

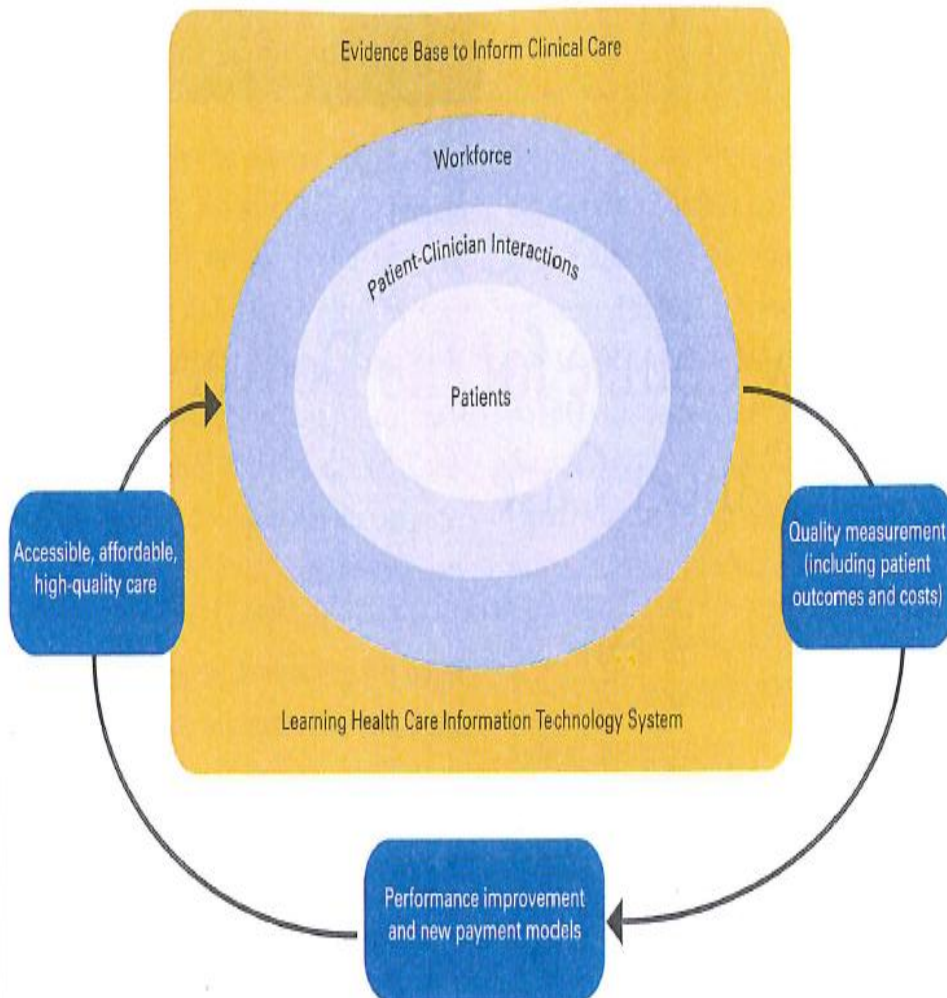
Quality Management of Breast Cancer Patients: A comparison between different countries

Didier Verhoeven



“Delivering High-Quality Cancer Care”

Committee Framework Recommendations for Improving Quality of Cancer Care

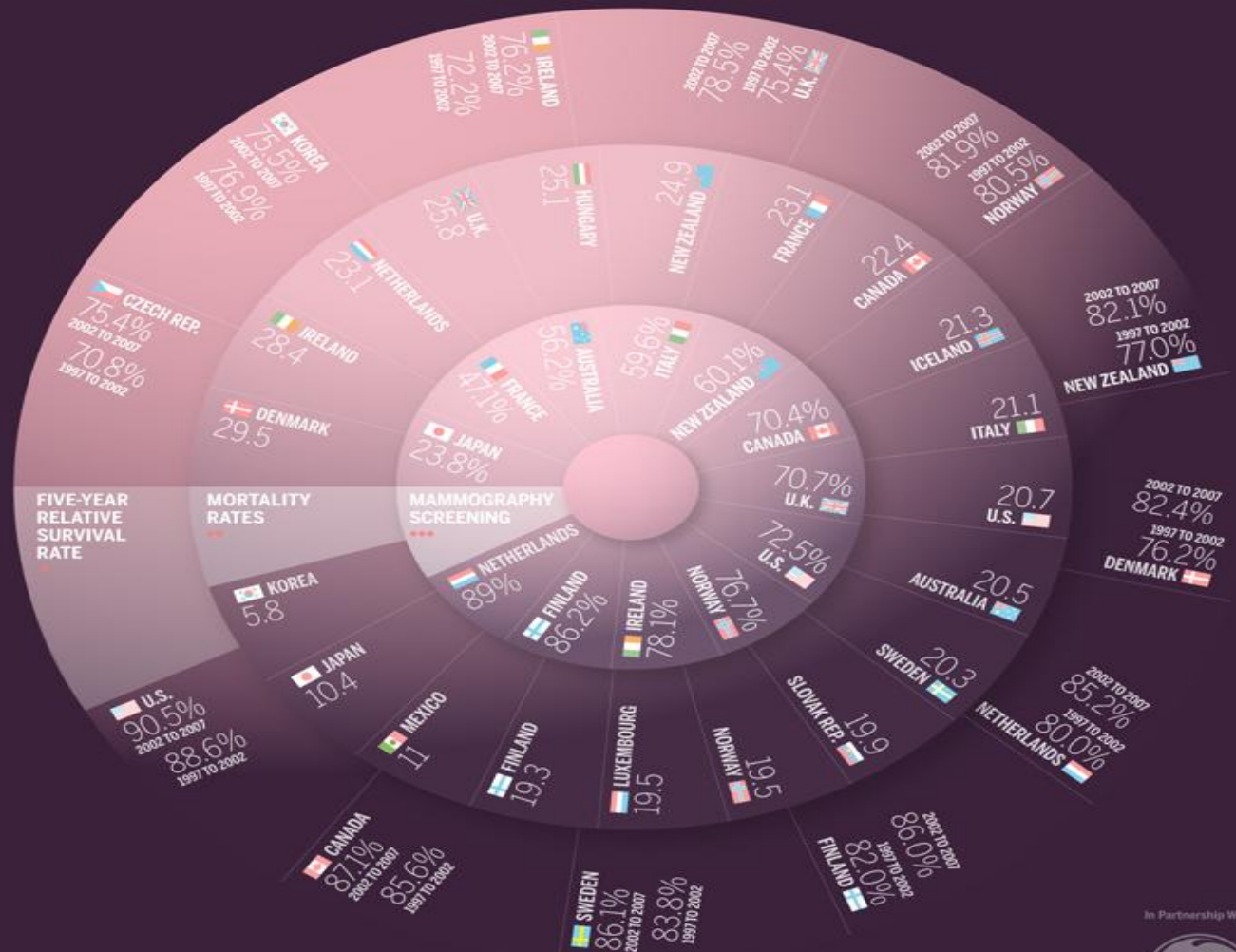


1. Engaged Patients
2. Adequately Staffed, Trained and Coordinated Workforce
3. Evidence Based Cancer Care
4. A learning health care IT system for cancer
5. Translation of evidence into clinical practice, quality measurements and performance improvement
6. Accessible, affordable cancer care

OECD : What is suitable for comparison ?

THE FIGHT AGAINST BREAST CANCER

In honor of National Women's Health Week, we've looked at the fight against breast cancer around the world. We've looked at how the United States—and other member countries of the Organisation for Economic Co-operation and Development—are performing in three categories: improvement in the five-year survival rate for breast cancer, the mortality rate per 100,000 women, and the percentage of women who have mammography screenings. In some areas, we have made extraordinary progress; in others we still have a long way to go.



* 1997 to 2002, and 2002 to 2007. Relative survival rate signifies the number of patients alive five years after their disease was diagnosed relative to the percentage of people of the same age and sex still alive in the same five year period.

** Per 100,000 women, 1995 to 2005

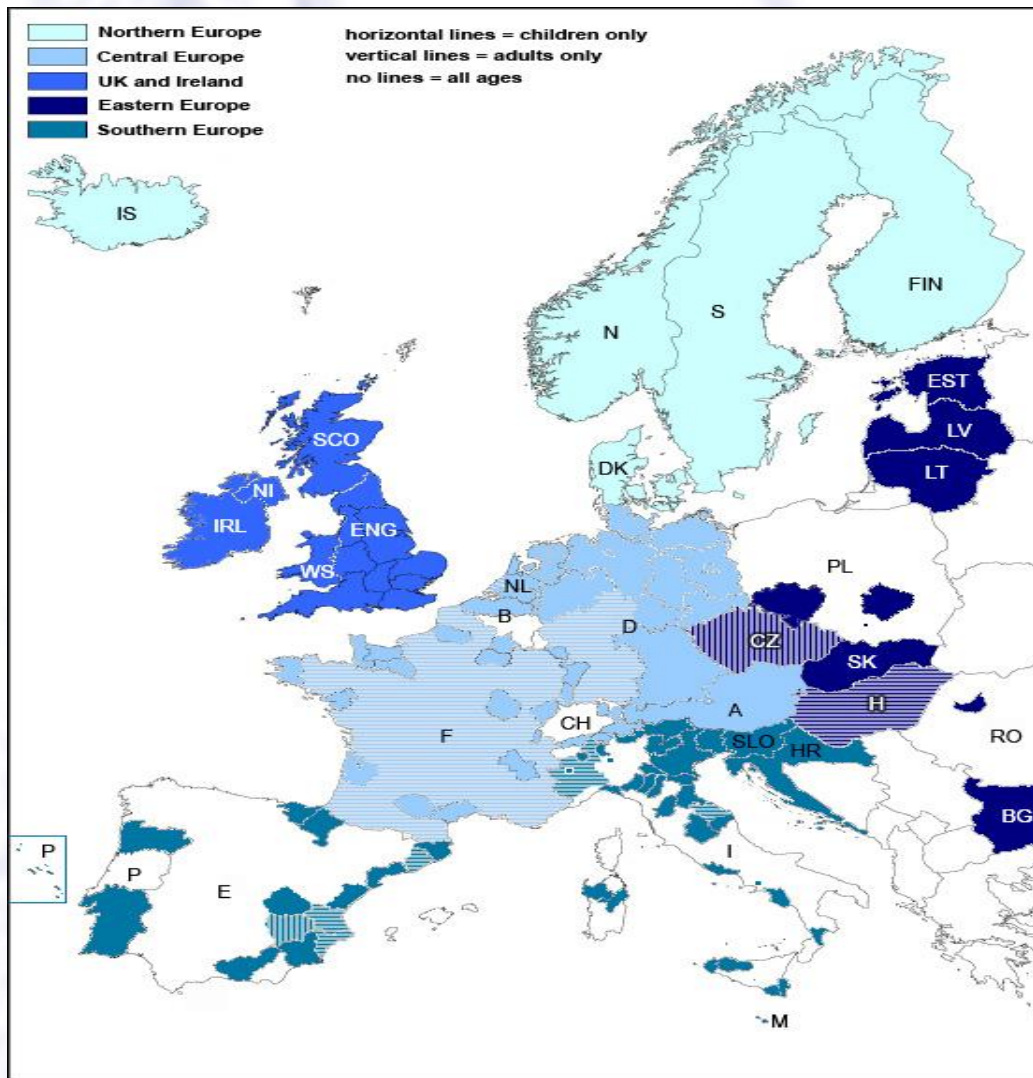
*** Women aged 50 to 69





EUROCARE

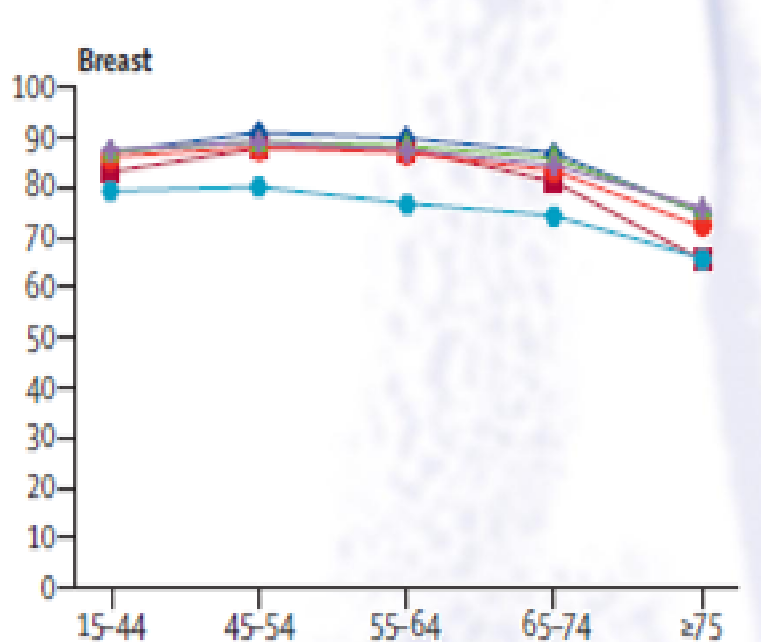
Survival of cancer patients in Europe



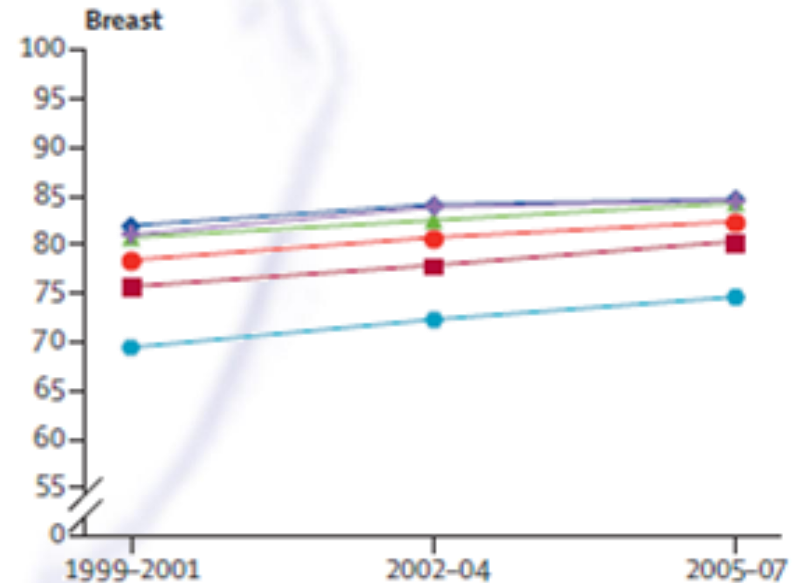
Breast cancer survival : 1999-2007

EUROCORE-5 (Lancet Oncology,2014)

Age specific 5-year relative survival



Age-standardised 5-year relative survival



International Cancer Benchmarking Partnership (ICBP)



- Partnership between Australia, Canada, Denmark, Norway and Sweden
- To inform of policies to improve cancer survival
- Important Cancer Issues
 - Cancer survival
 - Population awareness regarding cancer
 - Attitudes in primary care
 - Delays
 - Treatment and co-morbidities
- Relative survival is increasing, but there are persistent differences
- Lesser patient cancer awareness in UK and Denmark

Disparities in Breast Cancer Outcome (S.Wheeler, sept.2013)

- Socioeconomic Resources
- Delivery of Care
- Tumor Biology
- Genetics
- Lifestyle and Reproductive Experiences
- Environmental Exposures
- Nutrition

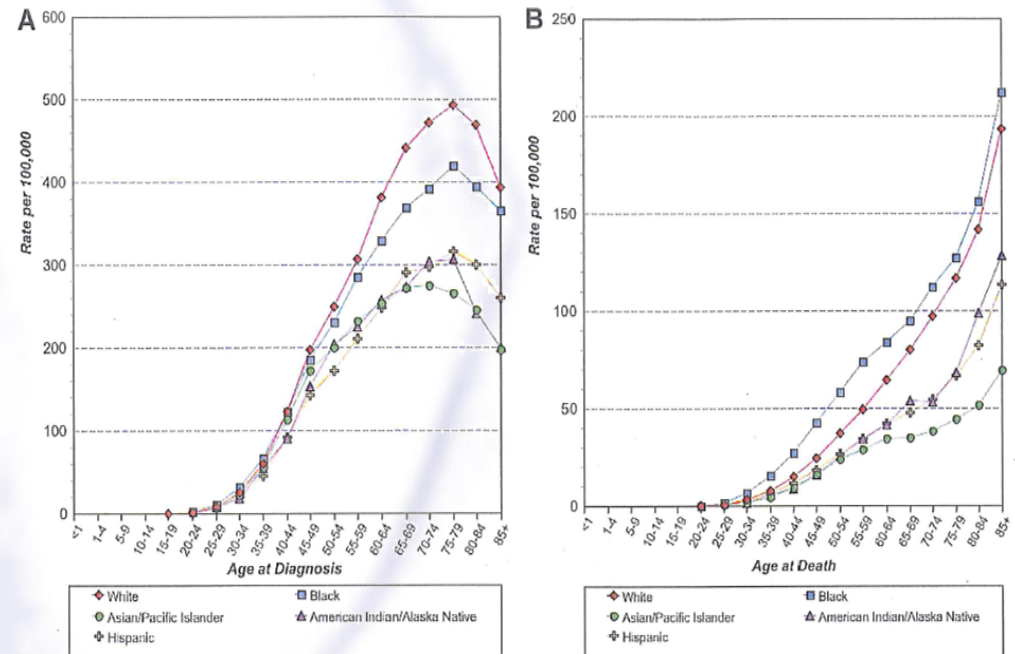
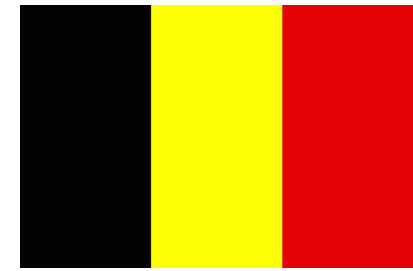


Figure 1. Breast cancer incidence and mortality by age at diagnosis and race/ethnicity. (A): Age-specific SEER female breast cancer incidence rates by race/ethnicity, all ages, 1992–2010. (B): Age-specific US female breast cancer mortality rates by race/ethnicity, all ages, 1992–2010 [16].

Belgium – Newspaper



“Survival rate highly variable between hospitals”

13/12/2013

1 Overlevingskans vijf jaar na diagnose

GEMIDDELD

82%

PERCENTAGE PER ZIEKENHUIS

88% Hoogst scorend ziekenhuis

81% Mariaziekenhuis Overpelt

80% UZ Antwerpen en AZ Groeninge

79% UZ Gent

78% AZ Delta

56% Laagst scorend ziekenhuis

(gecorrigeerd voor leeftijd en stadium borstkankerpatiënte)

R.Wilson, EUSOMA

News paper



Ziekenhuizen zetten hun rapport online

2 Vrouwen met borstkanker stadium I en II die een borstsparende operatie ondergaan

GEMIDDELD

62%

PERCENTAGE PER ZIEKENHUIS

100% Hoogst scorend ziekenhuis

88% Mariaziekenhuis Overpelt

79% AZ Groeninge

70% UZ Gent

65% AZ Delta

61% UZ Antwerpen

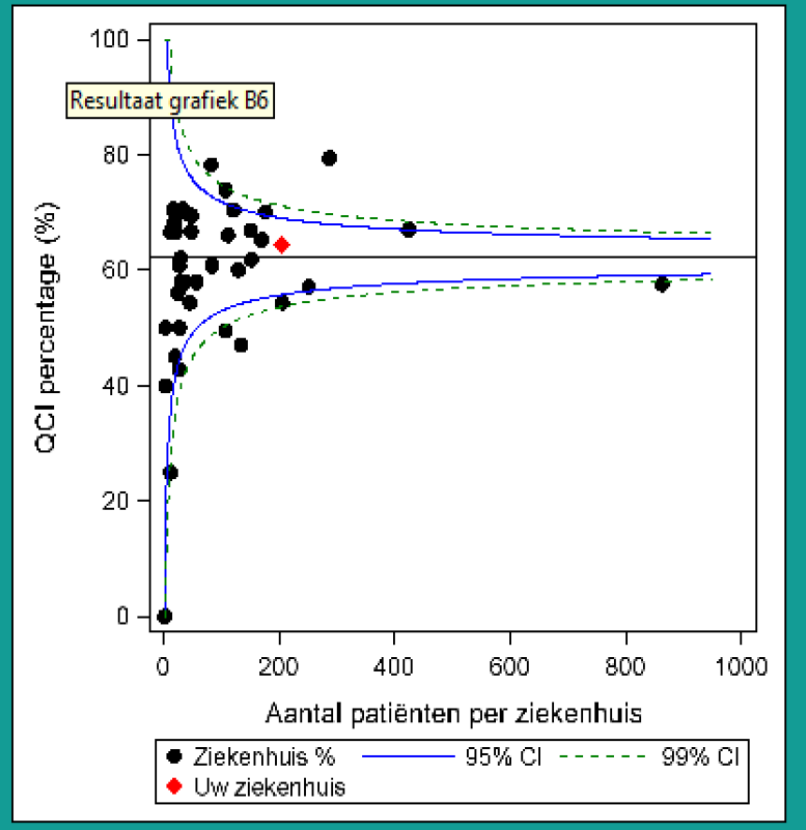
0% Laagst scorend ziekenhuis

Quality indicators

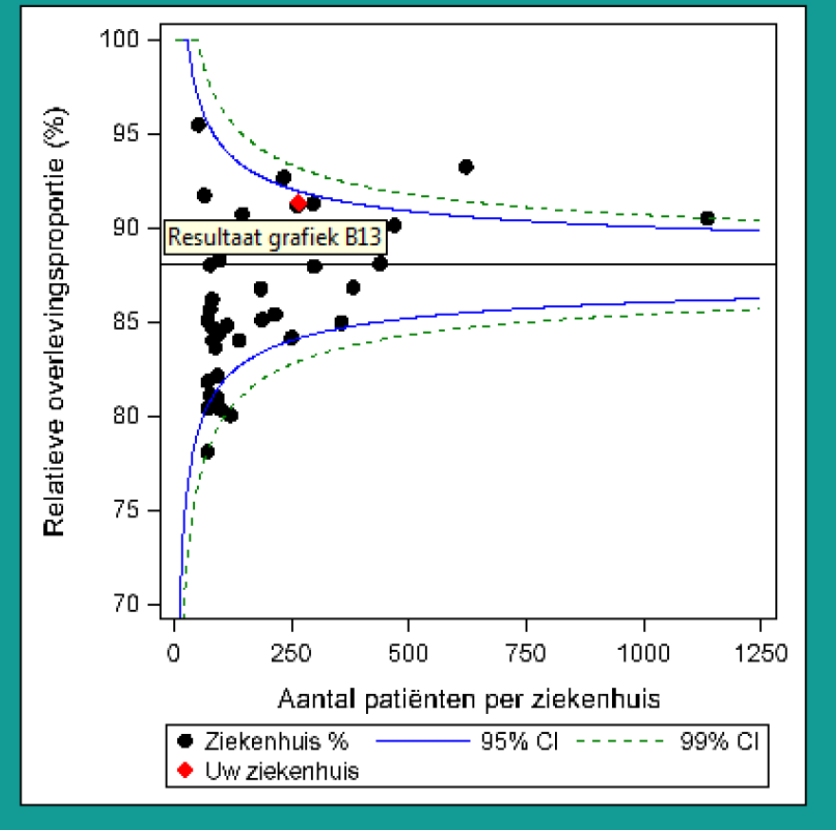
% BCS / Mastectomy

Relative, 5-year survival

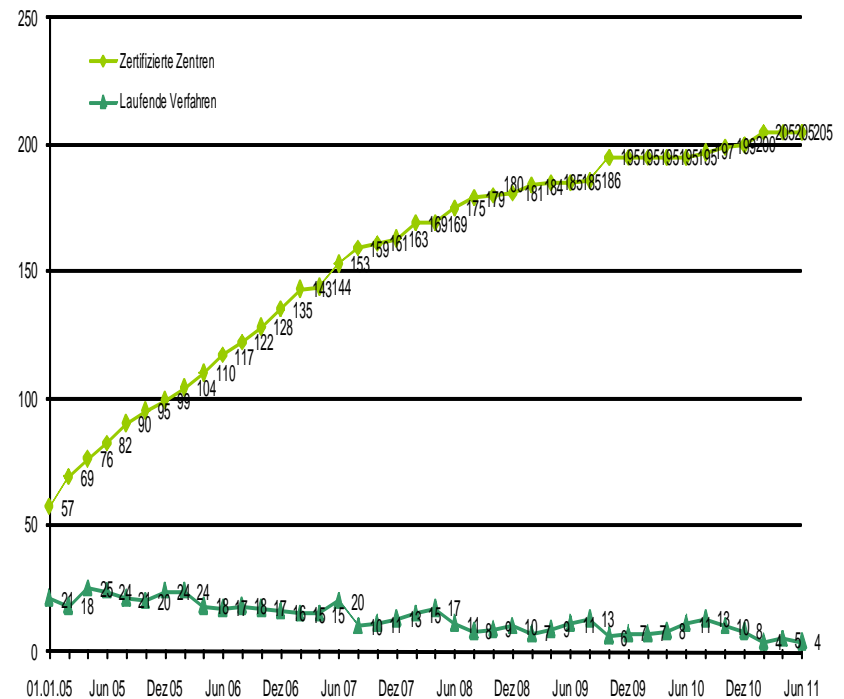
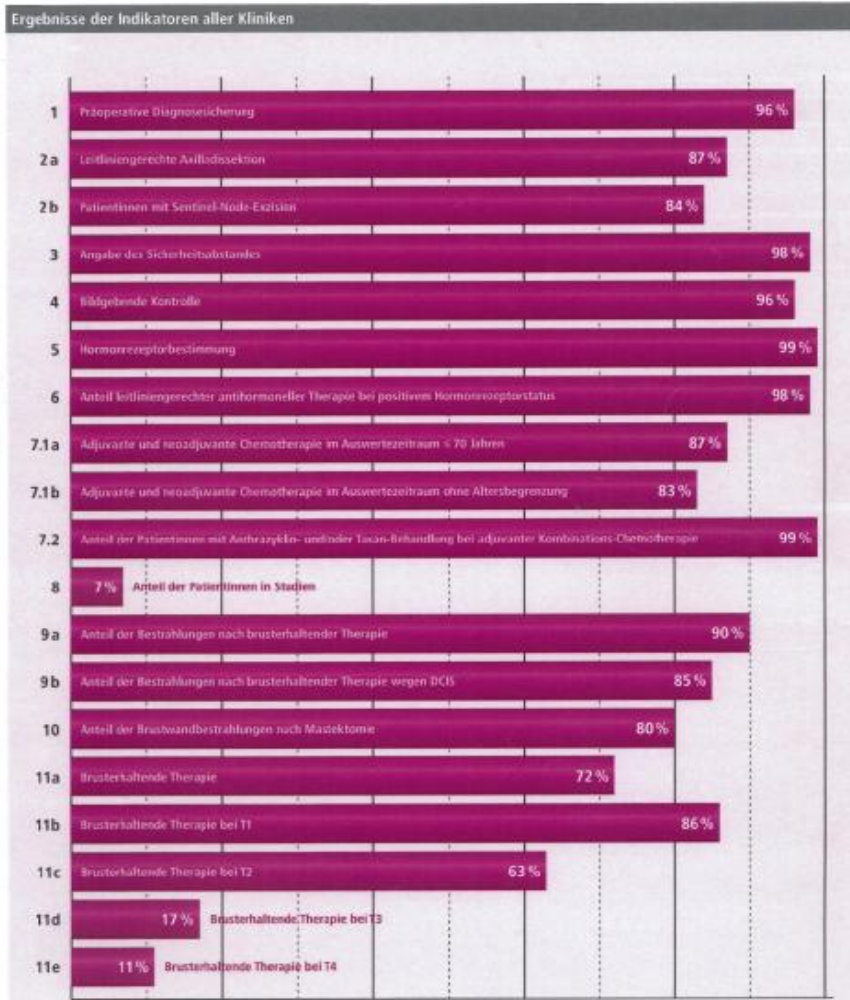
Indicator B6



Indicator B13



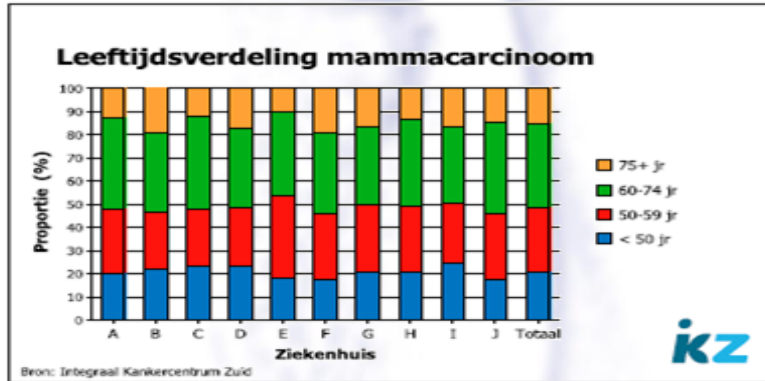
Germany : 91 % treated in certified breast centers



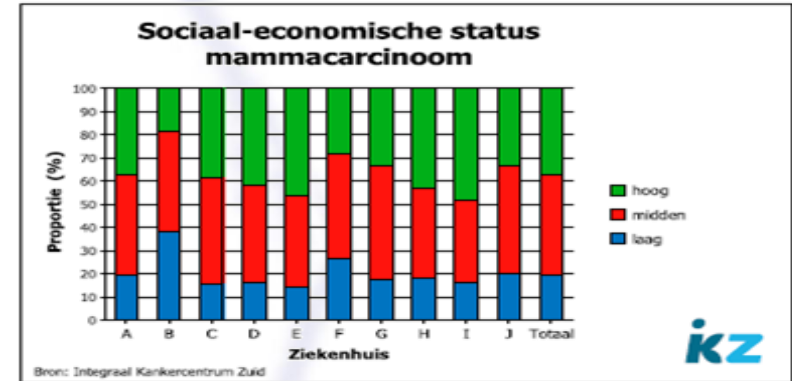
The Netherlands



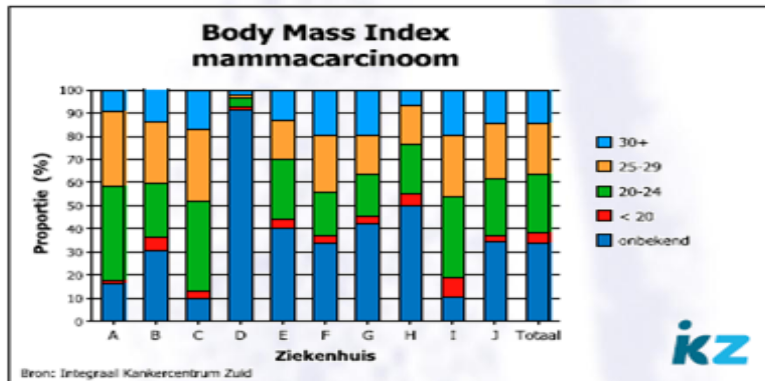
PATIËNTGERELATEERDE CASEMIX NAAR ZIEKENHUIS



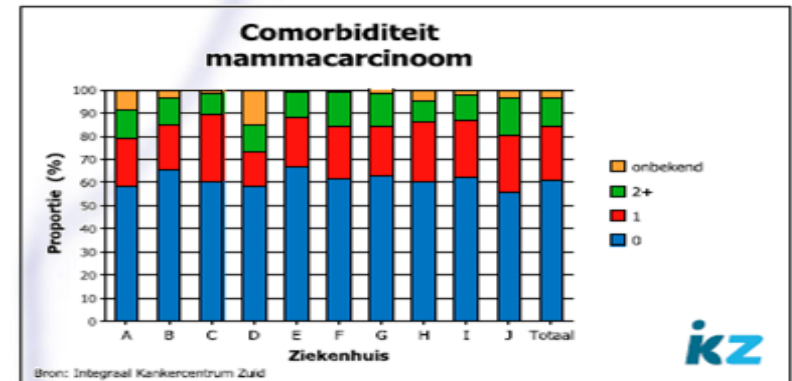
Figuur 2: Leeftijdverdeling patiënten met een mammacarcinoom gediagnosticeerd in 2010 in de IKZ regio, naar ziekenhuis van diagnose (n=2139).



Figuur 3: Sociaal-economische status van patiënten met een mammacarcinoom gediagnosticeerd in 2010 in de IKZ regio, naar ziekenhuis van diagnose (n=1929).

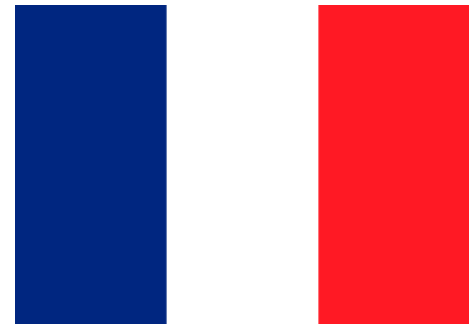


Figuur 4: Body mass index (kg/m²) voor patiënten met een mammacarcinoom gediagnosticeerd in 2010 in de IKZ regio, naar ziekenhuis van diagnose (n=2139).



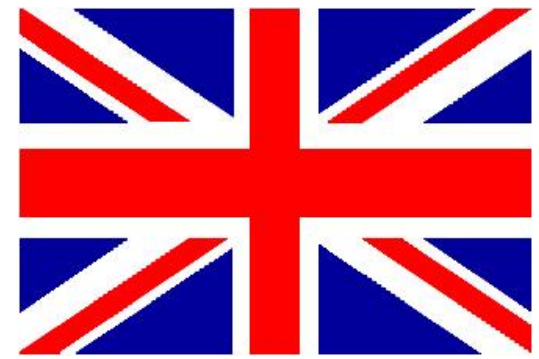
Figuur 5: Aantal bijkomende ziekten voor patiënten met een mammacarcinoom gediagnosticeerd in 2010 in de IKZ regio, naar ziekenhuis van diagnose (n=2139).

France



- **More developed structure indicators (accreditation), less process indicators**
- **Little systemic information on the quality of the health care**
- **Cancer registration incomplete, must be more developed**
- **There is no will from the health care system to promote breast centers ?**
- **Certification of oncology unit more than breast cancer unit.**

UK



- **Several (too many) documents laying out standards**
 - Peer review, NICE, Surgical guidelines, Dept of Health Guidelines, Regional documents,....
- **Indicators covering full patient pathway**
 - Big emphasis on waiting times, 8 different targets
- **Commissioning of breast cancer services (NHS) under supervision of community doctors (GP)**

Quality Indicators, each step along the way is vital (IOM, 1999)

- *"Multiple steps during the diagnostic evaluation of breast cancer are identified at which the quality of care may be affected by the quality of the procedure. **Poor quality at any step could significantly impact the overall quality of care provided.**"*

Difference in screening Programs

TABLE 3-1 Breast Screening Programs in Different Countries*

	United States	Canada	United Kingdom	Sweden ⁱ	The Netherlands	Australia
Year screening program started	1988 (Medicare)	1988 (British Columbia was the 1st province)	1988	1986	1989	1994
Age of women screened (target population)	40 and older, generally until 75	50 to 69	50 to 70	Beginning at 40; ending at 64 or 74	50 to 75	40 to 79
Screening interval (years)	1-2	2 ⁱⁱ	3	1 1/2-2, depending on age ⁱⁱⁱ	2	2
Percent of target population screened	55-63% ^{iv}	54% ^v	76% ^{vi}	89% ^{vii, viii}	78% ¹⁶	54
Referral type	Doctor or self-referral	Doctor or self-referral	Invite	Invite	Invite	Invite or self-referral
Double reading^x	Some ^{xi}	No	No	Yes	Yes	Yes
Number of views	2	2	2 ^{xii}	2	2 ^{xiii}	2
Quality enforcement	National law (MQSA) ^{xiv}	Voluntary accreditation ^{xv}	Voluntary ^{xvi}	National law ^{xvii}	National law ^{xviii}	National accreditation requirements ^{xix}
Quality assurance site visits	Yes	No	Yes	Yes	Yes	Yes
Level of organization	Medicare is national; otherwise based on state and private insurance provider policies ^{xx}	Province ^{xxi}	National	County (Swedish counties are comparable to stated in the U.S.)	National	National

Comparison of screening outcome

TABLE 3-2 Comparison of Screening Mammography Outcomes in the United States and Britain

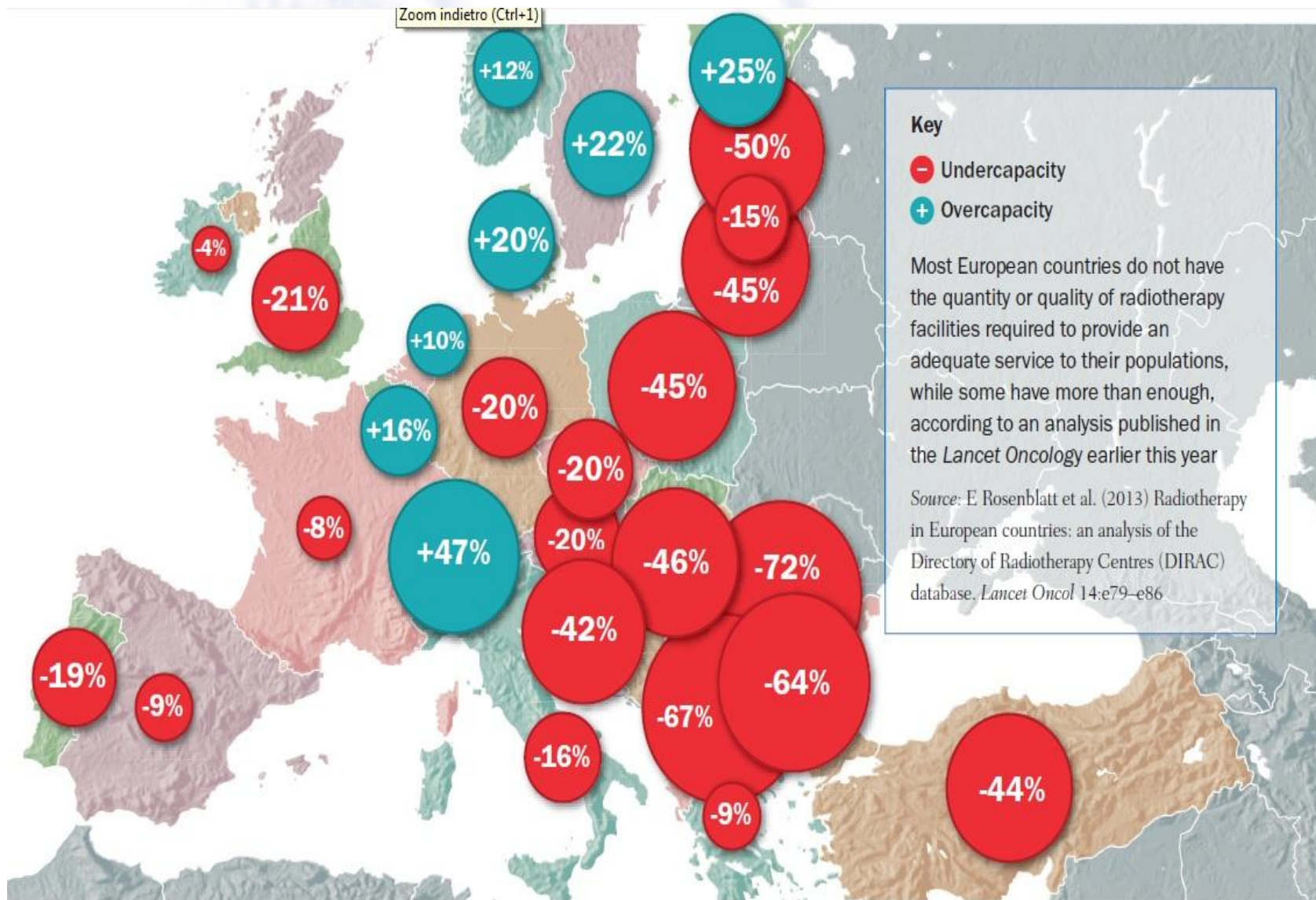
	United States	Britain	Source	Comments
Sensitivity	77% (>300/month) 70% (≤300/month)	79% (>300/month)	Esserman et al., 2002, <i>JNCI</i> ¹	Used enriched test set; U.S. figures are for high-volume radiologists
Specificity	88% (>300/month)	88%		Volume was not significantly correlated with specificity for any of the groups.
Mammograms judged to be abnormal at 1st screen	12.0%	7.4%	Smith-Bindman, 2003, <i>JAMA</i>	U.S. value = median of estimates from two data sets (11.2-13.1)
Mammograms judged to be abnormal at later screens	7.4%	3.6%		U.S. value = median of estimates from two data sets (6.8-8.0)
Mammograms judged to be abnormal	6.9%	4.9%	Elmore et al., 2003, <i>JNCI</i>	Values are medians of estimates for three or more studies; included both 1st and subsequent screening mammograms
Women with abnormal mammograms later diagnosed with breast cancer	7.6%	12.3%		Values are medians of estimates for three or more studies
Negative biopsies	73%	40%		Included all types of biopsy
Biopsy rates/100 screening mammograms for later screens	0.33	0.28	Smith-Bindman, 2003, <i>JAMA</i>	Differences are <i>not</i> significant
Negative open surgical biopsies at 1st screen	82%	36%		
% Negative open surgical biopsies at later screen	22%	10%		
% Cancers detected	78.6% (>300/month) 70% (≤300/month)	83.5%	Esserman et al., 2002	
# Cancers detected at 1st screen/1,000	6.8	8.4	Smith-Bindman, 2003, <i>JAMA</i>	Median of estimates from two data sets (6.3-7.2)
# Cancers detected at later screens/1,000	2.6	4.3		U.S. value = Median of estimates from two data sets (2.3-2.8)
% Invasive cancers detected at early stage (T1NoMo)	41%	26%	Sant, 2003, <i>Int J Cancer</i> ; Sant, 2004, <i>Int J Cancer</i>	U.S. data from SEER; UK based on median of two counties (18-34%); for cases diagnosed in 1990s
Five-year survival rate for invasive breast cancers	89%	78%		U.S. data from SEER; U.K. data based on median of two counties (73-83%) for cases diagnosed in 1990s
Mortality rate for all breast cancers/100,000	21.2	26.8	Cancer Facts & Figures 2003, ACS	

Surgery : ratio BCS/Mastectomy

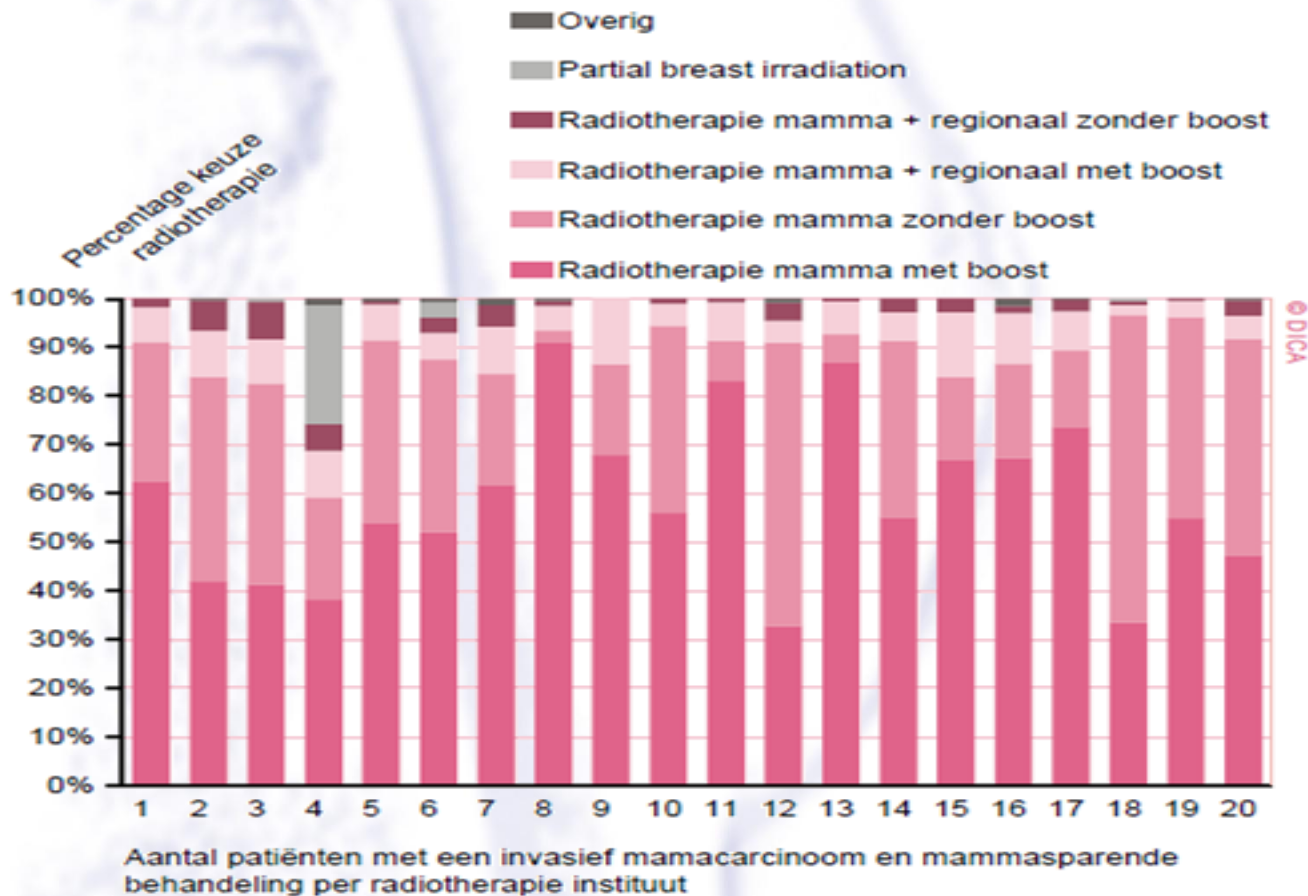
- Fluctuating across time and geography
- Site specific
- Interaction patient/doctor
- Proportion of mastectomy after 1 year (recurrence)
- Esthetic results



Radiotherapy facilities in Europe (2013)



Radiotherapy after BCS



figuur 2: Vormen van radiotherapie voor patiënten met een invasief mamacarcinoom die mammasparend behandeld zijn per radiotherapie instituut. (2011)

Waiting time

- Issue depending of accessibility of the health care
- Data of 6000 pt in doubt !
 - =>System working in function of “indicators”

Targets Around Waiting times, UK

- Two week wait referrals seen in 2 weeks (cancer initially suspected) - **93%***
- Breast symptom two week wait (cancer not initially suspected) - **93%**
- Patients treated within 62 days of two week referral - **85%**
- Patients treated within 31 days of agreeing treatment plan - **96%**
- Patients treated within 62 days of screening referral - **90%**
- Patients subsequent treatment within 31 days (surgery) - **94%**
- Patients subsequent treatment within 31 days (drugs) - **98%**
- Patients subsequent treatment within 31 days (radiotherapy) - **94%**

* (% refers to standard as proportion of patients)



Participation in clinical trials

- Germany :
 - Between 10% and 20 %
- The Netherlands :
 - > 10%
- US :
 - > 2%

- Conflicts of interest between sponsors and investigators

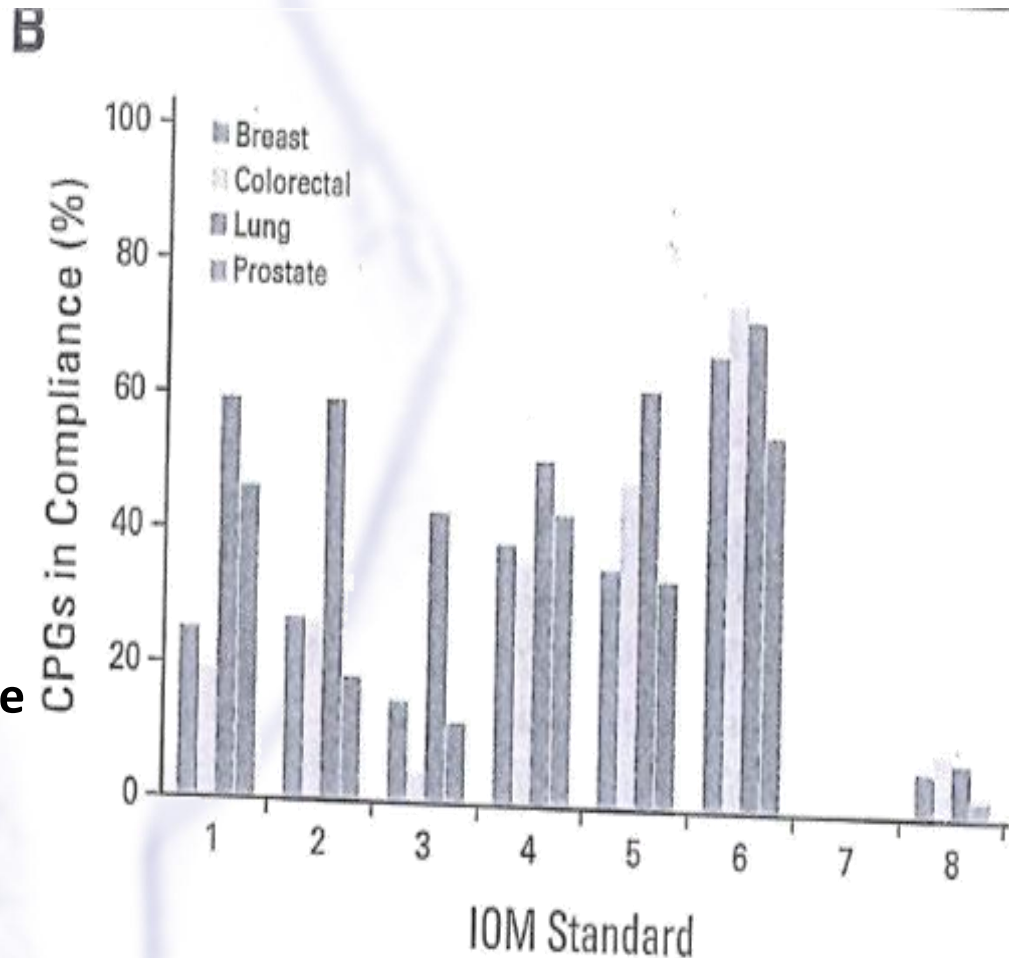


**Le
mensonge
tue**



Oncology Clinical Practice Guidelines (B.Reames,JCO,2013)

- **Vast majority fail to meet the IOM standards**
 - 1.Transparency
 - 2.COI
 - 3.Guideline development group composition
 - 4.Systematic review
 - 5.Rating strength of evidence
 - 6.Articulation of recommendations
 - 7.External review
 - 8.Updating



Conclusion 1

- **A lot of data, difficult to compare**
- **Few indicators suitable for comparison**
- **Some international initiatives**
:OECD,ICBP,EUROCARE
- **Country specific differences**
- **Disparities depending on different multifactorial reasons**

Conclusions 2

- **In depth analysis highly informative**
- **Fear to create a system in function of indicators**
- **Fear of wrong information of the public opinion**
- **Future : “Pay for Performace” system**
- **Building cost-effectiveness models**

Thanks !

- **Judy Wagner RN , patient advocate, US**
- **All members of the Breast Clinic Voorkempen**

