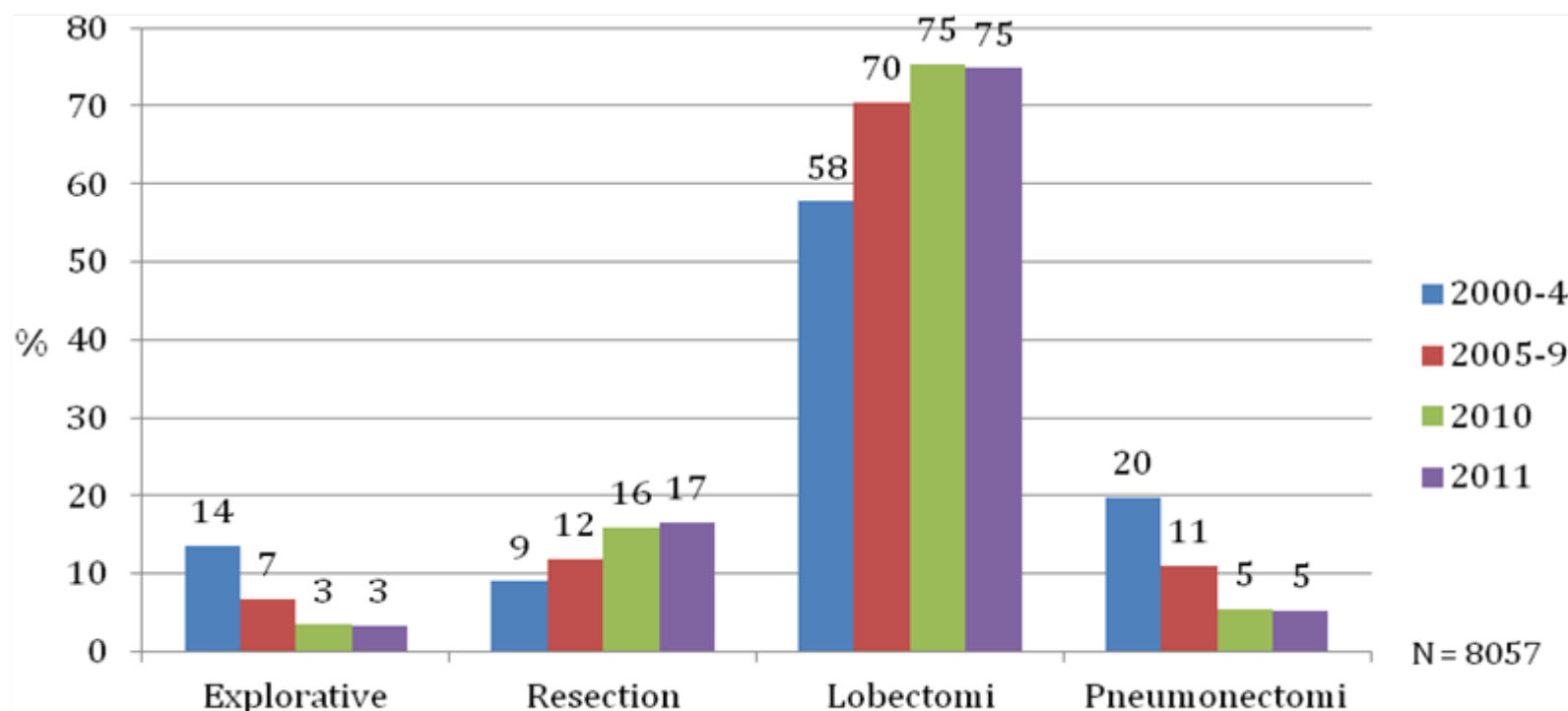
Source: annual report 2012, the Danish Lung Cancer Registry/Group ([www.lunsecancer.dk](http://www.lunsecancer.dk))





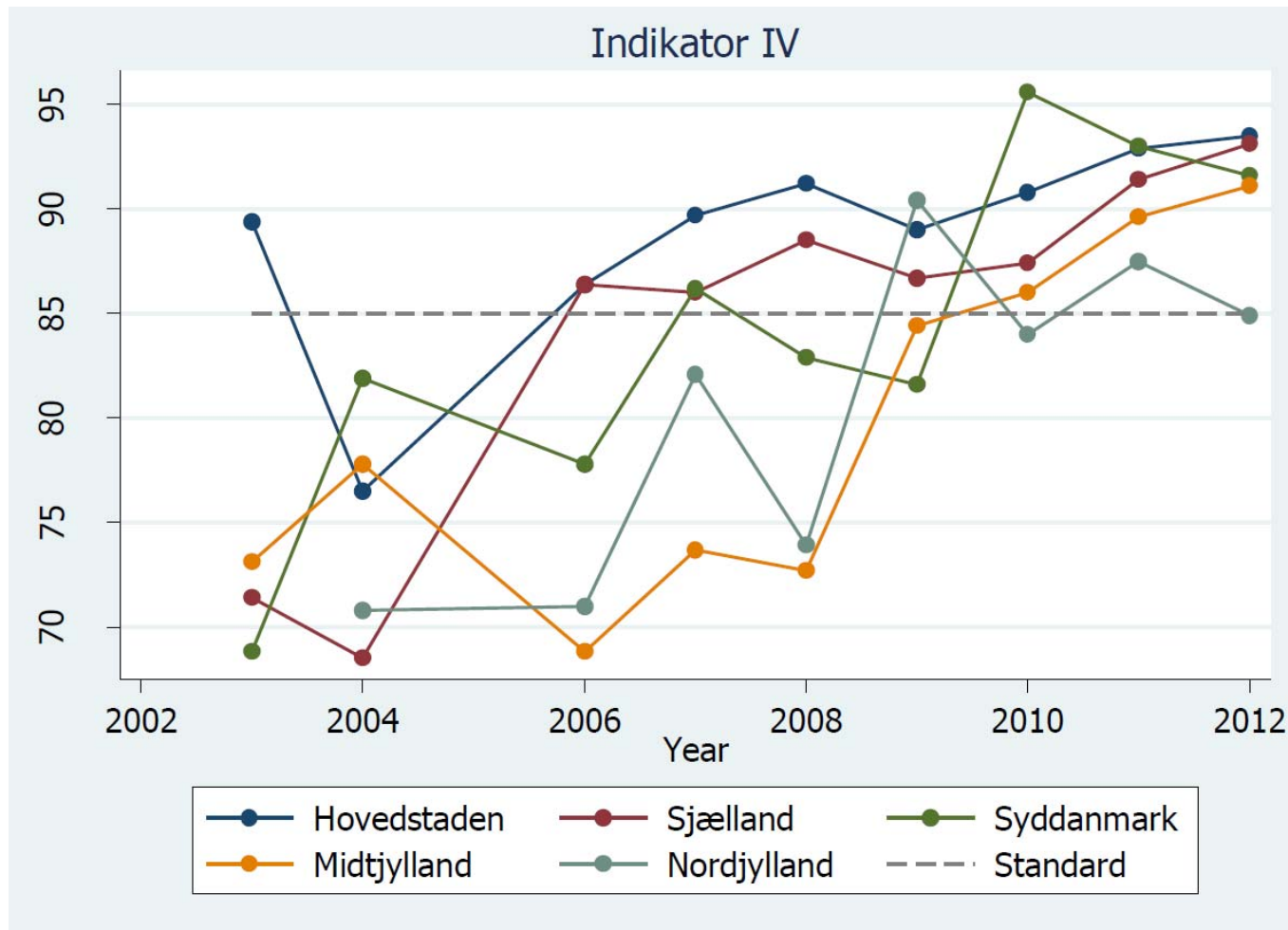
# Type of surgical procedures, in four time-intervals including the years 2000 – 2011

*Obs. reference*



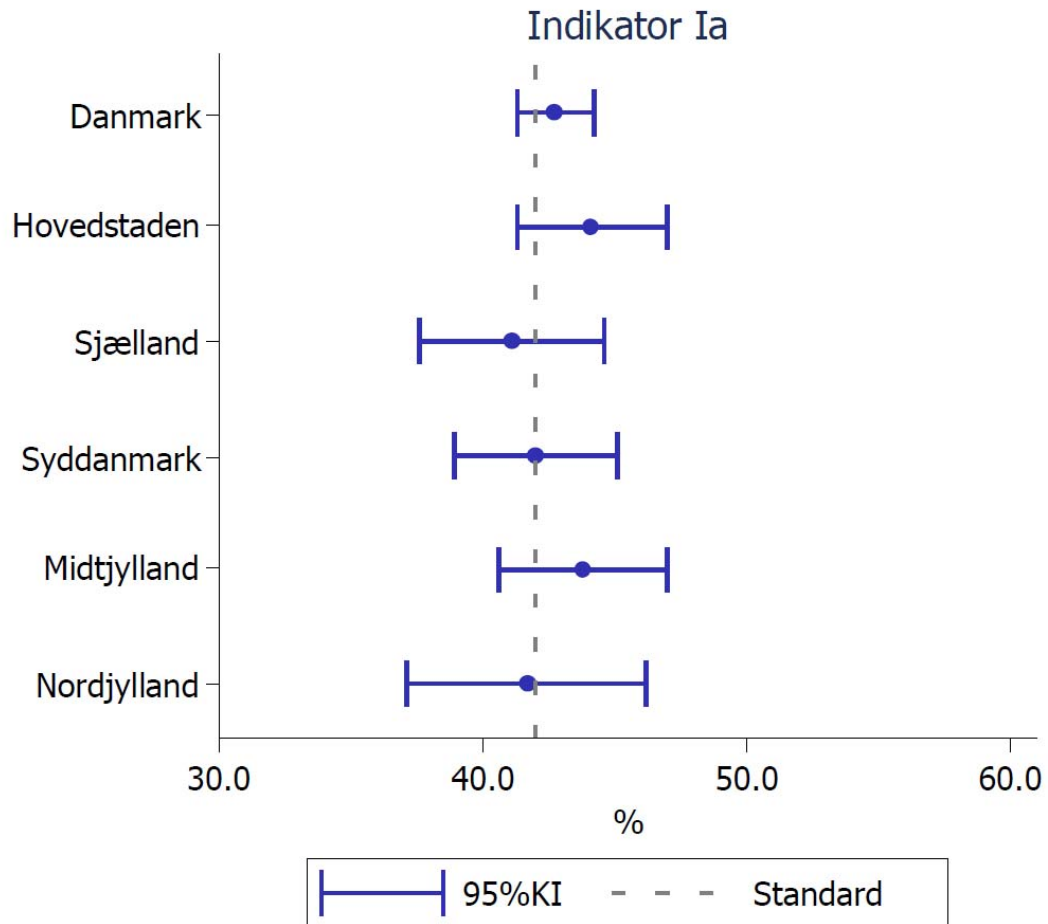
# Diagnostic accuracy

Source: annual report 2012, the Danish Lung Cancer Registry/Group ([www.lungetcancer.dk](http://www.lungetcancer.dk))



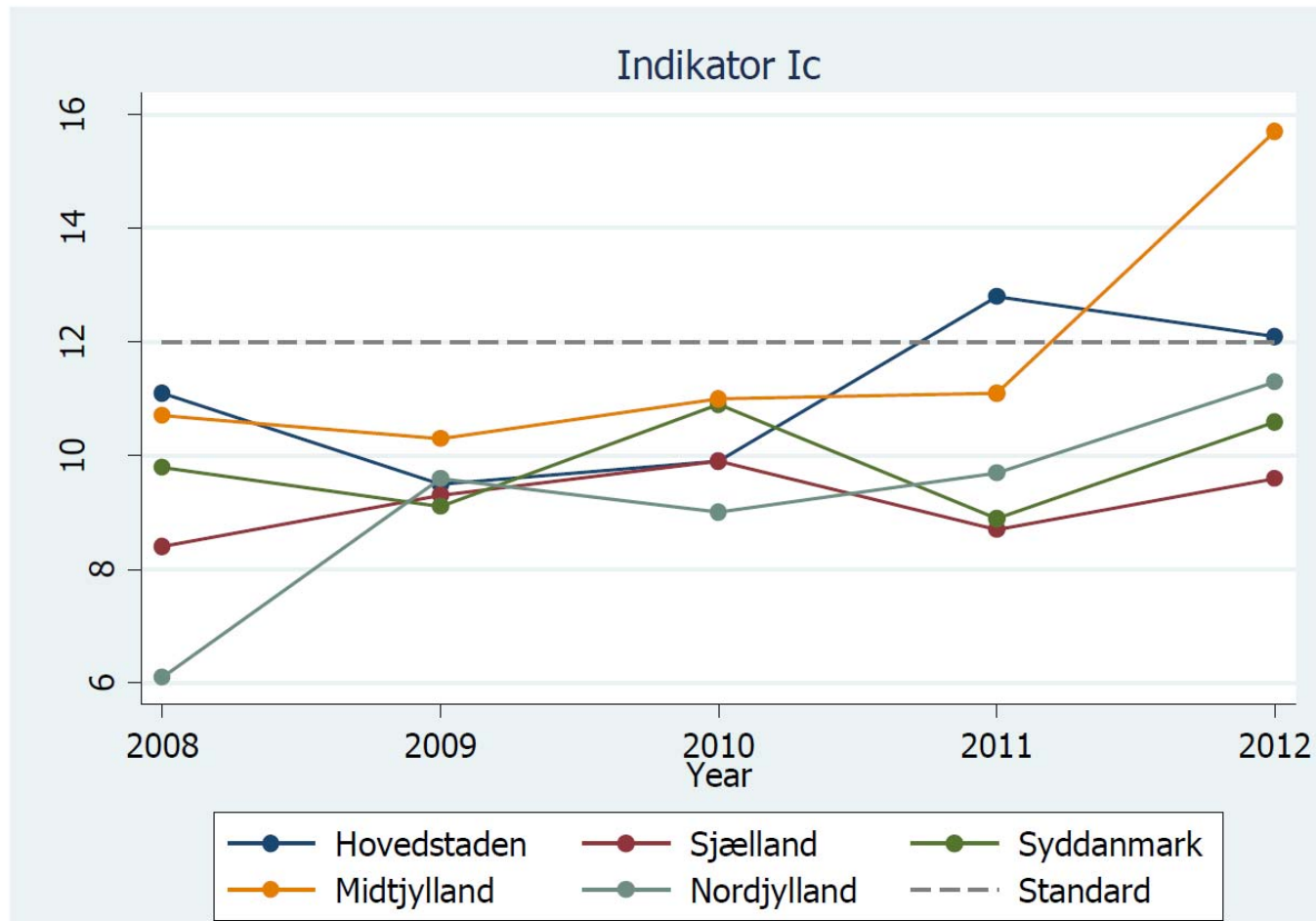
# Fraction of patients surviving 1 year after diagnose

Source: annual report 2012, the Danish Lung Cancer Registry/Group ([www.lungetcancer.dk](http://www.lungetcancer.dk))



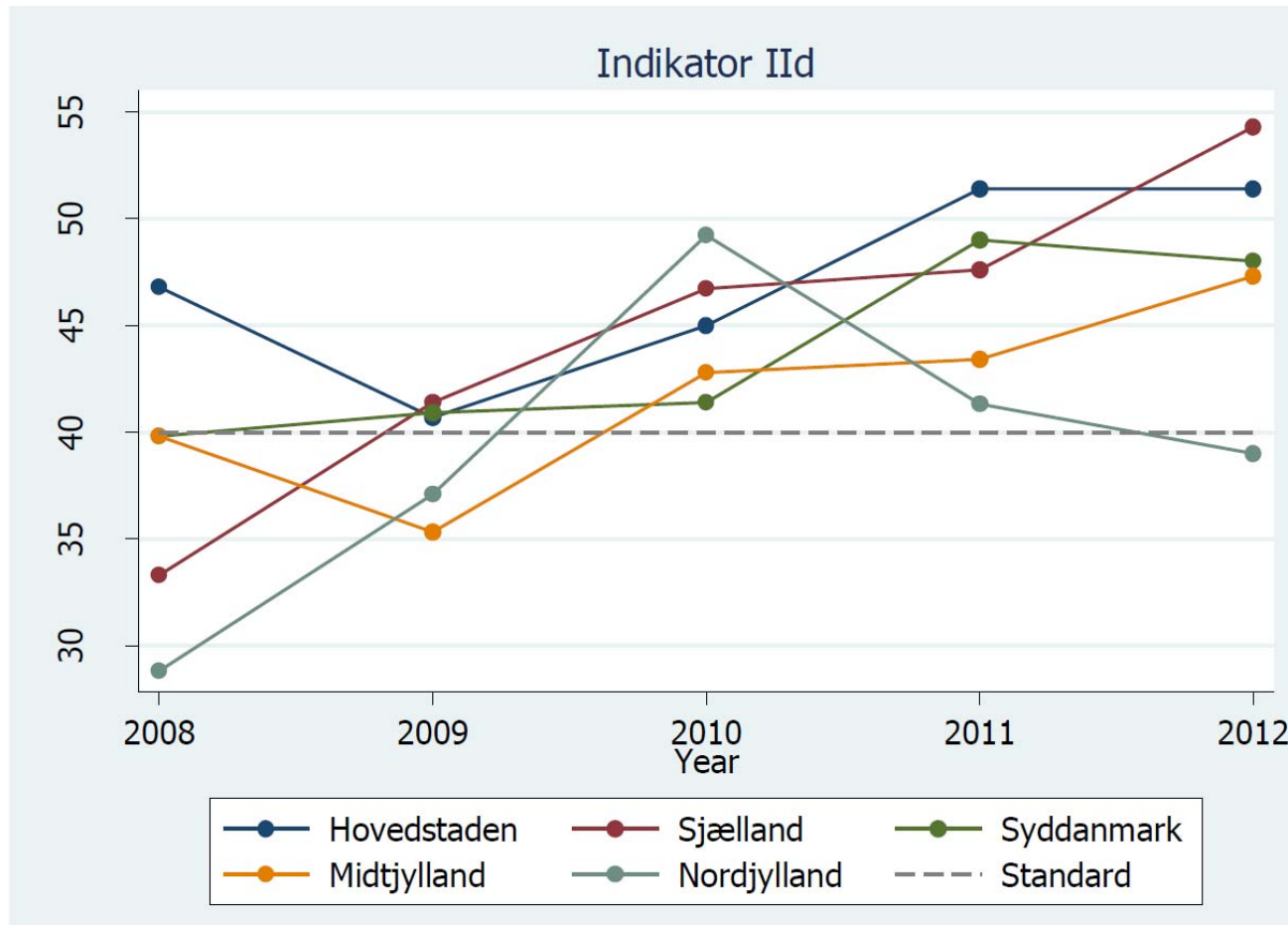
# Trend - 5 year survival

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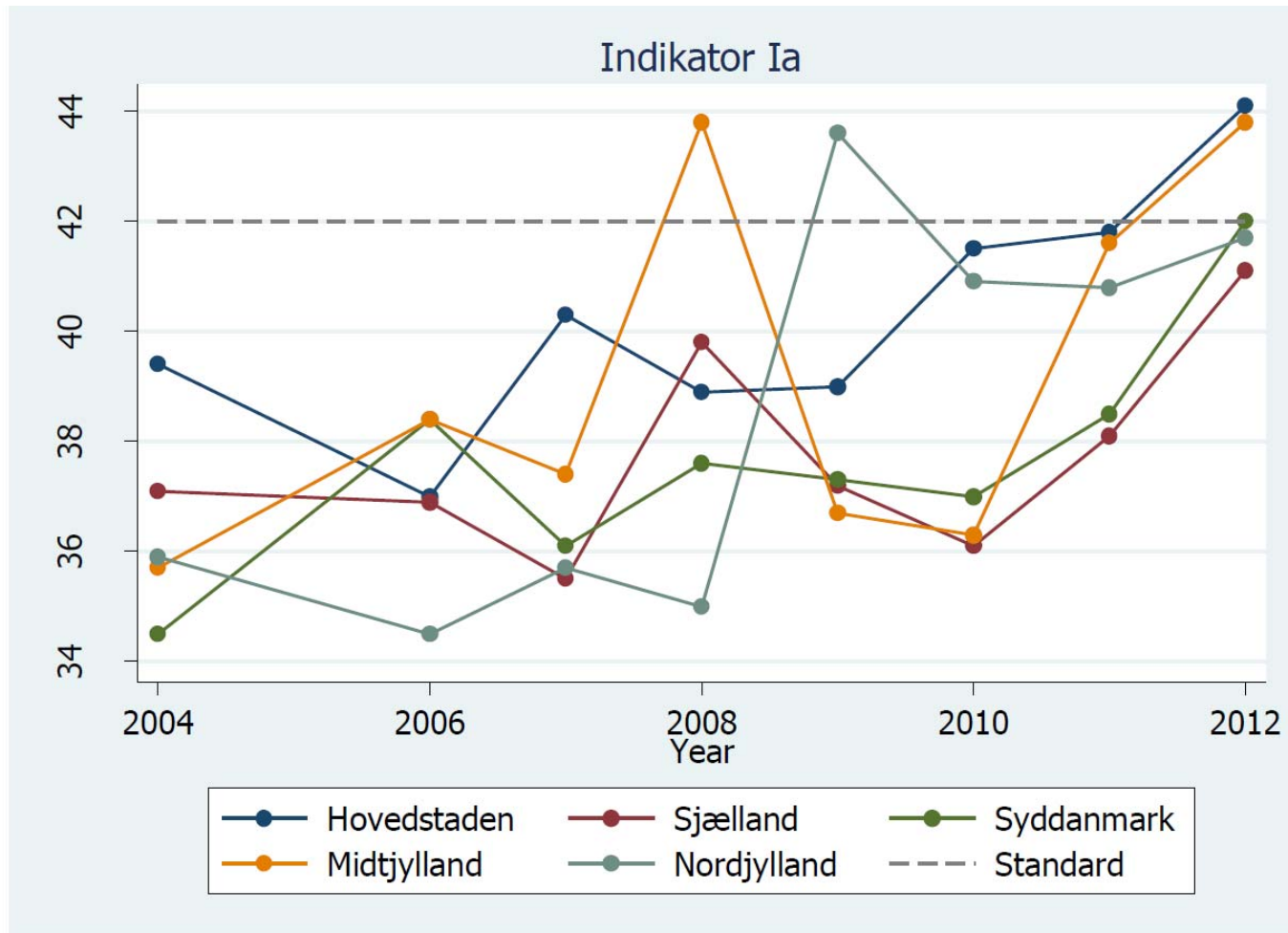
# 5 years postoperative survival

Source: annual report 2012, the Danish Lung Cancer Registry/Group ([www.lungecancer.dk](http://www.lungecancer.dk))



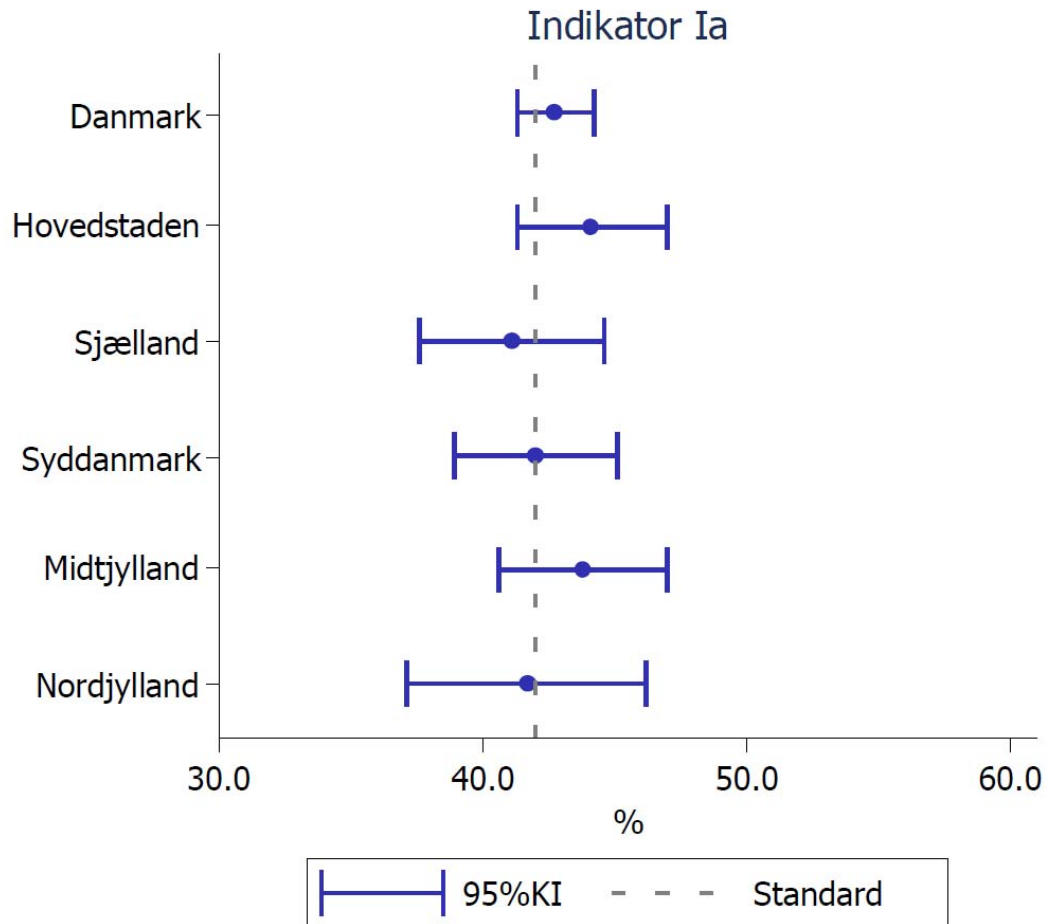
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