



Global health disparities, organisatie van Zorg een wereld van verschil?

Erwin Humer

Manager bevolkingsonderzoek
darmkanker

Is het gras bij de buren groener dan bij ons?

(een rondgang langs de velden)



- 4 sessies bezocht
- Site visit Methodist Hospital San Antonio
- Europees perspectief
- Nederlands perspectief





ONS sessies

- Dr Winnie SO, President,
Asian Oncology Nursing Society
- Tracy Truant, President,
Canadian Association of Nurses in Oncology
- Raymond Chan, President,
Cancer Nurses Society of Australia
- Stella Aguinaga Bialous, President,
ISNCC
- Paul Travett
European Oncology Nursing Society



Azie



**Estimated cancer incidence, mortality and prevalence worldwide
and Asia in 2012**

	World	Asia	North America
Population (thousands)	7054446	4249231	350594
Number of new cancer cases (thousands)	14067.9	6763.0	1786.4
Age-standardised rate (per 100 000 persons per year.)	182.0	152.2	315.6
Number of cancer deaths (thousands)	8201.6	4499.5	691.5
Age-standardised rate (per 100 000 persons per year.)	102.4	100.1	105.5
5-year prevalent cases, adult population (thousands)	32455.2	13191.7	5315.4
Proportion (per 100,000)	625.0	415.6	1888.2
5 most frequent cancers (ranking defined by total number of cases)	Lung Breast Colorectum Prostate Stomach	Lung Stomach Breast Colorectum Liver	Prostate Breast Lung Colorectum Bladder

Cancer health disparities across countries of different income levels

High-income countries				Low- and middle-income countries			
Country	Incidence (ASR)	Mortality (ASR)	1 – MIR	Country	Incidence (ASR)	Mortality (ASR)	1 – MIR
Israel	283.2	94.4	0.667	China	174.0	122.2	0.298
Japan	217.1	93.8	0.568	India	94.0	64.5	0.314
Korea	307.8	100.3	0.674	Malaysia	143.6	84.8	0.409
Singapore	206.4	90.5	0.562	Pakistan	111.8	79.6	0.288

ASR: age-standardised rate (per 100,000 population); MIR: mortality-incidence ratio

IARC – Globocan 2012

Cancer health disparities between ethnic groups within a country

Age-standardised rate (ASR) of colorectal cancer incidence in Singapore

Ethnic group	ASR of colorectal cancer incidence
Chinese	34.3
Malays	24.6
Indians	15.7

ASR: per 100,000 population

Source: Singapore Cancer Registry, 2014

Cancer health disparities between ethnic groups within a country

Age-standardised rate (ASR) of cervical cancer incidence divided by different ethnic groups in China

Ethnic Minority	Ethnic group	ASR of cervical cancer incidence
	Han	5.24
	Uyghur	17.27
	Mongols	15.72
	Hui	12.29

ASR: per 100,000 population

董丹 et al. 2015

Disparities between rural and urban residents within a country

Age-standardised rate (ASR) of incidence and mortality of all cancers in India

Gender	Parameter	Barshi (rural)	Bhopal (urban)
Male	ASR of incidence	51.5	104.6
	ASR of mortality	40.7	47.4
	1 – MIR	0.210	0.547
Female	ASR of incidence	55.1	105.5
	ASR of mortality	38.6	33.8
	1 – MIR	0.299	0.680

ASR: per 100,000 population

Source: National Cancer Registry Programme, India 2010

Factors that contribute to cancer health disparities in Asia

- Economic status
- Cultural issues and religion
- Health illiteracy
- Access to healthcare services

Governmental healthcare expenditure

- Insufficient resources for the universal provision of healthcare services.
 - Generally higher out-of-pocket healthcare expenditures (% of total health expenditure paid by the individuals) in low- and middle-income countries (WHO, 2015)
 - LMICs: India = 58.2%, Pakistan = 54.9%,
 - HICs: Japan = 14.4%, Korea = 36.6%
 - Accessibility to healthcare services is lower in low- and middle-income countries, as not everyone can afford the cost.
- Contribute to the lower survival rate among individuals in low- and middle-income countries.

Asian Oncology Nursing Society

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Out of the pocket

Cultural and religious issues

- Cultural beliefs that hinder health seeking behaviours:
 - Beliefs that cancer is a stigma
 - Reluctance of being handled by health professionals of the opposite sex
- Religion and alcohol consumption

Health illiteracy

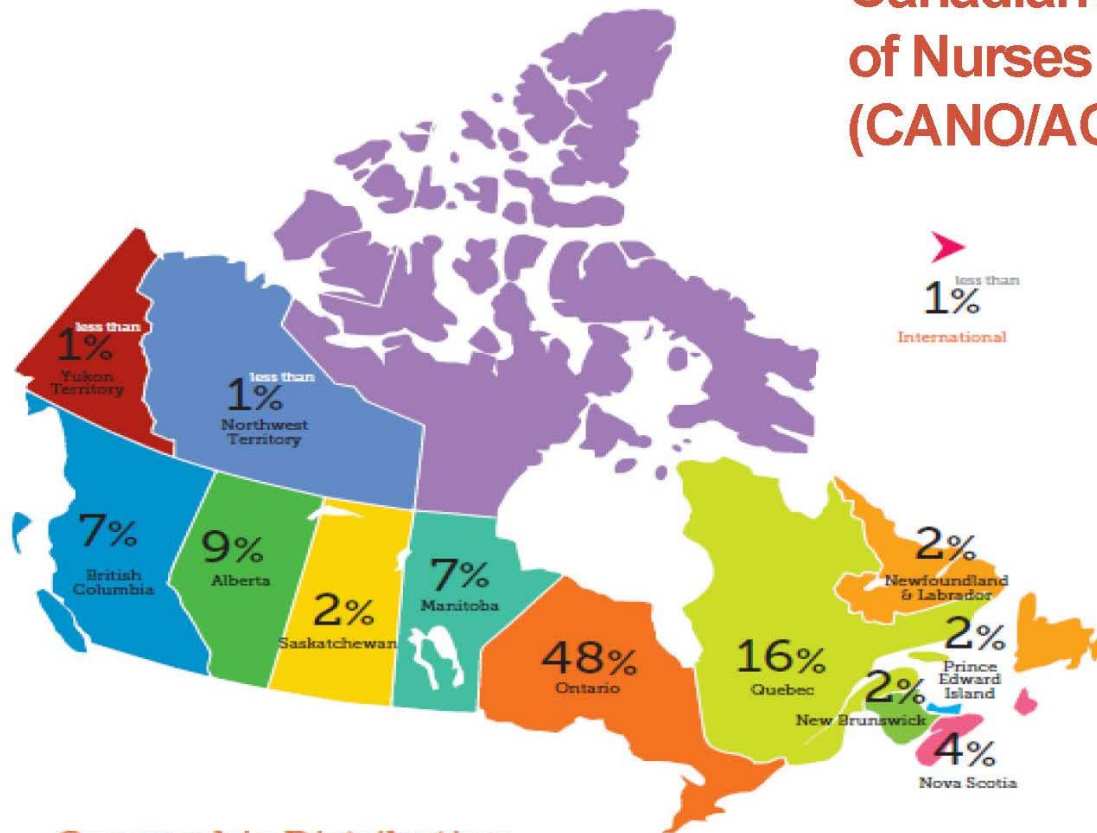
- Insufficient knowledge of, and misconceptions about, various types of cancer.
- Not familiar with various cancer screening tests / treatment methods.

Access to healthcare services

- Preference of health professionals to work in urban areas. (Rao *et al*, 2011)
- Advanced medical facilities are located in metro areas rather than rural areas. (Choi, 2016)
- Access costs time and money, causing inconvenience for rural residents.
 - 70% of rural Indians experience difficulties in accessing healthcare services (Balarajan *et al*, 2011)

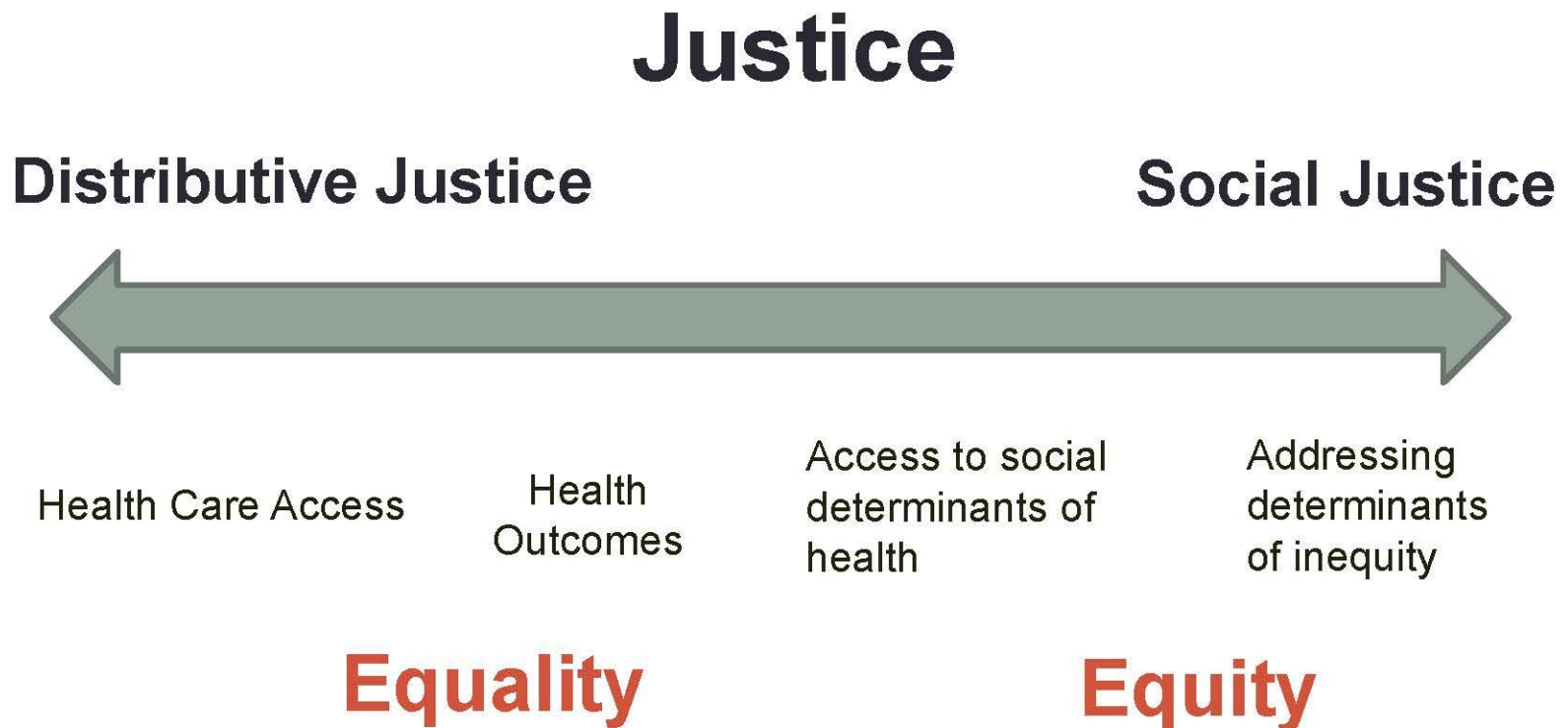
Canada

Canadian Association of Nurses in Oncology (CANO/ACIO)



Geographic Distribution

Equity, Equality and Justice in Health Care



Varcoe, C. Health disparities in cancer care: Foundational Concepts. In: Varcoe C, Habib S, Sinding C, Fitch M, Gullatte MM, Cummings GG. Health disparities in cancer care: Exploring Canadian, American and international perspectives. *Canadian Oncology Nursing Journal*. 2015;25. p. 73-74.

High Quality Cancer Care

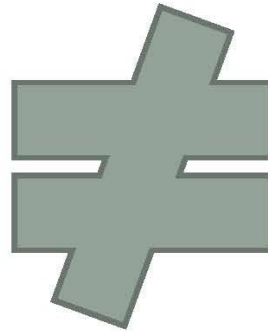
Alignment of timely, effective and relevant resources with patient needs to achieve optimal health

- Person-centered
- Holistic
- Coordinated
- Evidence informed
- Opportunities to develop relationships
- Address the social determinants of health
- Attention to equity
- Attention to shaping policy
- Considers individuals and aggregates
- Considers cost



Browne et al., 2012; Canadian Partnership Against Cancer, 2012; Feuerstein & Ganz, 2011; Hewitt et al., 2006; Institute of Medicine, 2013; Lotfi-Jam et al., 2009; Malin et al., 2011

**Navigator
Roles**



**Equitable
Cancer
Care**

(Access



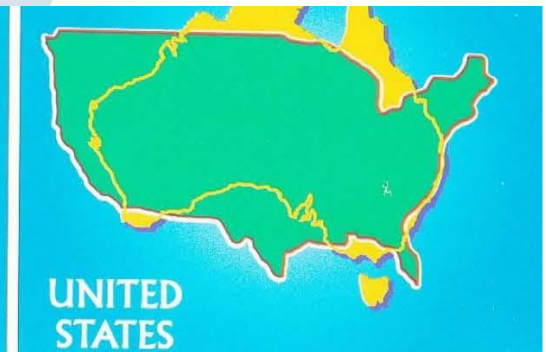
Equity)



Summary Points

- **Navigation** is a core element of all oncology nurses' roles
- A **navigator** may be one resource in an overall system of care that has navigation as a core element.
- **Equity** and **equality** are not the same
- A **social justice** perspective considers not only *what is* by also *why*?
- Attention at the individual level as well as **addressing the root causes of inequity** must be used together to promote equity oriented, high quality cancer care.

Australie



AUSTRALIA... A BIG COUNTRY!

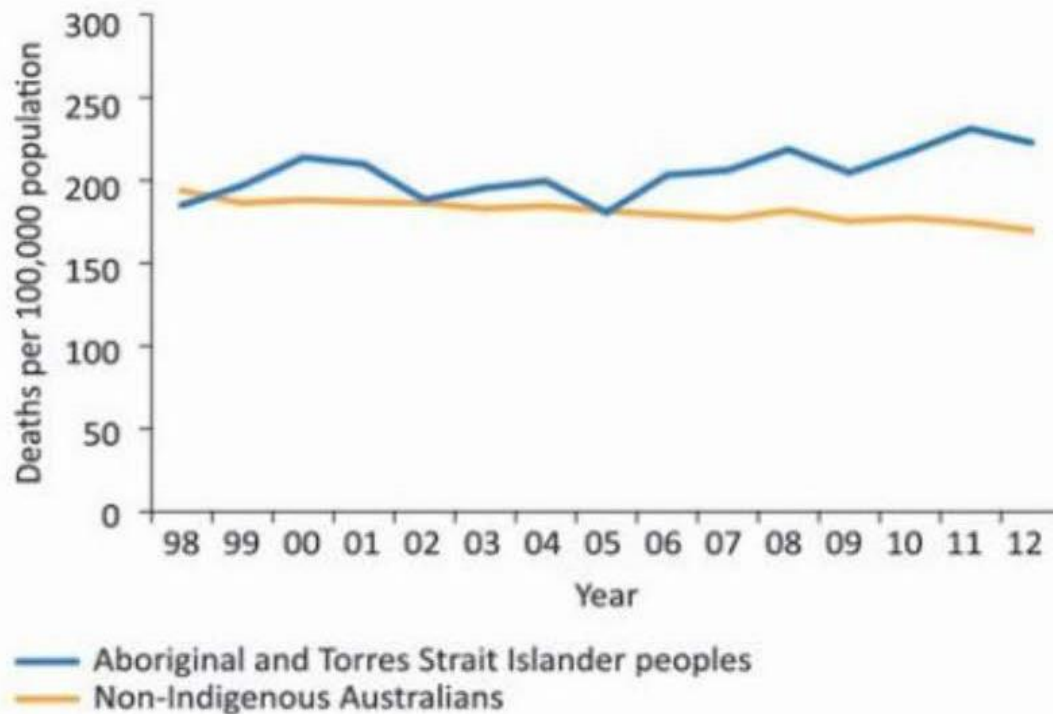


Disparities: Trends and Challenges



Trends and Challenges

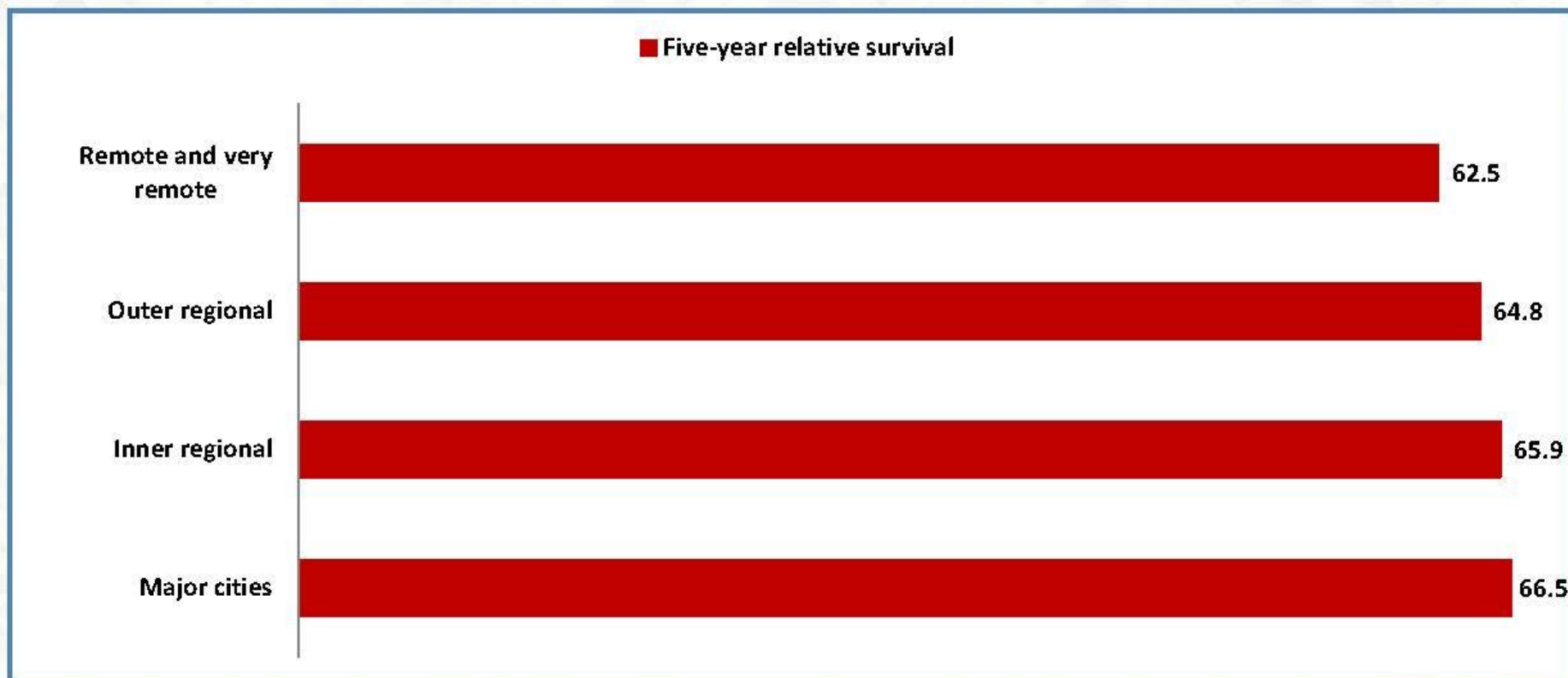
Mortality due to cancer in Aboriginal and Torres Strait Islander peoples





Trends and Challenges

Five-year relative survival by remoteness area, 2006-2010



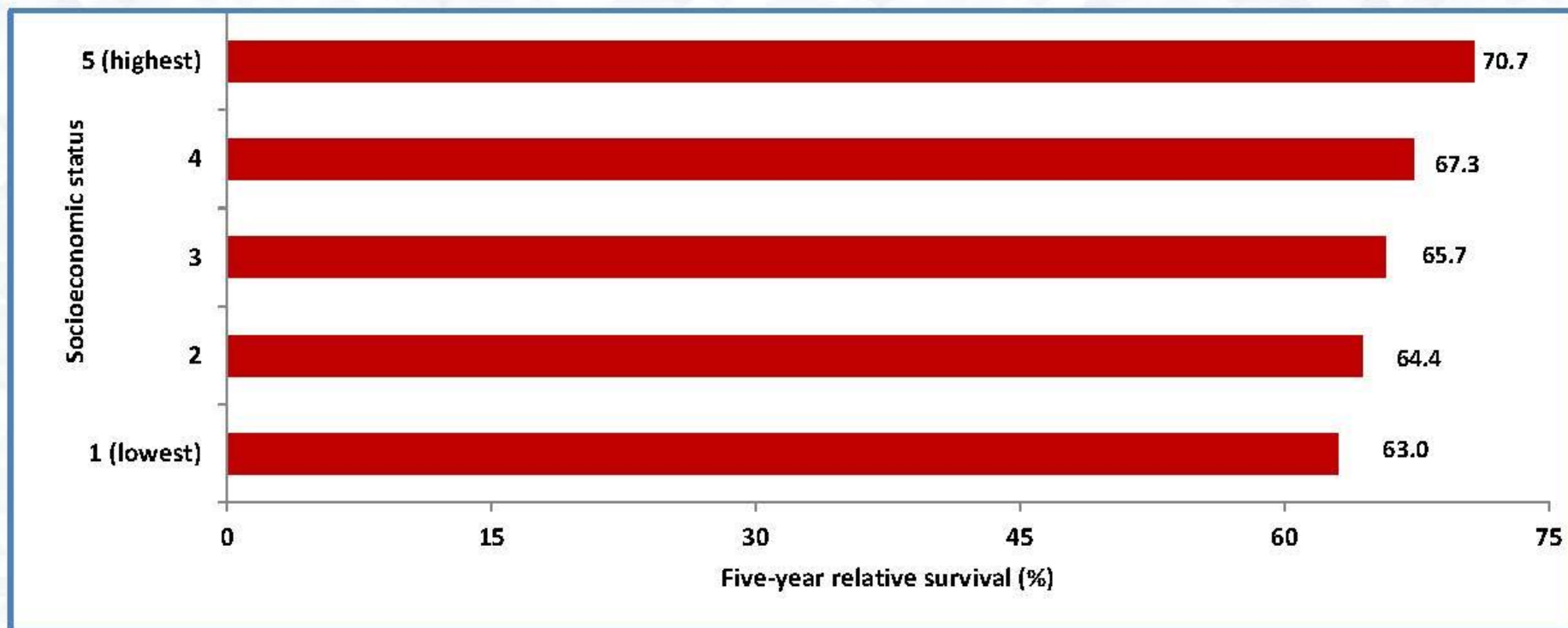
Acknowledgement: Cancer Australia





Trends and Challenges

Five-year relative survival by socio economic status, 2006-2010



Acknowledgement: Cancer Australia



Survivorship and Supportive Care Outcome Data



Any Solution?

- Government Agencies (Commonwealth and State)
- Researchers and Clinical Trial Groups
- NGOs
- Public and Private Health Providers
- People affected by Cancer
- Advocacy Groups
- Health Professional and Professional Colleges
 - A Specific Workforce: Cancer Care Coordinators

Whole-of-System Approach

National Professional Colleges
Advocacy Groups



Government Agencies

Researchers and
Clinical Trial
Groups



Public and Private Health Providers
NGOs

Cancer Care Coordinators/
Nurse Navigators



Health Professional
People affected by Cancer

1. Assess and screen for care needs & people at risk for adverse outcomes
2. Facilitate delivery of cancer care consistent with evidence-based guidelines
3. Ensure timely and appropriate referral to specialist, allied health & support services
4. Facilitate continuity of care between health professionals and across settings for care delivery
5. Provide timely & consistent education to patients and their families
6. Participate in service improvement activities that aim to improve coordination of care and optimise outcomes

COSA 2015:



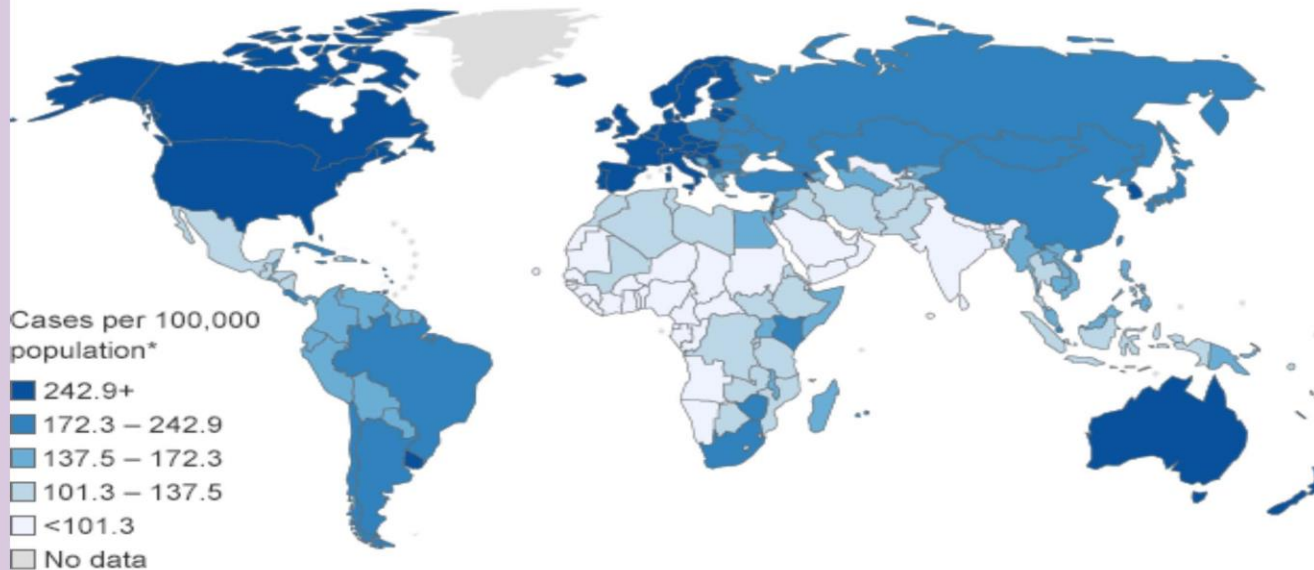
Endorsed by:



ihbi

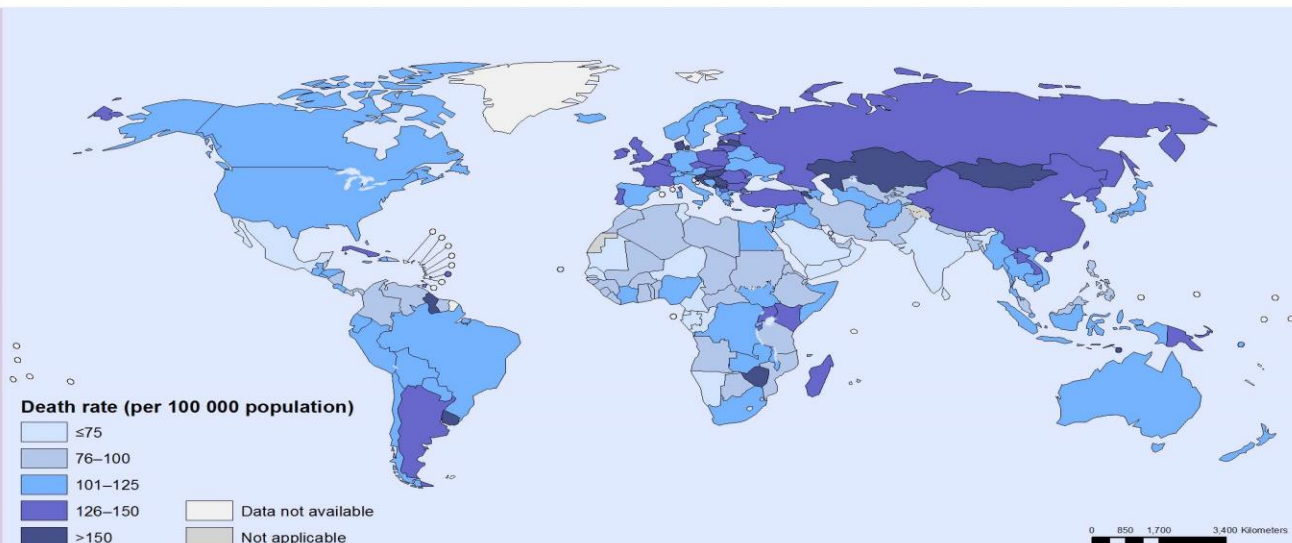
Institute of Health and Biomedical Innovation

ISNCC

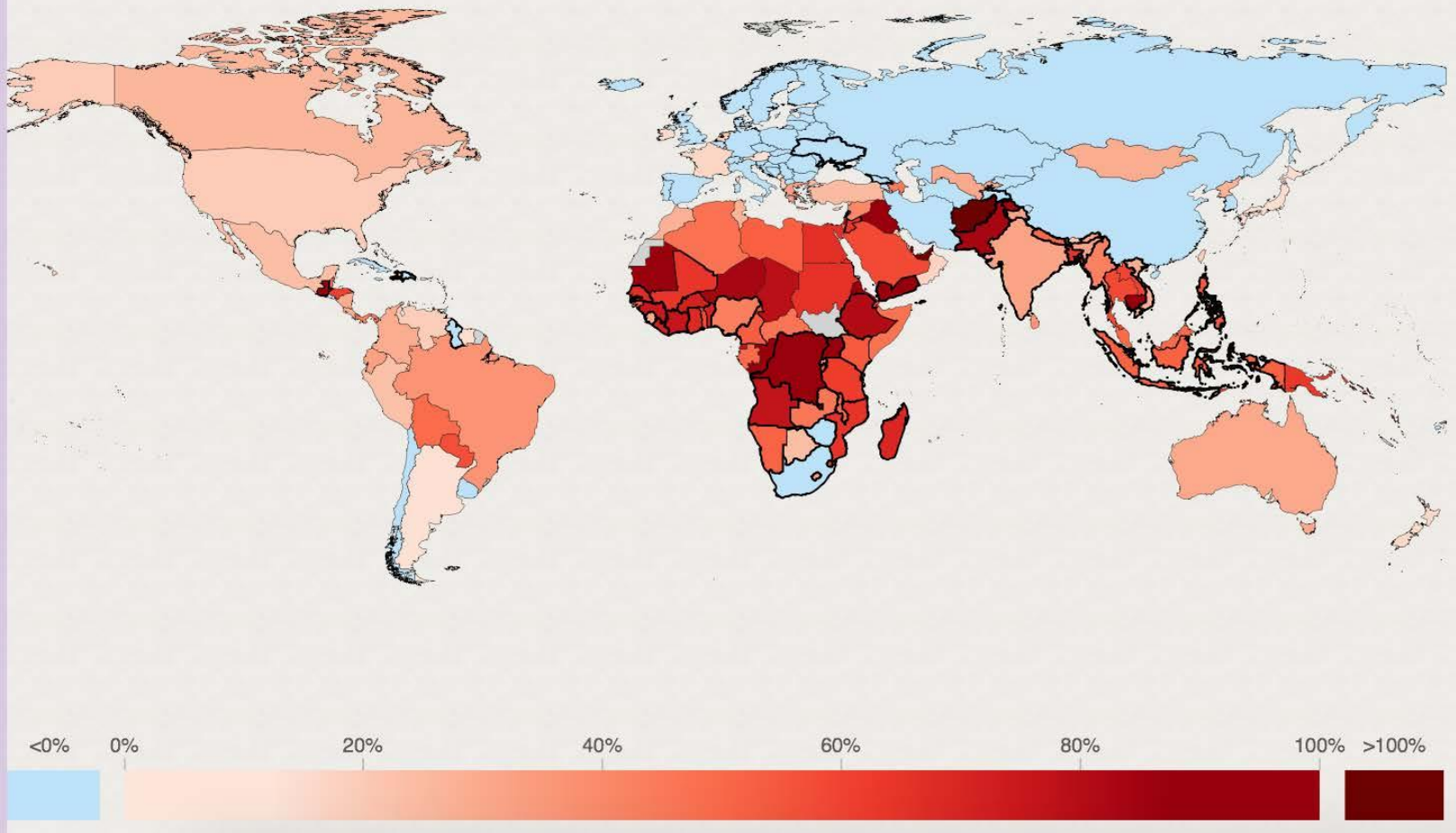


World Cancer Cases and Mortality, 2012

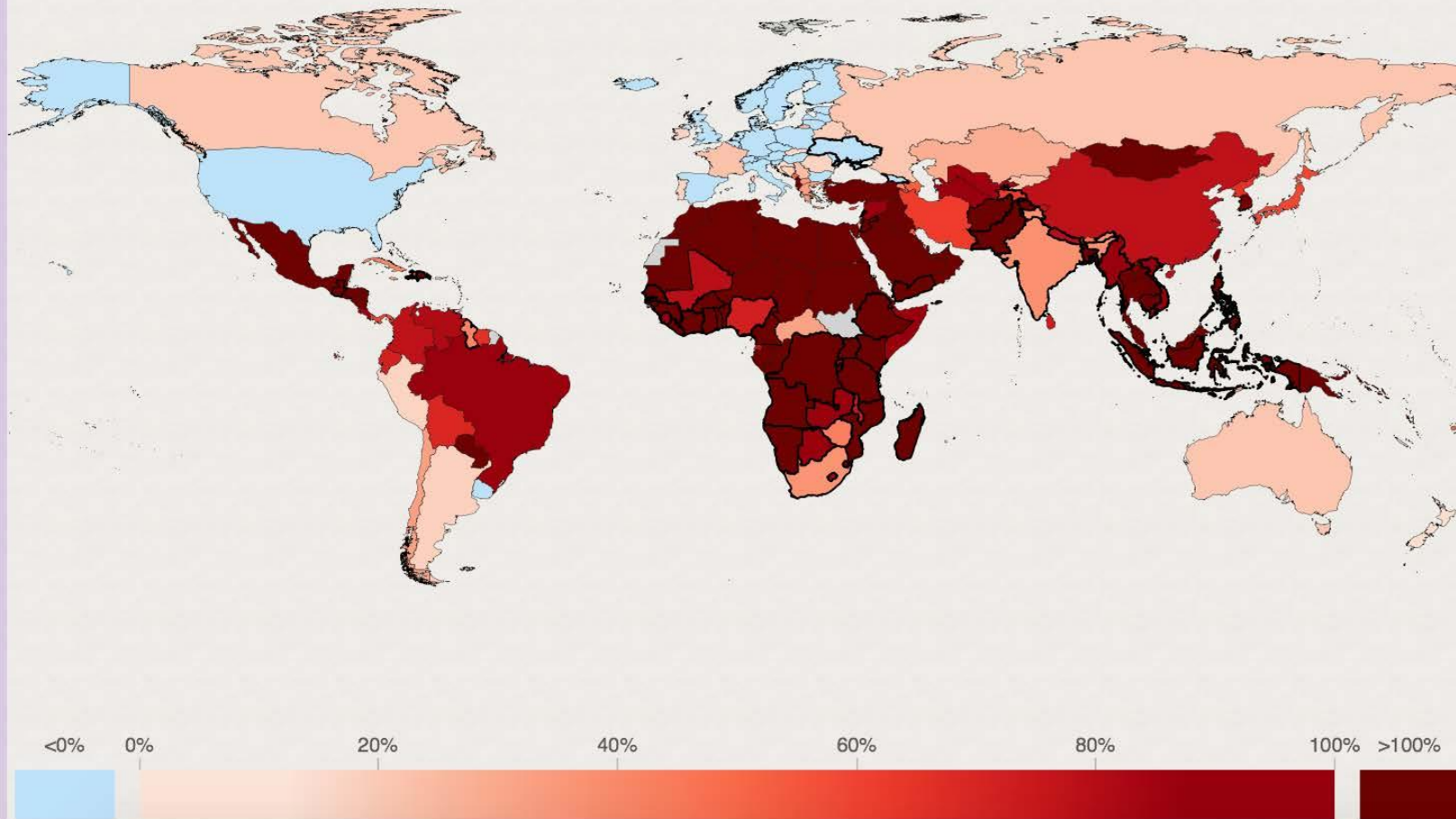
Source: WHO GloboCan



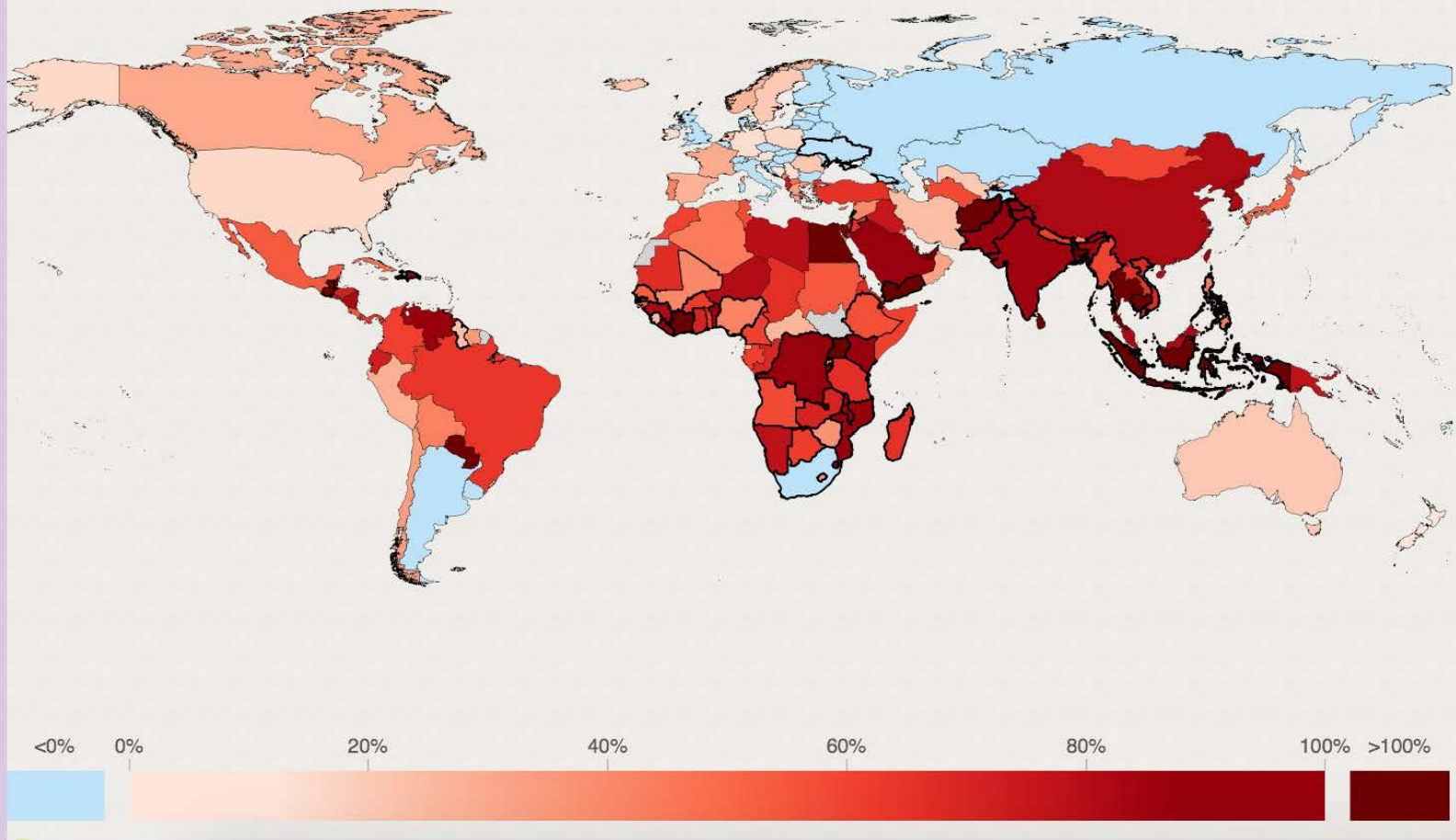
Percent Change in Leukemia DALYs, 1990-2010



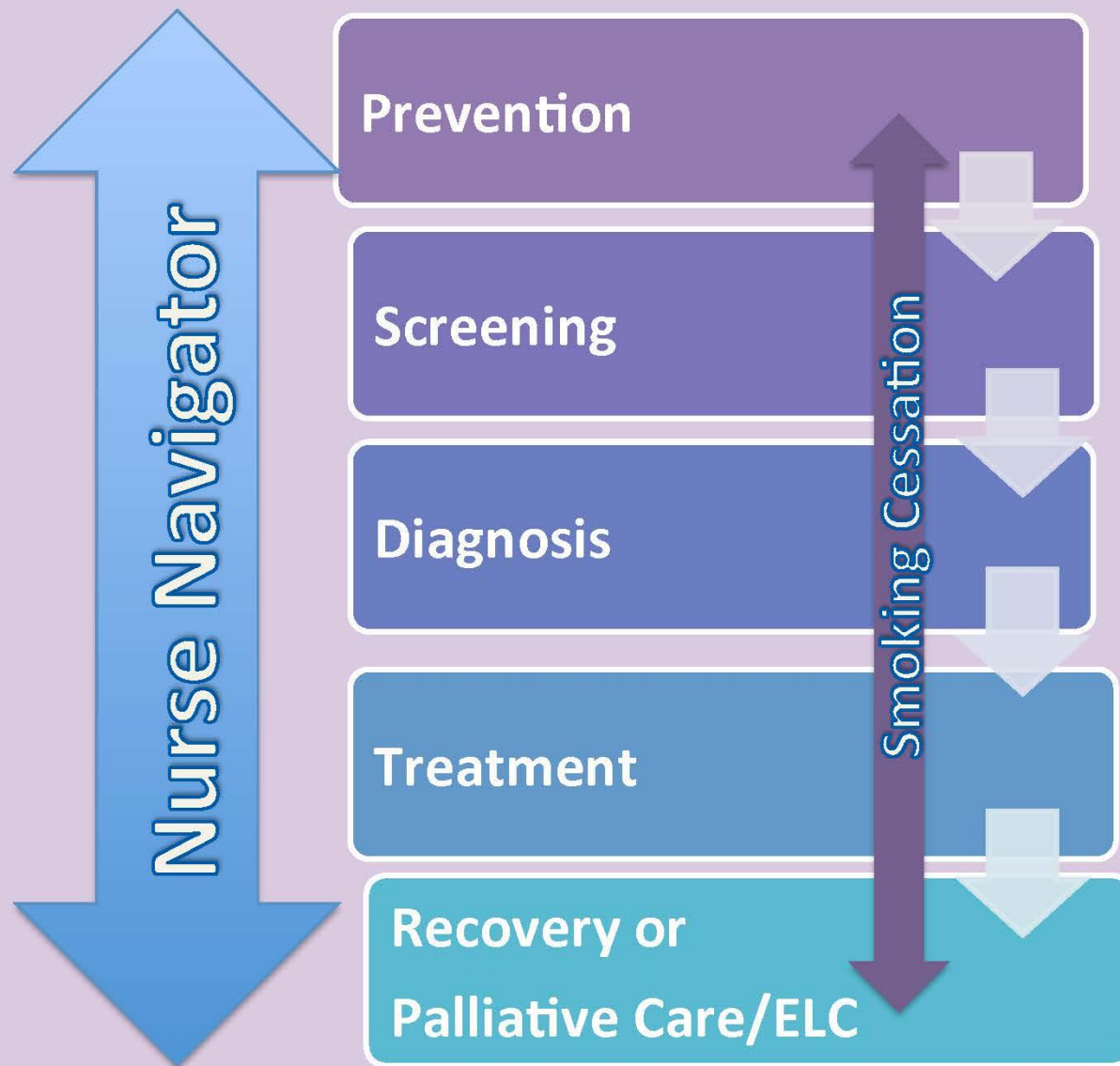
Percent Change in Breast Cancer DALYs, 1990-2010



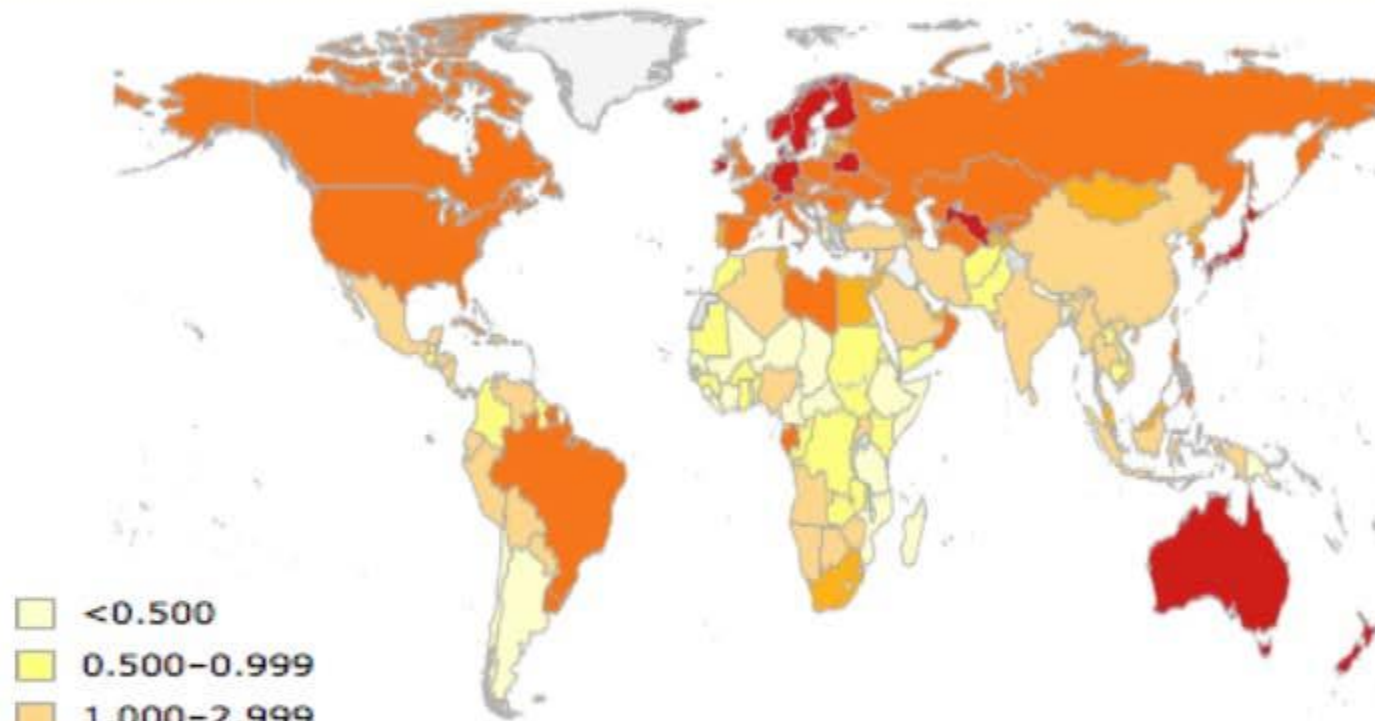
Percent Change in Lung Cancer DALYs, 1990-2010



Lung Cancer:



WHO Map: Density of nursing and midwifery personnel (total number per 1000 population, latest available year)



Nurse Navigator Challenges

- Personnel: insufficient number of nurses
- Cultural: nurses' role
- Scope of Practice
- Nurses' education
- Disparities in cancer care mirror disparities in Professional Nursing



Methodist Hospital San Antonio

- Geen opvallende visuele verschillen
- Veel overeenkomsten: personeelstekort, hoge werkdruk, hoge betrokkenheid
- 5 Sociaal Werkers: meer problemen met verzekeringsvoorwaarden van patiënten



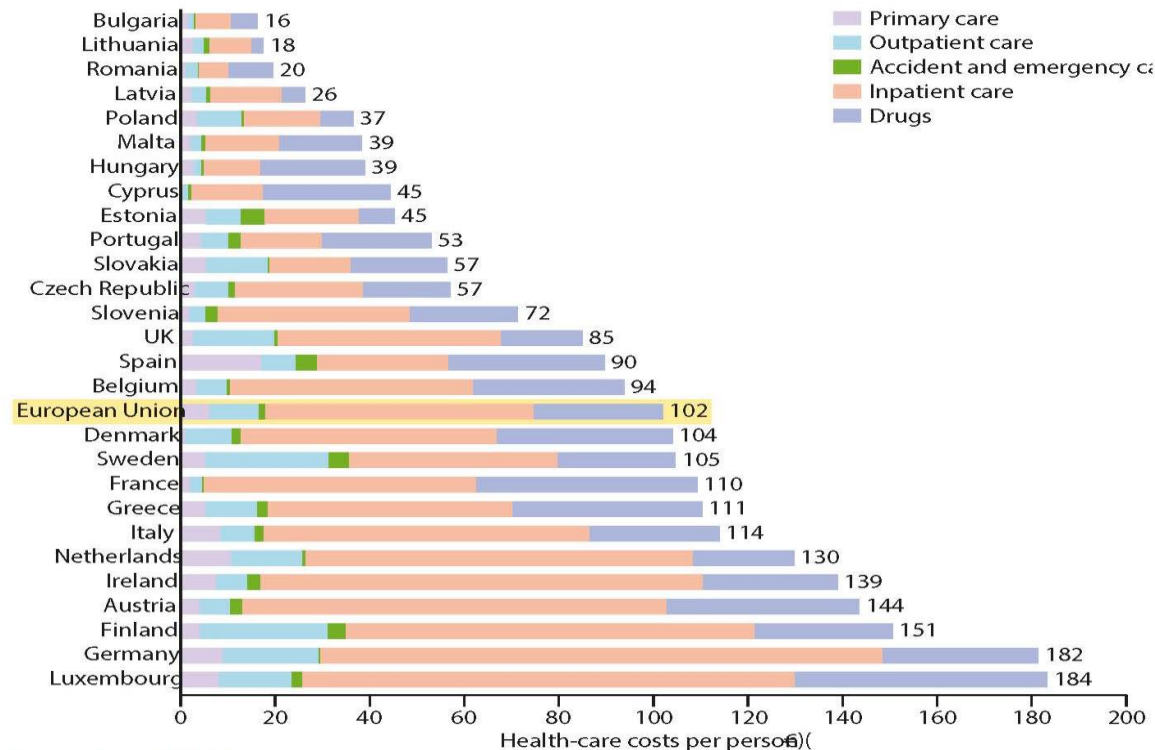


**„We cannot be a
strong nation
unless we are a
healthy nation“**

President Franklin D. Roosevelt

Europees perspectief

Costs of cancer care per person in EU in 2009, by service category



Health-care costs of all cancers and of colorectal, lung, breast, and prostate cancers EU in 2009, by country

	All cancers		Colorectal cancer		Lung cancer		Breast cancer		Prostate cancer	
	Cost per person (€)	Adjusted cost per person(€)*	Cost per person (€)	Adjusted cost per person(€)*	Cost per person (€)	Adjusted cost per person(€)*	Cost per person (€)	Adjusted cost per person(€)*	Cost per person (€)	Adjusted cost per person(€)*
Austria	144	119	16	13	13	11	19	16	14	12
Belgium	94	71	12	9	8	6	12	9	11	8
Bulgaria	16	54	1	5	1	2	2	8	1	5
Cyprus	45	47	4	4	2	2	7	7	4	4
Czech Republic	57	104	7	13	5	9	7	13	6	11
Denmark	104	69	12	8	10	6	13	8	12	8
Estonia	45	82	6	11	4	7	7	13	4	7
Finland	151	127	15	13	12	10	20	16	16	14
France	110	97	10	9	7	6	15	13	15	13
Germany	182	171	21	20	16	15	29	27	21	20
Greece	111	128	8	10	10	11	17	20	14	16
Hungary	39	80	4	8	4	8	6	12	5	11
Ireland	139	88	15	10	13	8	15	9	11	7
Italy	114	96	13	11	9	8	11	9	10	8
Latvia	26	53	3	6	2	4	4	8	2	4
Lithuania	18	33	2	4	1	3	2	4	2	4
Luxembourg	184	141	22	17	21	16	26	20	18	14
Malta	39	59	4	7	2	3	6	9	4	6
Netherlands	130	123	17	16	13	12	19	18	9	8
Poland	37	78	4	9	5	11	4	9	2	5
Portugal	53	61	5	6	3	4	7	8	6	7
Romania	20	52	2	5	1	4	3	8	2	6
Slovakia	57	103	6	11	5	9	7	14	6	10
Slovenia	72	90	7	9	6	7	8	10	8	10
Spain	90	96	9	10	5	5	11	12	10	11
Sweden	105	92	7	6	8	7	11	10	13	11
UK	85	92	10	10	7	8	9	10	7	7
Total for European Union	102	102	11	11	8	8	13	13	11	11

*Adjusted for price differentials with the purchasing power parity method.

Tabel 2.23 Uitgaven aan zorg¹⁾ per hoofd van de bevolking, enkele Europese landen en de Verenigde Staten (euro's)

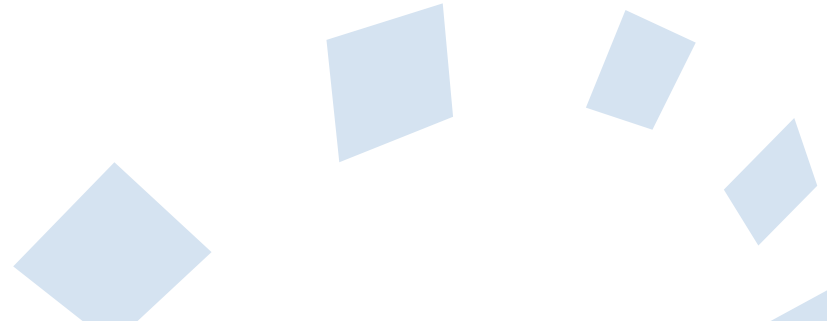
	2008	2009	2010	2011	2012	gem.groei
<i>Verenigd Koninkrijk (pond)</i>	1.949	2.089	2.118	2.160	2.188	2,9%
<i>Verenigd Koninkrijk (euro)</i>	2.447	2.345	2.469	2.489	2.698	2,5%
<i>Frankrijk</i>	3.158	3.265	3.325	3.400	3.466	2,4%
<i>Duitsland</i>	3.111	3.283	3.403	3.469	3.611	3,8%
<i>België</i>	3.216	3.362	3.440	3.546	3.680	3,4%
Nederland	3.689	3.818	3.955	4.028	4.209	3,3%
<i>Verenigde Staten (euro)</i>	5.047	5.511	5.974	5.845	6.529	6,6%
<i>Verenigde Staten (dollar)</i>	7.423	7.687	7.919	8.136	8.389	3,1%

Bron: OECD

Tabel 2.25 Gemiddeld aantal verpleegdagen in enkele Europese landen en de Verenigde Staten

	2008	2009	2010	2011	2012	gem.groei
Nederland^(1,2)	6,0	5,7	5,5	5,2	5,2	-3,6%
Verenigde Staten	15,3	16,4	16,4	16,3	16,2	3,3%
Verenigd Koninkrijk	8,2	9,2	8,9	8,9	8,9	2,5%
België	9,9	10,7	10,6	10,6	10,9	2,2%
Frankrijk	10,5	11,2	11,1	11,1	11,2	1,6%
Duitsland	10,3	11,3	11,2	10,9	10,9	1,3%

Bron: OECD en DigiMV



Tabel 2.26 Aantal bedden per 1.000 inwoners in enkele Europese landen en de Verenigde Staten

	2008	2009	2010	2011	2012	gem.groei
Verenigd Koninkrijk	2,8	2,8	2,7	2,4	2,4	-3,6%
Verenigde Staten	2,7	2,6	2,6	2,6	nb	-1,3%
Nederland^(1,2)	3,2	3,1	3,1	3,3	3,3	1,2%
Frankrijk	3,6	3,5	3,5	3,5	3,4	-1,1%
België	4,3	4,2	4,2	4,1	4,1	-1,4%
Duitsland	5,4	5,4	5,4	5,3	5,3	-0,2%

Bron: OECD

...



Tabel 2.27 Aantal medisch specialisten per 1.000 inwoners in enkele Europese landen

	2008	2009	2010	2011	2012	gem.groei
Nederland ⁽¹⁾	1,3	1,4	1,4	1,5	n.b.	2,9%
Verenigde Staten	1,4	1,4	1,3	1,4	n.b.	-0,5%
Frankrijk	1,5	1,5	1,5	1,6	1,6	1,1%
België	1,6	1,6	1,6	1,6	1,7	0,6%
Verenigd Koninkrijk	1,6	1,6	1,7	1,7	1,7	2,2%
Duitsland	1,9	2,0	2,0	2,1	2,2	3,2%

Bron: OECD

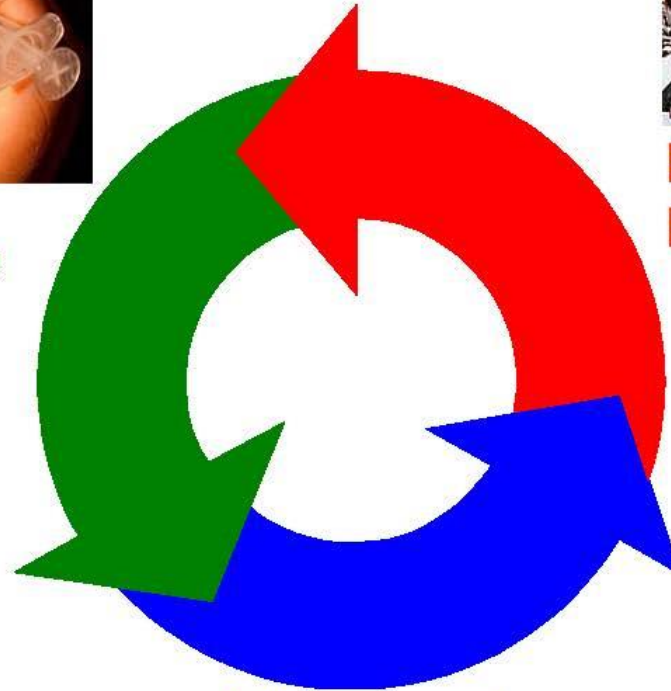
Health care and economic output



Health care



Economic
Productivity (GDP)



Life expectancy

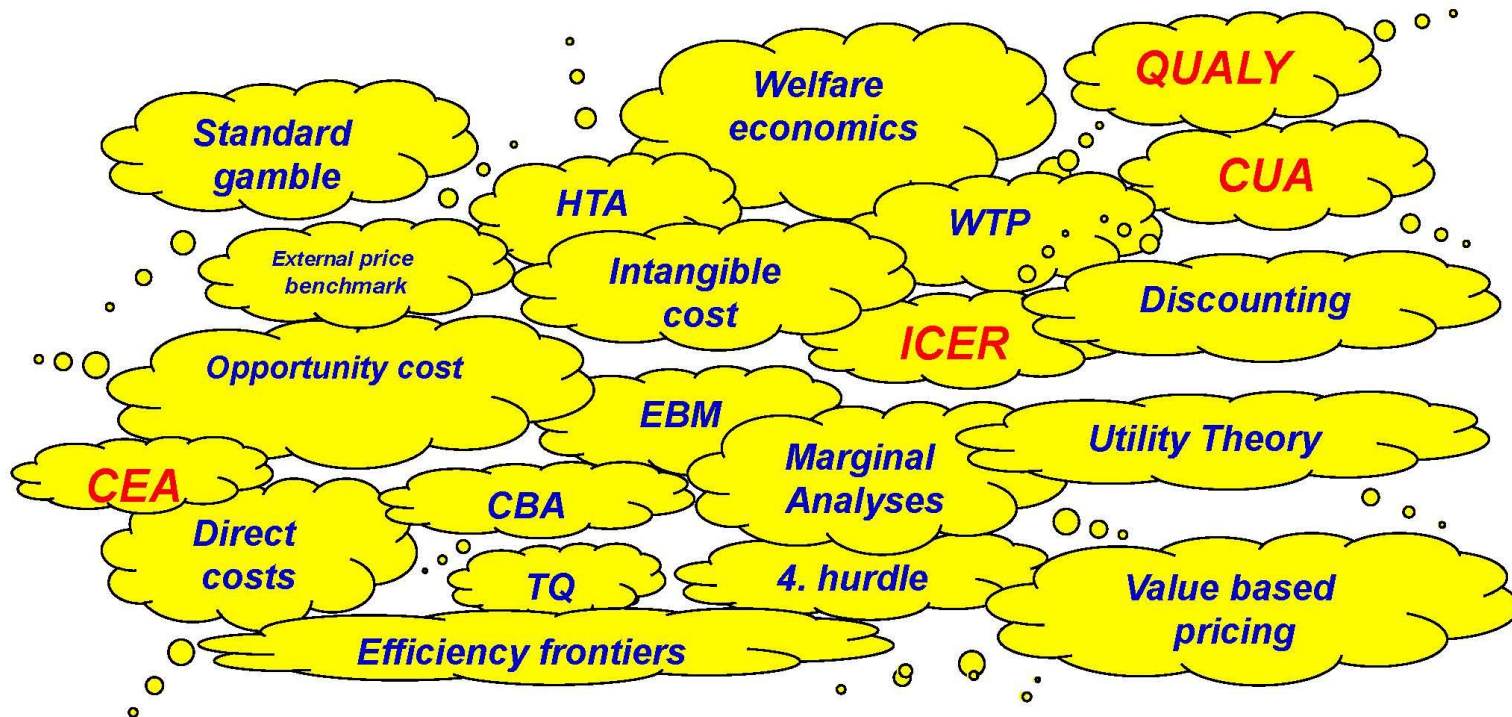


What is value?

$$\text{Value} = \frac{\text{Benefits}}{\text{Price}}$$



Numerous methods of measuring value/benefits



- No generally accepted methodological standard for assessing health care services
- Health economics offers orientation support

Nederlands perspectief

Locaties ziekenhuizen juli 2014

academische en algemene ziekenhuizen inclusief buitenpoliklinieken

Soort

- academisch ziekenhuis
- algemeen ziekenhuis
- buitenpolikliniek

— provincies



Bron: RIVM

Minuten

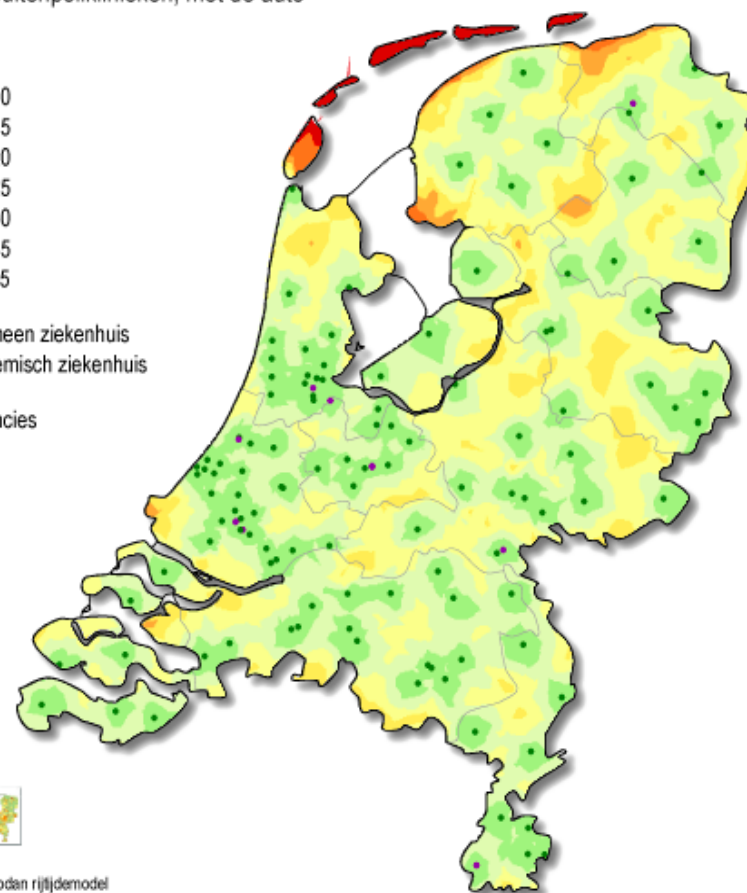
- ≤ 10
- 10 - 15
- 15 - 20
- 20 - 25
- 25 - 30
- 30 - 45
- > 45

- algemeen ziekenhuis
- academisch ziekenhuis

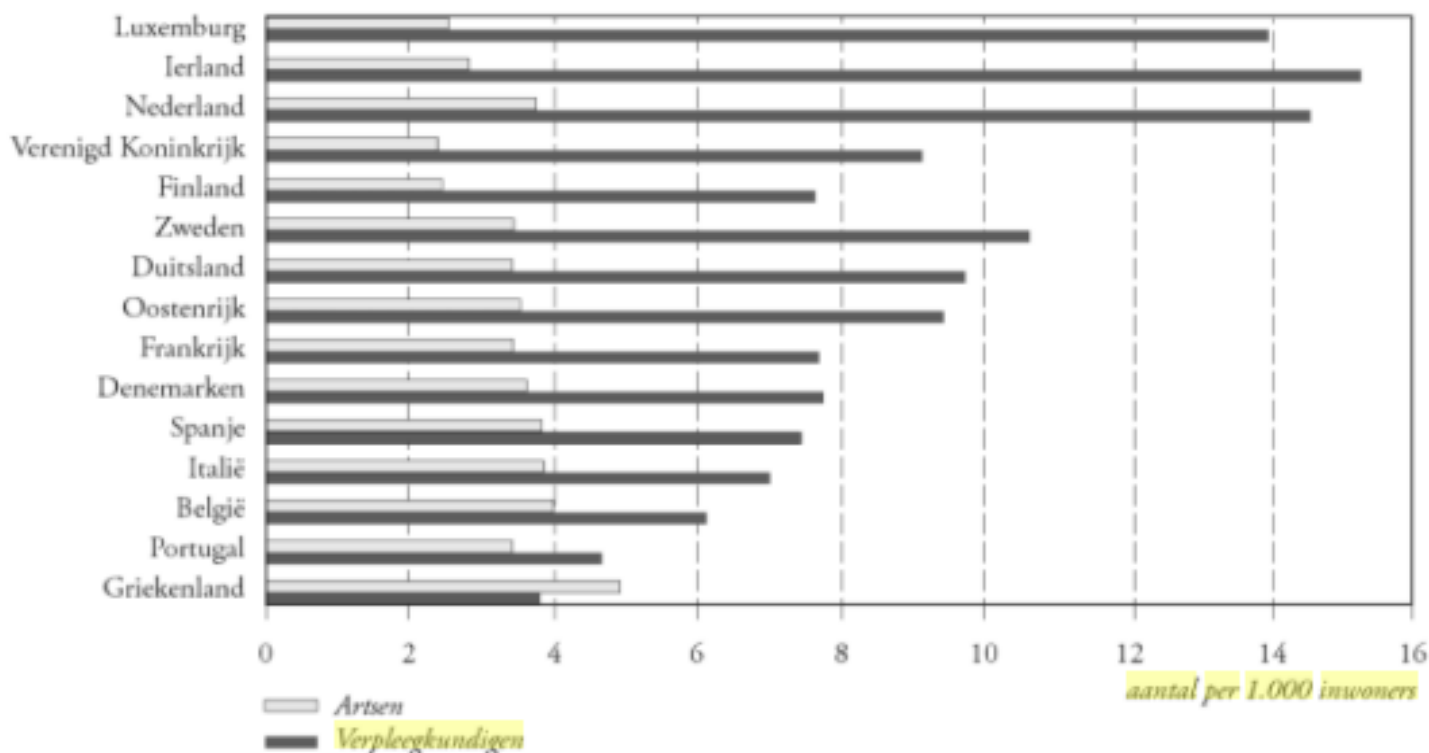
— provincies

Reistijd tot dichtstbijzijnde ziekenhuis 2014

exclusief buitenpoliklinieken, met de auto



Bron: RIVM, Geodan rijtijdemodel



Figuur VII. Het aantal Big geregistreerde artsen en verpleegkundigen in Europa, per 1000 inwoners in 2005, OECD Health data, 2007



Gras groener bij de burenen?

Afhankelijk van:

- Grootte van het land
- Financiële keuzes
- Culturele achtergrond
- Normen en waarden



Gras groener bij de bureen?

En de bril die je opzet!



