



Slovenian Health System

From financing and organisation
to provision of health care

DEMOGRAPHY AND BURDEN OF DISEASE

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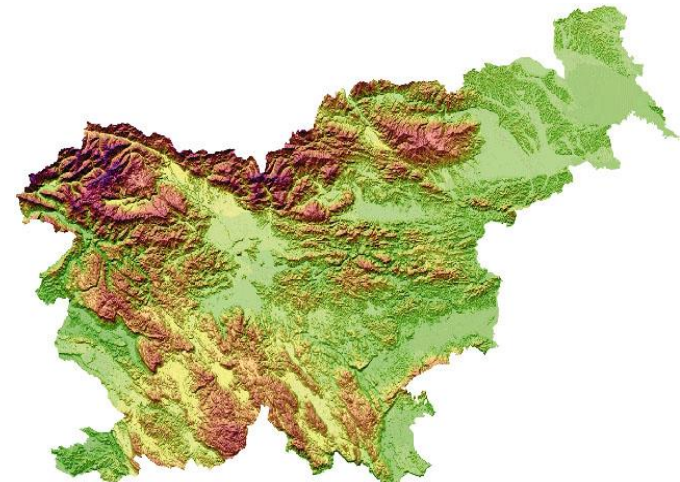
Content

- ☞ **Slovenia ID**
- ☞ **Financing of health care system in Slovenia**
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SLOVENIA ID

The basic values in Slovenian health care system

- **Universality**
 - Everybody has access to health care
- **Solidarity**
 - All citizens contribute into health care system in accordance with their income and use health care services in accordance to their needs
- **Equality**
 - Access to health care services according to needs and no other determinant like ethnic group, gender, age, social status or capability of payment.



Slovenia identity card



- AREA: 20.273 sq km² (0.47 % of the total EU28 area)
- POPULATION: 2.070.050 (94,3 % Slovenes)
- GDP (current prices; estimation): 42.999 billion EUR (in PPP: 20.800)
- GOVERNMENT DEBT AS A SHARE IN GDP: 74.1 % OF GDP
- GDP PER CAPITA: 20.015 EUR
- GROSS EARNINGS: 1.813 EUR
- GDP GROWTH: 4,8%
- UNEMPLOYMENT RATE: 5,0 %

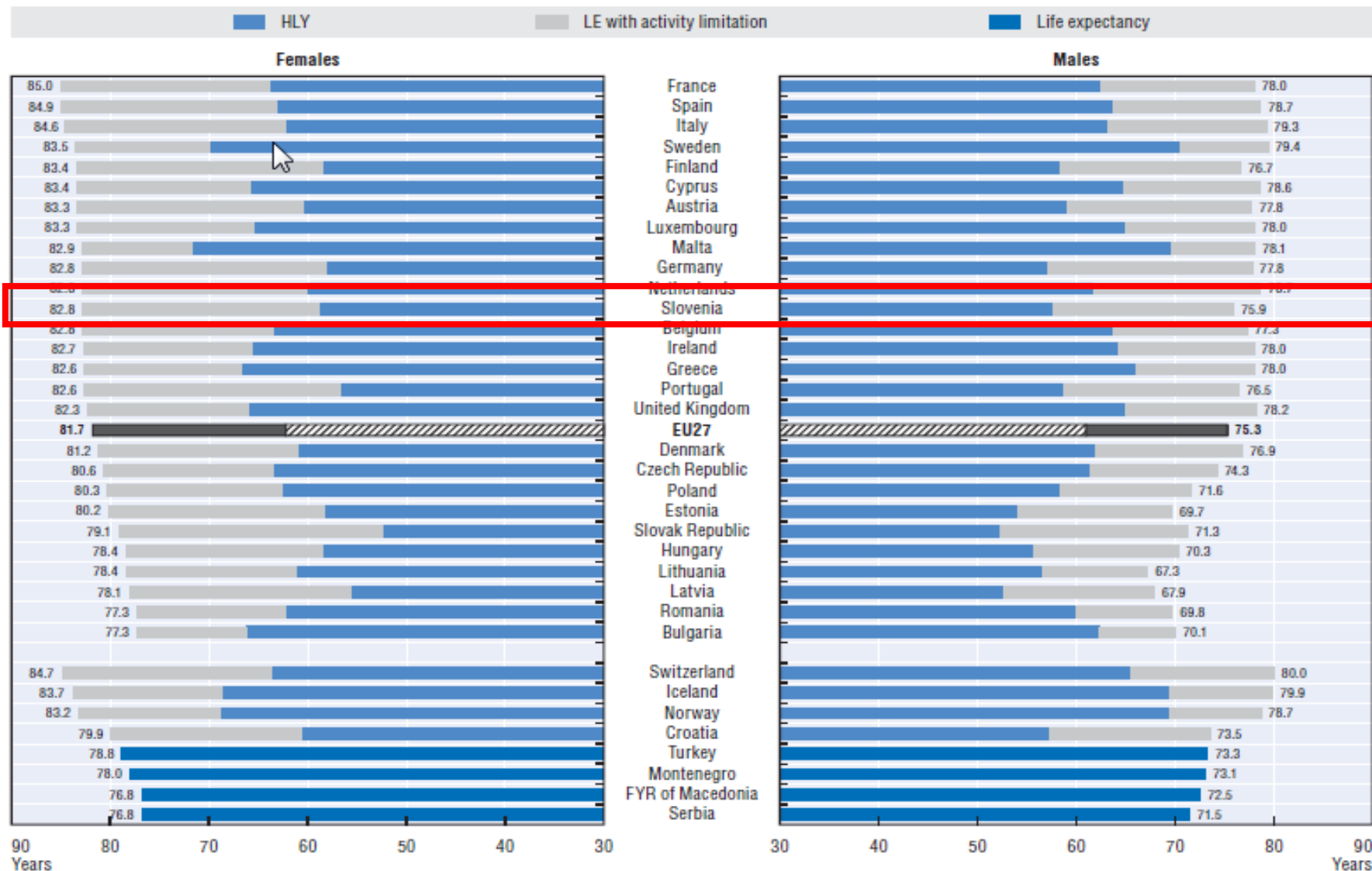




Health care system in Slovenia – identity card

- **TOTAL HEALTH EXPENDITURE 2017:**
 - € 3.423 billion,
 - 8,0 % GDP (72,9 % public resources)
- **SOCIAL HEALTH INSURANCE:** compulsory health insurance
- **LIFE EXPECTANCY:** 78,2 (M), 84,1 (F); **EU28:** 78,1 (M), 83,6 (F)
- **HEALTHY LIFE YEARS (HLY):** 56,5 (M), 55,6 (F)
- **INFANT MORTALITY RATE:** 1,8; **EU28:** 3,6
- **AGE STRUCTURE (1.1.2016):** 19,7 % > 65; 15,0 % < 14 years
(2050: 39% > 60 years)
- **NATURAL POPULATION GROWTH 2016:** 0,3
 - crude birth rate: 10.3/1.000 population (2014)
 - fertility rate; 1.58 births/woman (2014)

Life expectancy and healthy life years, by sex, 2008–10



In 1972: 65,6 (M; +10,3) in 72,2 (F; +10,6)

Health care statistics

No. of physicians/1 000 pop.	3,0	Hospitalization rate (per 1.000 inhabitants)	182,6
No. of nurses/1 000 pop.	9,7	Bed occupancy rates (%)	70,5
No. of specialist physicians/1 000 pop.	1,0	ALOS	6,8
<p style="text-align: center;">DISEASE BURDEN (2007; per 100,000):</p> <p style="text-align: center;">11,7 Neuropsychiatric disorders 259,2 Cardiovascular diseases 202,5 Malignant neoplasm'</p>		<p style="text-align: center;">CAUSES OF DEATH:</p> <p style="text-align: center;">218,40 Cardiovascular diseases (EU = 221,75) 195,99 Malignant neoplasm's (EU = 169,67) 56,31 Injuries and poisoning (EU = 36,50)</p>	

Source : WHO Regional office for Europe, 2019; Eurostat Database, 2019; Health at Glance: Europe 2018, 2018.

Causes of death*

- ▶ 38% circulatory system
- ▶ 33% cancers
 - men: prostate (138.6 new cases per 100.000 men)
 - women: breast cancer (116.9 new cases per 100.000 women)
- ▶ 13% other noncommunicable diseases
- ▶ 8 % from injuries and poisoning

*WHO, 2014; WHO Regional Office for Europe

Strengths and weaknesses of Slovenian health care system

- ▶ **Universality of compulsory health care insurance**
- ▶ **No. of physicians in connection to work done**
- ▶ **Good accessibility to new health technologies**
- ▶ **Stress on prevention, health promotion**
- ▶ **Institute of gatekeeper at primary level**
- ▶ **Regional equality of assuring primary health care services**
- ▶ **Concessionaires as a “mirror” to public providers**
 - ▶ **No. of physicians**
 - ▶ **Inefficiency in buying health care services – complementary health insurance**
 - ▶ **Unsystematic quality control**
 - ▶ **Unsystematic transformation of wishes into real needs**
 - ▶ **Built-in non-solidarity or prioritization of certain categories of population**
 - ▶ **Non-autonomy of public health providers**
 - ▶ **Wages not connected to quality and productivity**
 - ▶ **Inflexibility of the public health institutions in accepting changes**
 - ▶ **Social dialogue and consent needs to be achieved to accept changes**

Some results

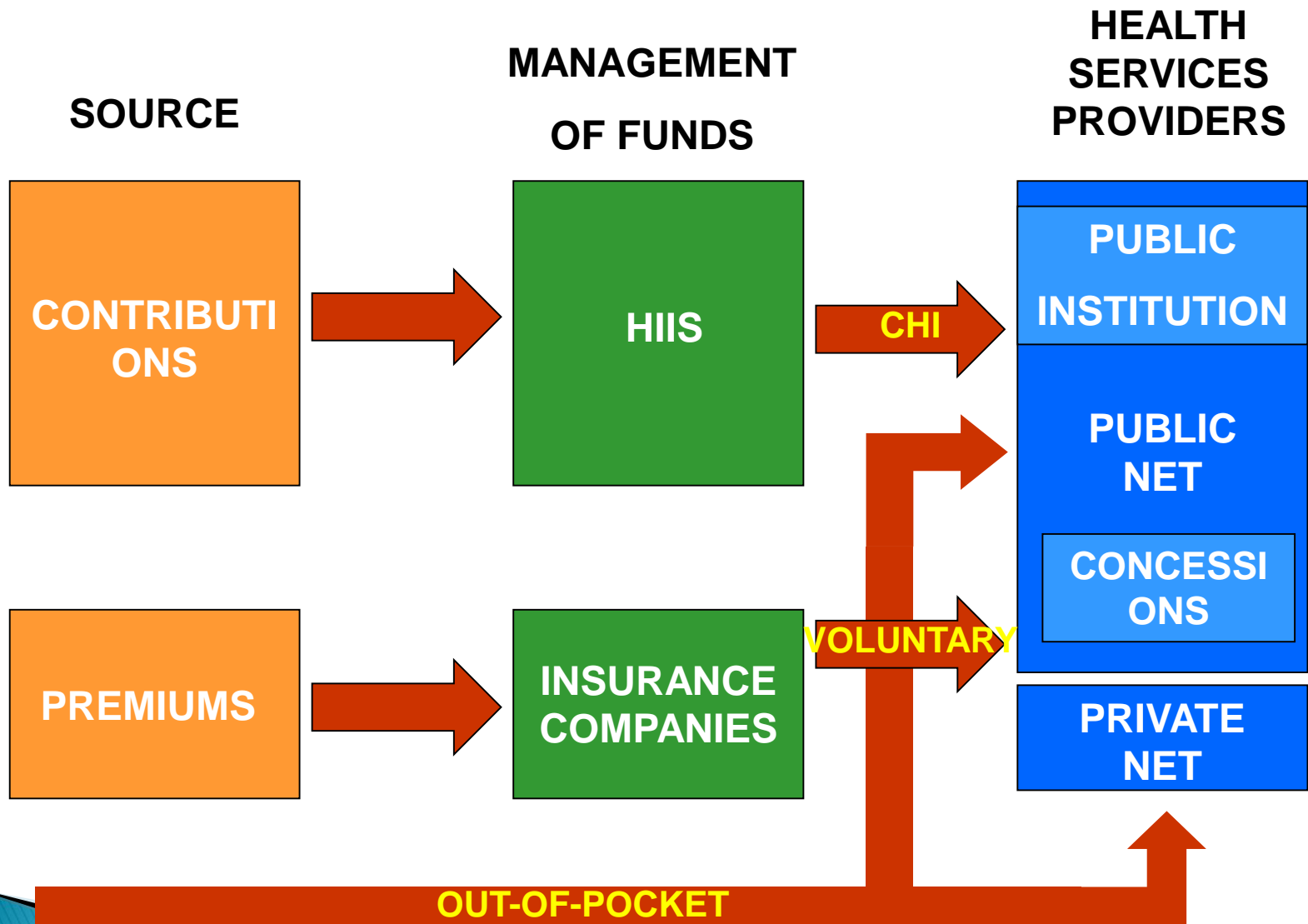
- ▶ Life expectancy has prolonged (cca 7 y. in the last 25 years)
- ▶ Slovenia is among the leading countries in the world with the lowest infant mortality rate
- ▶ We have significantly reduced the mortality rate in regards of cardiovascular diseases
- ▶ We have implemented effective screening programs and other preventive activities for all age groups
- ▶ We are among the leading EU countries in terms of universal access to health care (according to the SILC methodology)
- ▶ Our GDP for healthcare is lower than in countries with comparable health indicators

But ... some problems still remain ...

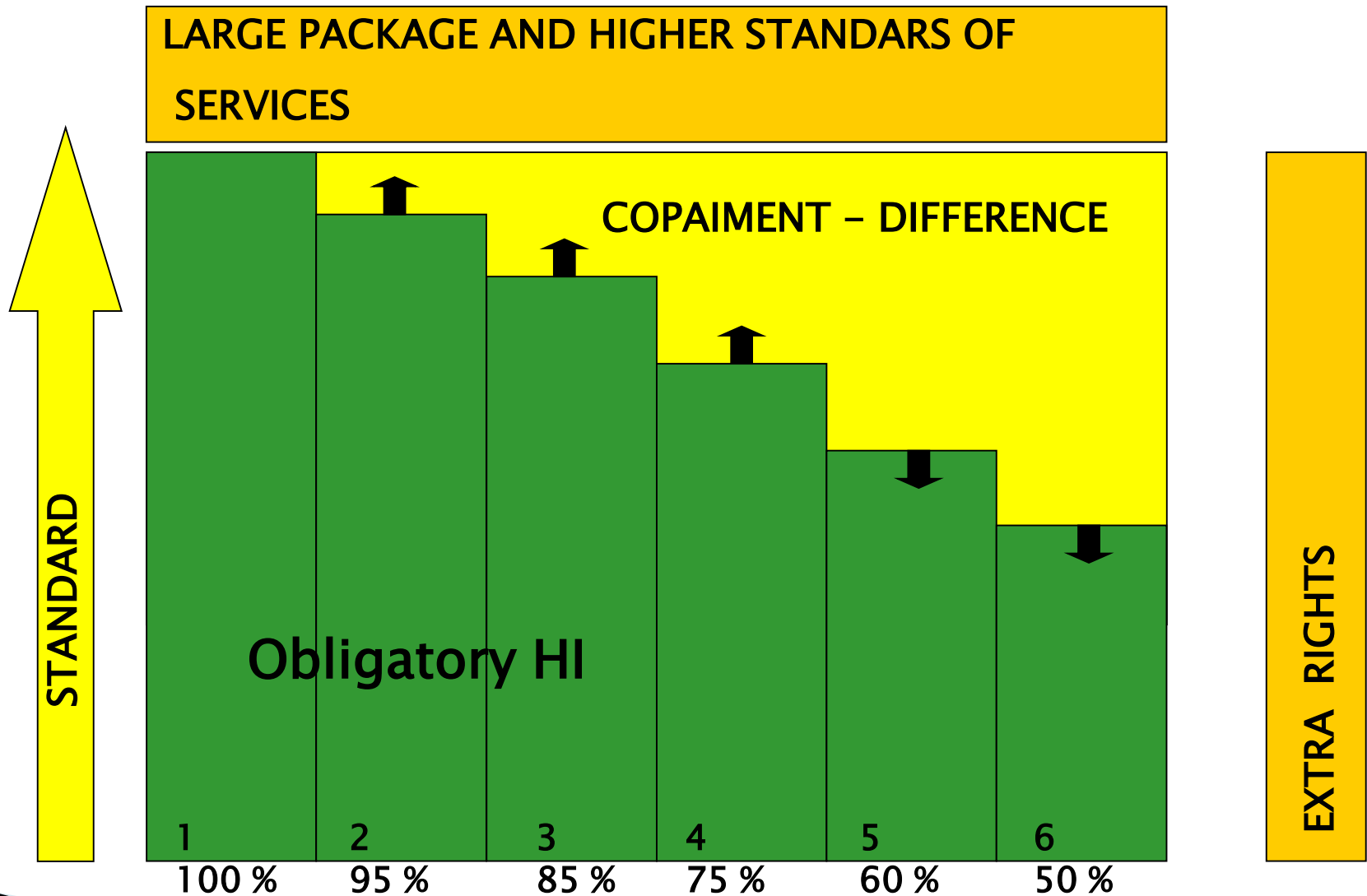
- ▶ **Cancer: 33% of deaths (because of aging)**
- ▶ **Alcohol:**
 - Adults: 11.5 liters (2015) close to EU average
 - Repeated drunkenness among 15-year-olds is higher than in most EU countries
- ▶ **Tobacco:**
 - 19% of adults in Slovenia smoked tobacco every day (2014); slightly below the EU average and down from 24% in 2001.
- ▶ **Obesity**
 - 19% (16%) of adults in 2014 (2007), above EU average
 - 20% of 15-years old (boys particularly) in 2014, the fifth highest in EU (despite reporting above average levels of physical activity; important contributor deteriorating diet of Slovenian adolescents in recent years
 - Some of the worst dietary behaviour in the EU with less than one in three eating fruit and vegetables regularly, more than one in three consuming sugar-sweetened beverages regularly and every second child skipping breakfast
- ▶ **Mental health:**
 - high suicide rates: 17.1 per 100.000 (EU average: 11.7)

FINANCING OF HEALTH CARE SYSTEM IN SLOVENIA

Scheme of fund's flow: pooling and purchasing



Obligatory and complementary health insurance



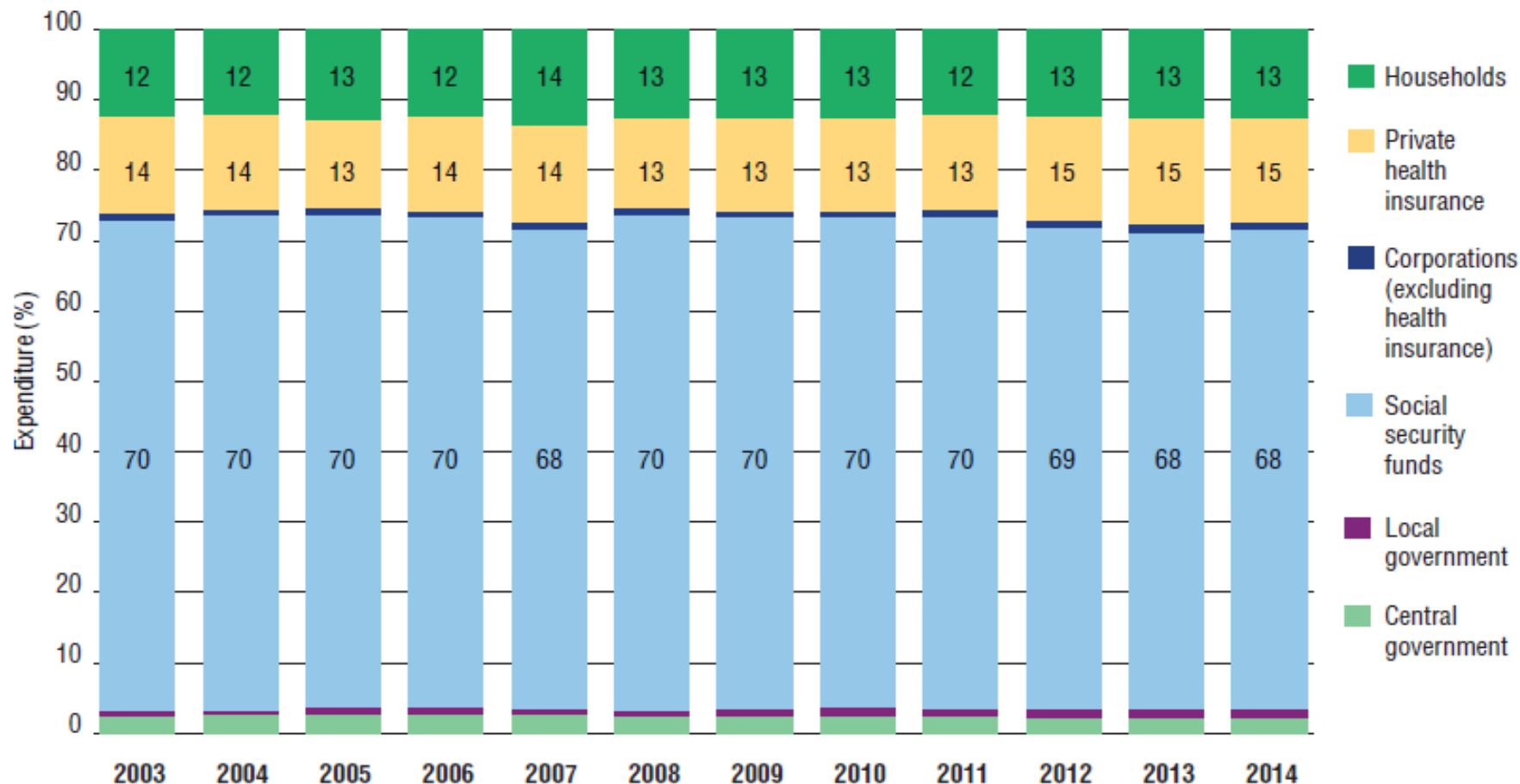
Social security contributions

Social security contributions	%
Contributions for pensions and disability	24,35
– Employees	15,50
– Employers	8,85
Contributions for compulsory health insurance	13,45 (13,25 till 2001)
– Employees	6,36
– Employers	7,09
Contributions for employment	0,20
– Employees	0,14
– Employers	0,06
Contributions for parenthood	0,20
– Employees	0,10
– Employers	0,10
Social security contribution total	38,20
– Employees	22,10
– Employers	16,10

Health care expenditure in mio EUR and as % GDP in 2016

	mio EUR	% GDP	%
TOTAL EXPENDITURE	3.329,86	8,37 EU28 (2014) = 9,9 %*	100
PUBLIC EXPENDITURE	2.406,63	6,05	72,3 EU28 (2014) = 79 %*
Compulsory health insurance (CHI)	2.215,74	5,57	66,5
Comp. pension ins. (support and attendance allowance)	81,03	0,20	2,4
Central budget	72,35	0,18	2,2
Local budget	37,50	0,09	1,1
PRIVATE EXPENDITURE	923,22	2,32	27,7 EU28 (2014) = 20 %*
Complementary (VHI) health insurance	476,37	1,20	14,3 EU28 (2014) = 5 %*
Out of pocket	446,85	1,12	13,4 EU28 (2014) = 15 %*

Health expenditure by source of funding, 2003 – 2014^a



Sources: IMAD calculations based on data from the Statistical Office of the Republic of Slovenia (2015a) for 2000–2013; preliminary data for 2014 taken from OECD (2015b).

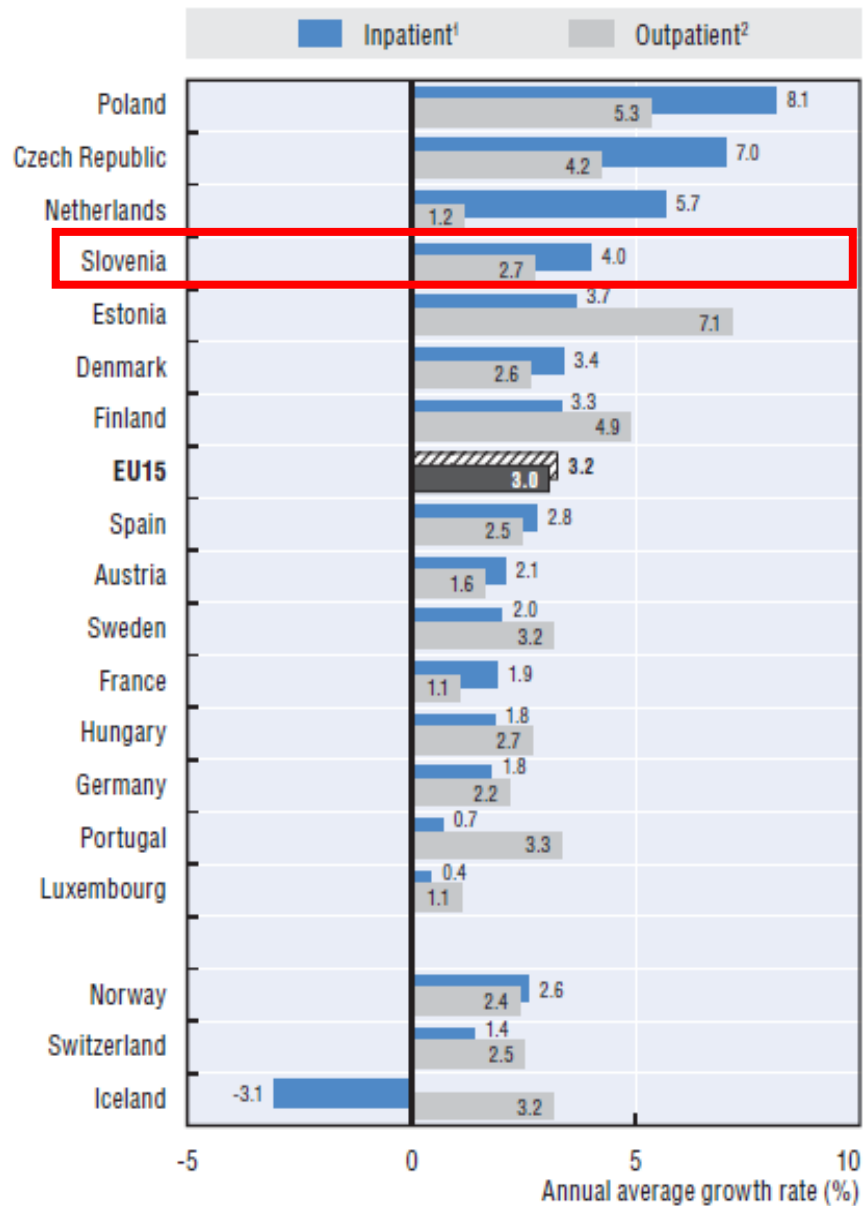
Notes: ^aExcluding capital investment; non-profit-making institutions serving households did not measurably contribute to expenditure and are not depicted in this figure; GDP from European System of National and Regional Accounts 2010 revision (Eurostat, 2010).

Health care expenditure in mio EUR and as % GDP in a period 2010–2016

	2010	2010	2011	2011	2012	2012	2013	2013	2014	2014	2015	2015	2016	2016
	mio EUR	% GDP	mio EUR	% GDP	mio EUR	% GDP	mio EUR	% GDP	mio EUR	% GDP	mio EUR	% GDP	mio EUR	% GDP
Compulsory health insurance (CHI)	2.093,26	5,77	2.126,51	5,76	2.080,31	5,78	2.057,64	5,73	2.078,3	5,57	2.146,66	5,57	2.215,74	5,57
Compulsory pension insurance	77,47	0,21	77,77	0,21	75,6	0,21	76,17	0,21	78,12	0,21	79,06	0,20	81,03	0,20
Central budget	49,38	0,14	49,15	0,13	65,50	0,18	62,48	0,17	68,97	0,18	72,01	0,19	72,35	0,18
Local budget	27,08	0,07	25,67	0,07	56,83	0,16	37,44	0,10	39,13	0,10	37,33	0,10	37,5	0,09
Public expenditures	2.247,19	6,20	2.279,10	6,18	2.278,24	6,33	2.233,73	6,22	2.264,52	6,07	2.335,05	6,05	2.406,63	6,05
Complementary (VHI) health insurance	406,04	1,12	421,76	1,14	458,6	1,27	477,77	1,33	471,55	1,26	472,35	1,22	476,37	1,26
Out of pocket	415,71	1,15	419,98	1,14	446,73	1,24	434,28	1,21	452,71	1,21	444,77	1,15	446,85	1,17
Private expenditures	821,75	2,27	841,74	2,28	905,34	2,51	912,05	2,54	924,26	2,48	917,12	2,38	923,22	2,32
Total expenditures	3.068,94	8,47	3.120,84	8,46	3.183,58	8,84	3.145,78	8,76	3.188,78	8,54	3.252,16	8,43	3.329,86	8,37
GDP	36252		36896		36002		35917		37332		38570		39769	

Source: Annual Reports 2016, 2012, HIIS; GDP data for 2016, SURS; comp. health ins. data for 2016, GIZ.

Additional financial burden for population:
more than 100 mio EUR.



Increase in expenditure in and out hospital health care 2000 – 2010

1. Including day care.
2. Including home care and ancillary services.

CHI consists of:

Compulsory health insurance for:

- ✓ illness and injury not connected to work
- ✓ injury at work or professional illness

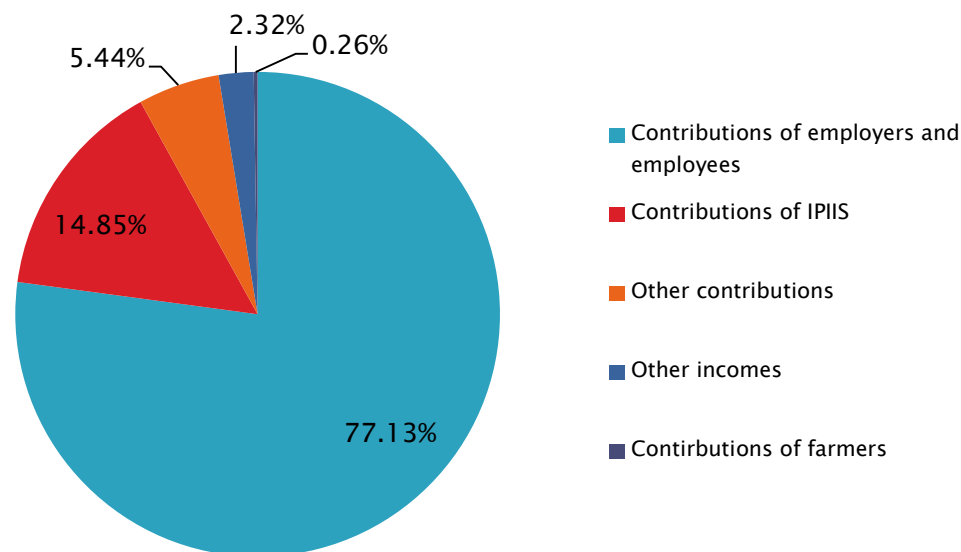
Act on Health Care and Health Care Insurance defines the extent of the following services for insured persons:

- ✓ payment of health care services
- ✓ wage compensation due to absenteeism
- ✓ funeral fee and death benefit (only social deprived group)
- ✓ compensation of travel costs connected to the health care services used.

CHI incomes

- ✓ CHI represents 66,5% (2016) of all incomes for health – this is HHS budget.
- ✓ Incomes for CHI come from contributions (in 2016: 97,7%) and other incomes, such as conventions, investments and other.

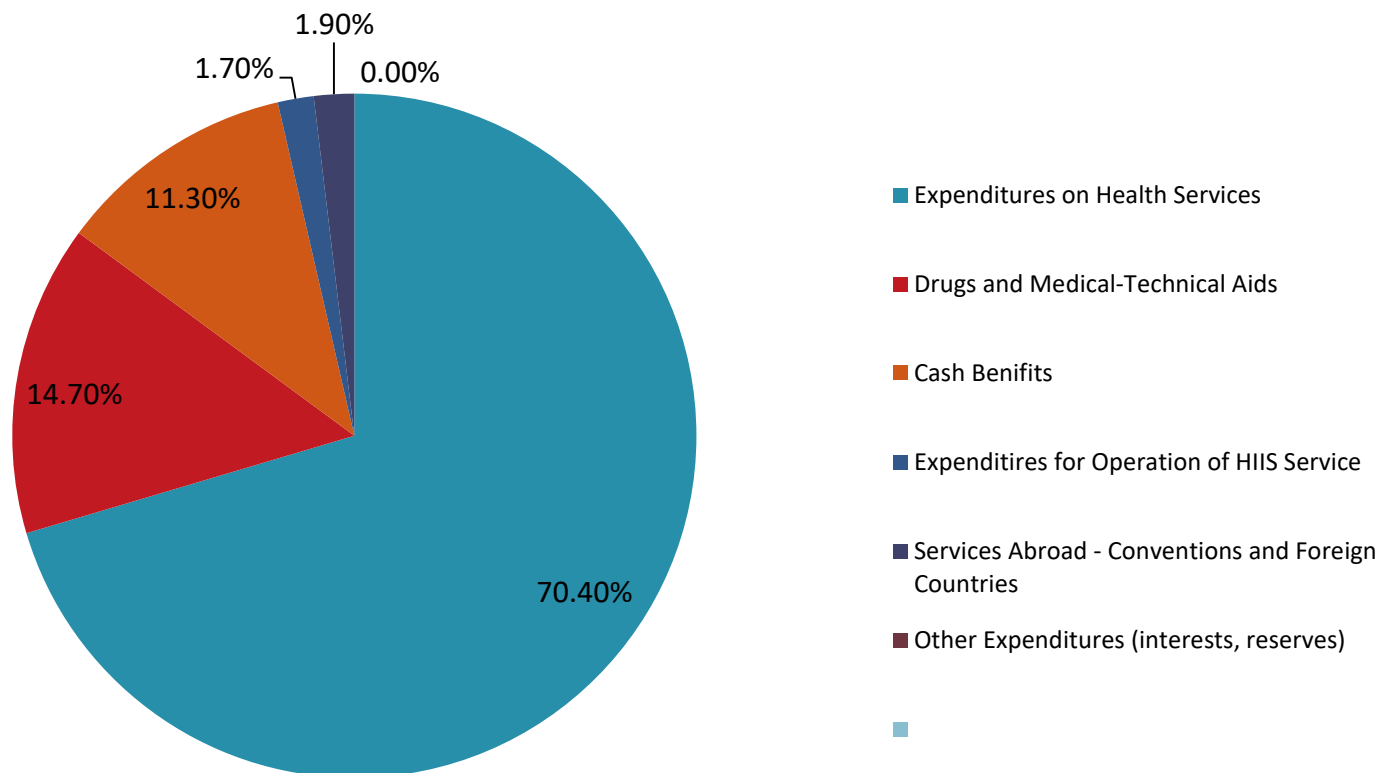
The CHI contributions' structure in 2016.



Source: Annual Report 2016, HHS.

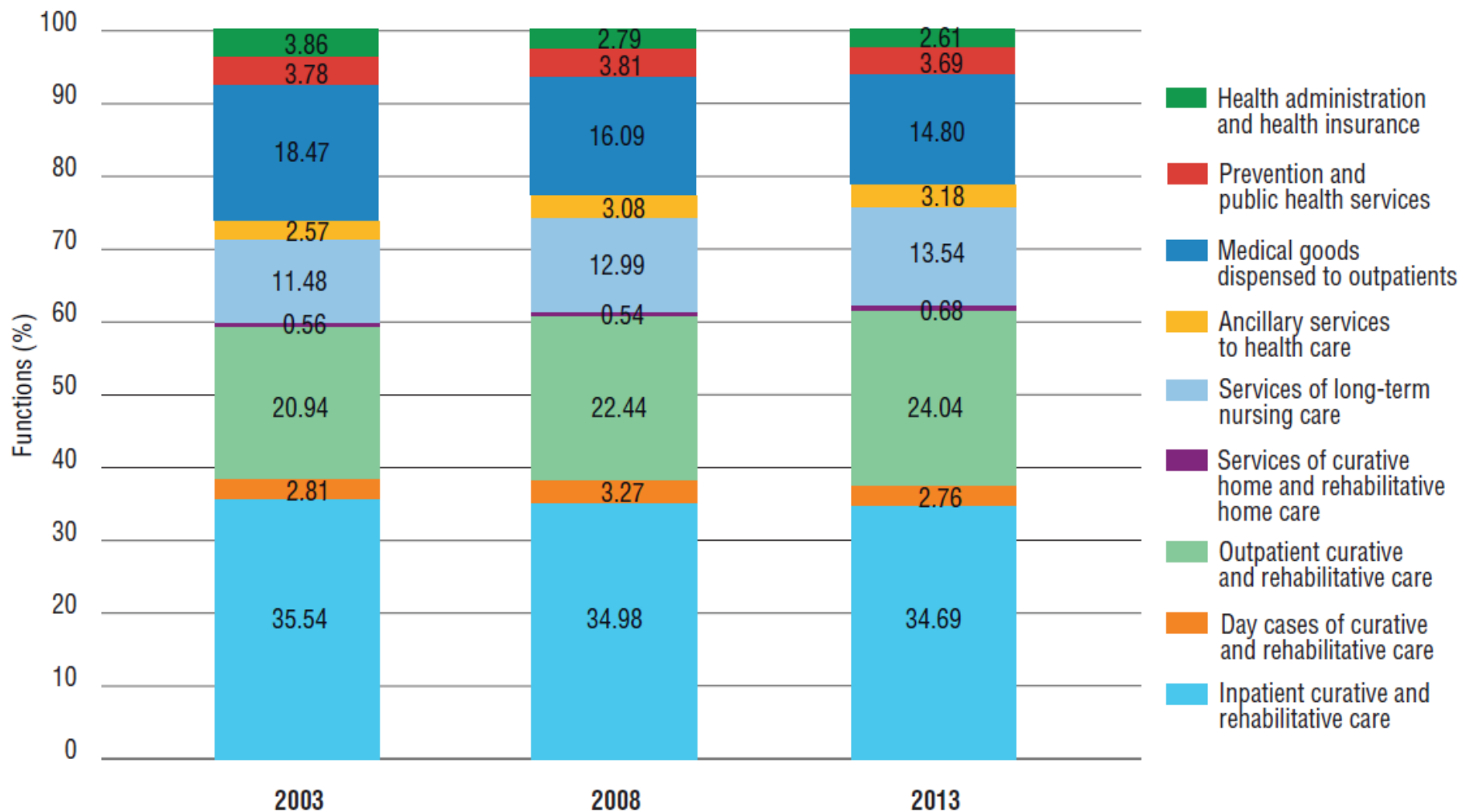
CHI expenditures

The CHI expenditures' structure in 2016.



Source: Annual Report 2016, HIIS.

Structure of current public health expenditure by health care functions



Source: IMAD calculations based on data from the Statistical Office of the Republic of Slovenia, 2015a.

Complementary Health Insurance

- ▶ Concept is based on copayments insurance and was introduced with the intention of bringing additional financial sources into the system
- ▶ Some population categories (pregnant women, children) as well as some illnesses (cancer, diabetes) are excluded.
- ▶ For most of the services copayment is needed: a certain percentage which can amount from 5% to 95% of the total value of the services, is covered by copayments. For those copayments complementary health insurance can be concluded that covers risks for copayments.

In such form compulsory and complementary health insurance act as siamese twins where one is completely dependent on other. Each service is hence covered from two sources.

Weaknesses of complementary health care insurance

- ▶ Regressivity in payment (absolute premium not connected to income)
- ▶ Hindered accessibility to health care services for compulsory insured
- ▶ If prices of health care services decrease (HHS), the profits of insurance companies grows
- ▶ Due to unlimited payments of health care services from complementary health insurance it gives a perverse incentive to health care providers to produce more services (also unnecessary)
- ▶ European Commission sent Slovenia impeachment stating that complementary health insurance is not in accordance to European competition laws
- ▶ Since higher costs were just transferred into complementary insurance, there were no incentives for rational behaviour

ORGANISATION AND PROVISION OF HEALTH CARE IN SLOVENIA

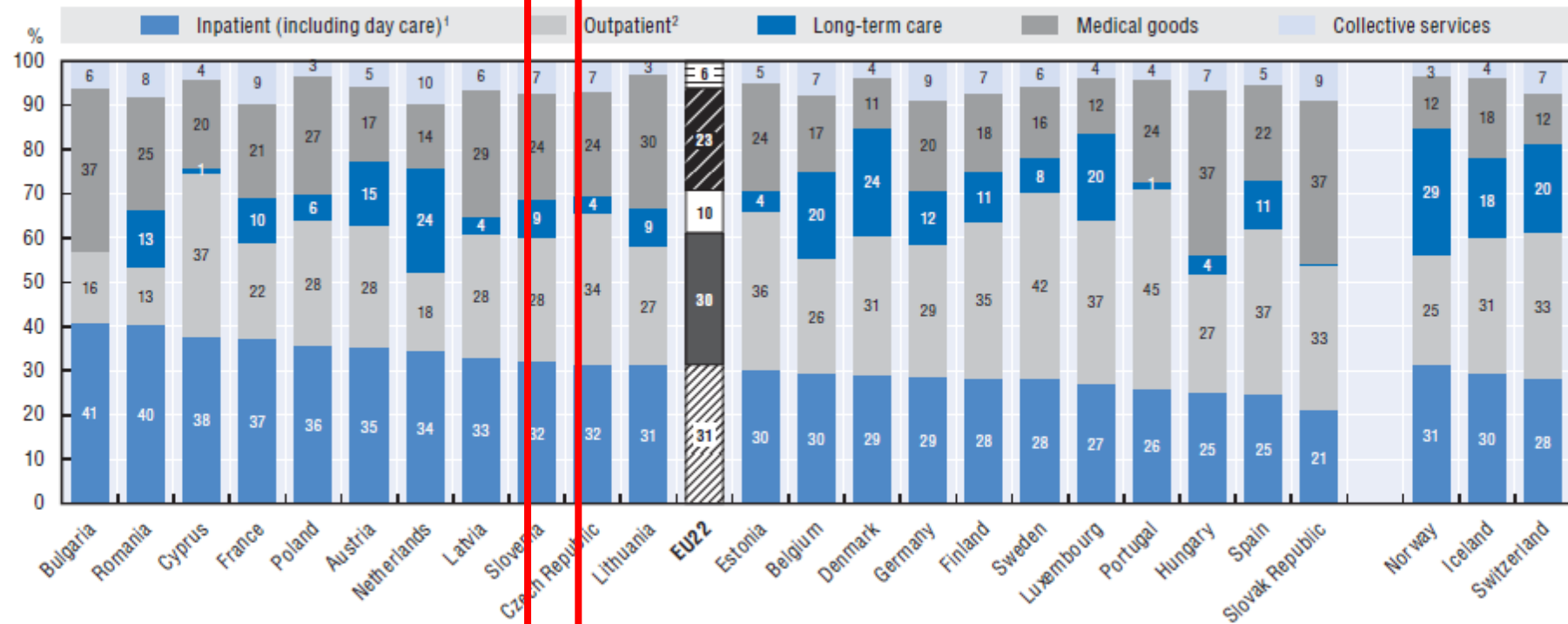
Organisation of provision of health care services

- ▶ Primary level (General Health Services and Pharmacies)
- ▶ Secondary level (Specialized Ambulatory and Hospital Services)
- ▶ Tertiary level (Clinics)

Health care expenditures for health activities, 2010

5.4.1. Current health expenditure by function of health care, 2010 (or nearest year)

Countries are ranked by inpatient curative care as a share of current expenditure on health

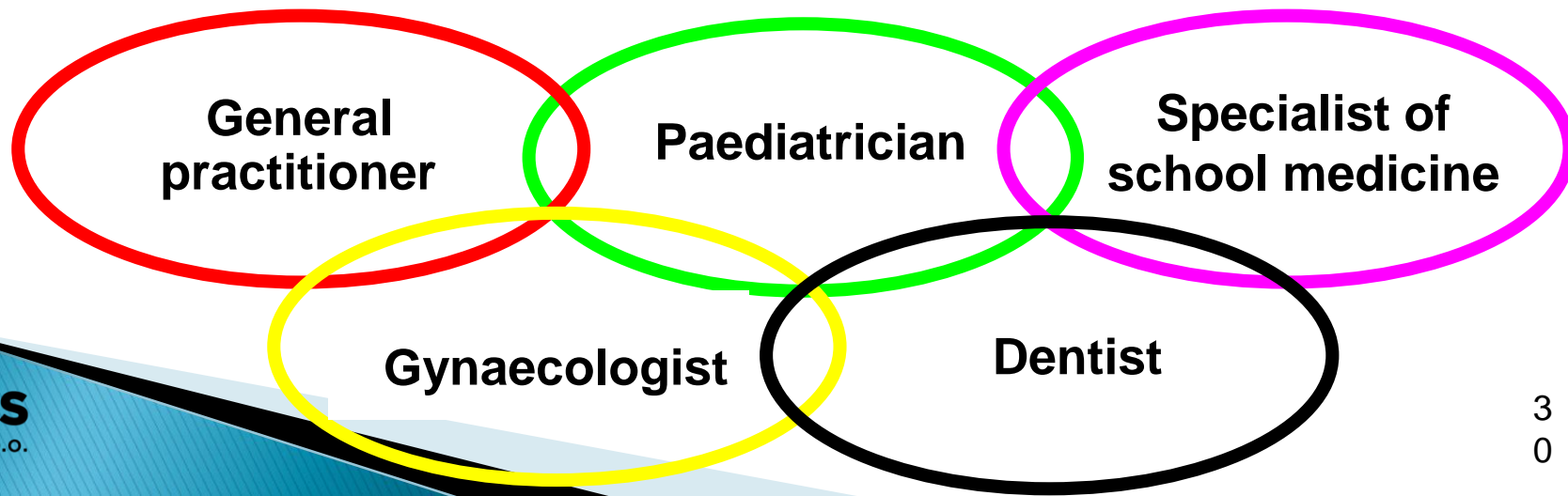


1. Refers to curative and rehabilitative inpatient and day care provided in hospitals, day surgery clinics, etc.

2. Refers to curative and rehabilitative care in doctors' offices, clinics, outpatient departments of hospitals, home care and ancillary services.

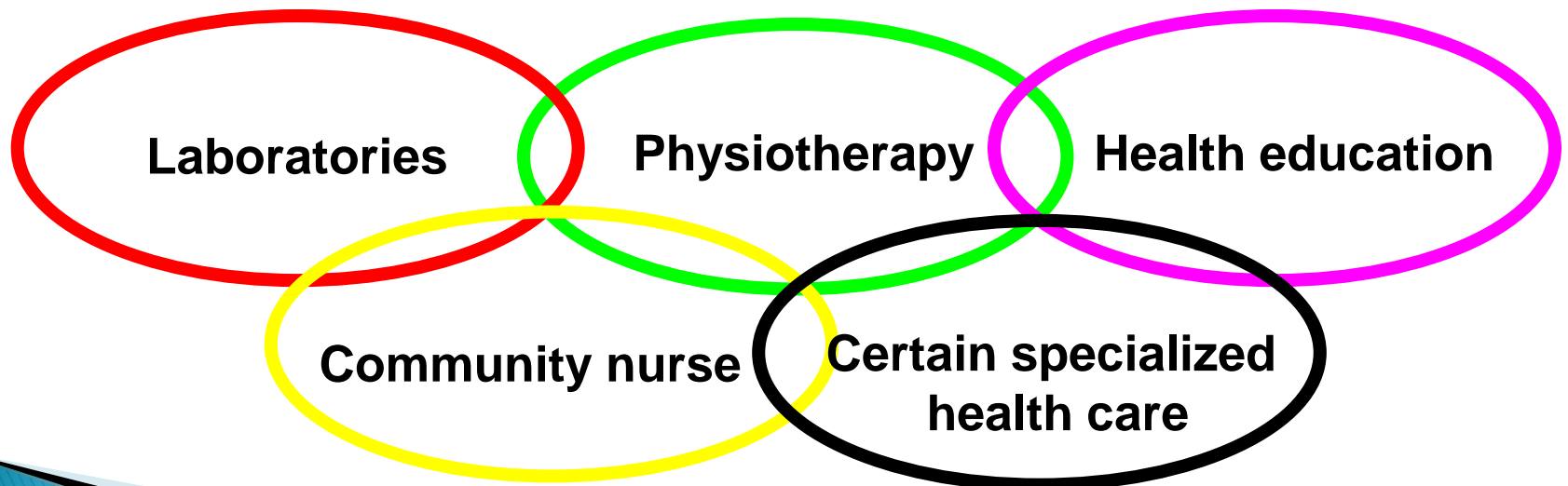
Primary level

- ▶ 63 primary public Health Centers and Private Doctors (with concession, contracted with the CHI)
 - ▶ 490 locations or outreach posts
 - ▶ 76.5% of all doctors at primary level work in PPHC
 - ▶ accessible to everyone, without referrals
- ▶ the first and direct contact of a patient with the health service



Primary level

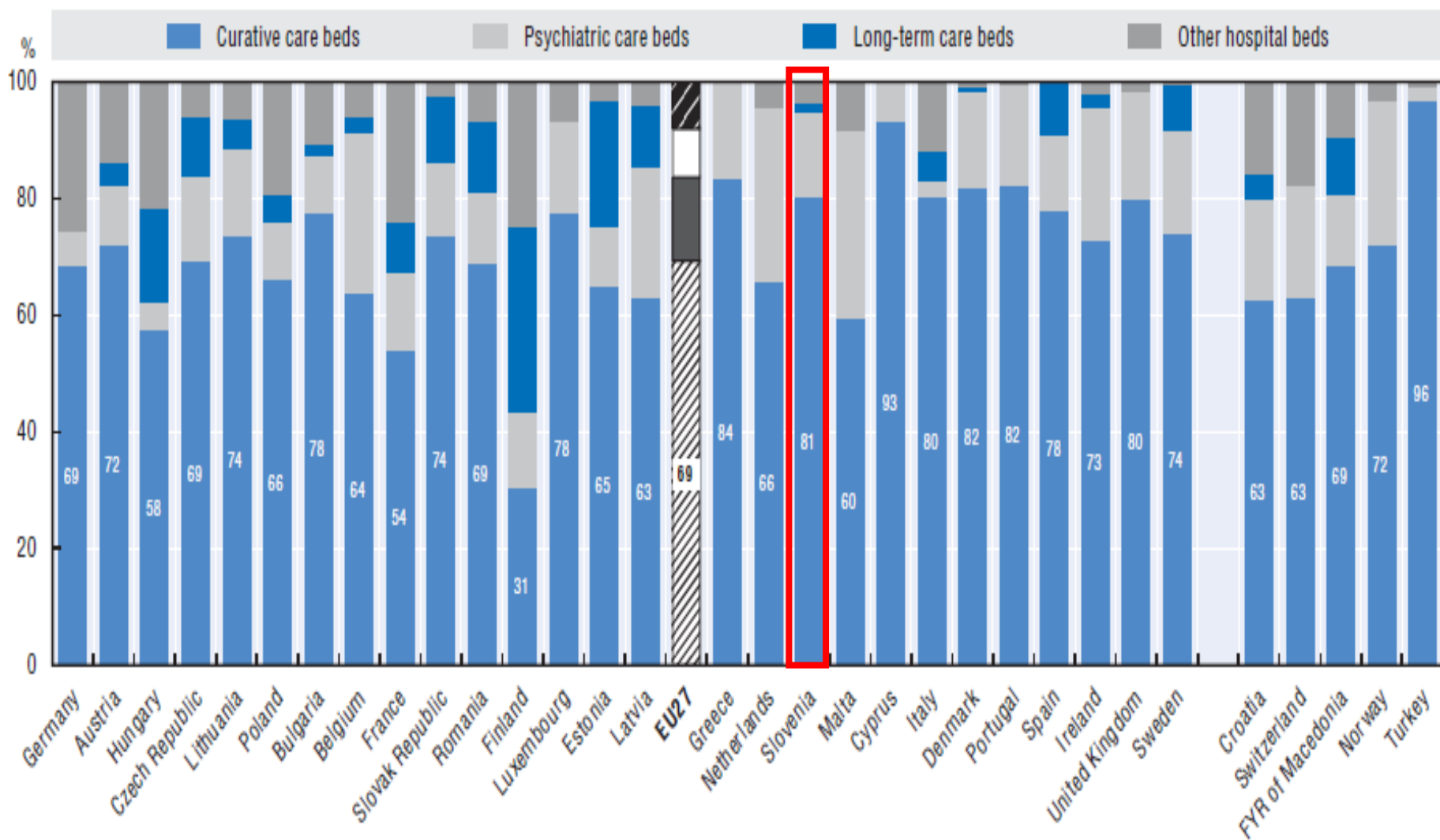
Other services organised in Public Health Centers



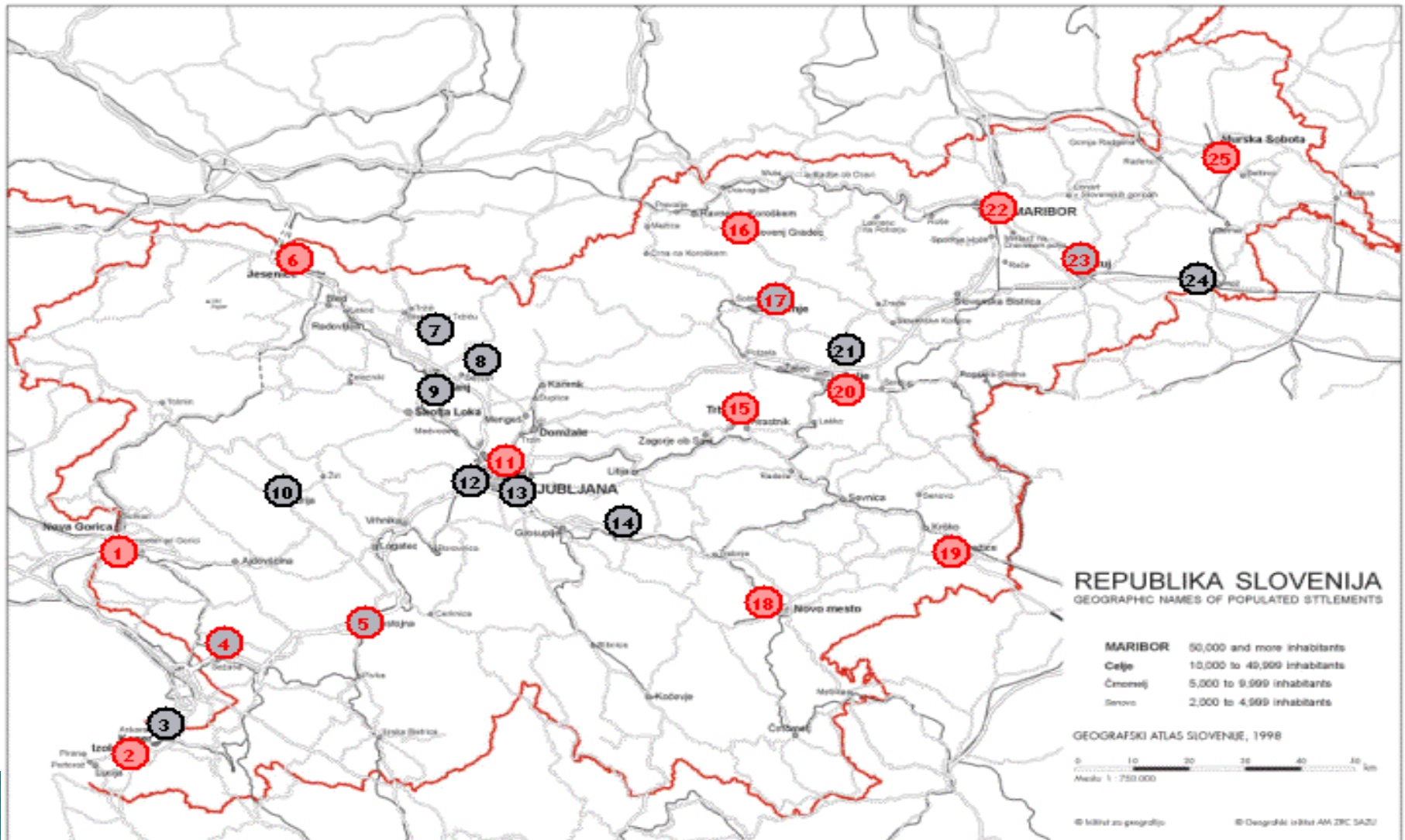
Secondary and tertiary level (25 public hospitals)

- ▶ Secondary
 - Specialised Ambulatory Services
 - Hospital Services
 - Access upon referral from GP at the primary level (gatekeeper)
- ▶ Tertiary:
 - Clinics, Clinical Institutes or Clinical departments
 - Highly Specialized Treatment
 - Scientific and Research Activities
 - Educational and Training Activities

Hospital beds by type of care, 2010 and 2010

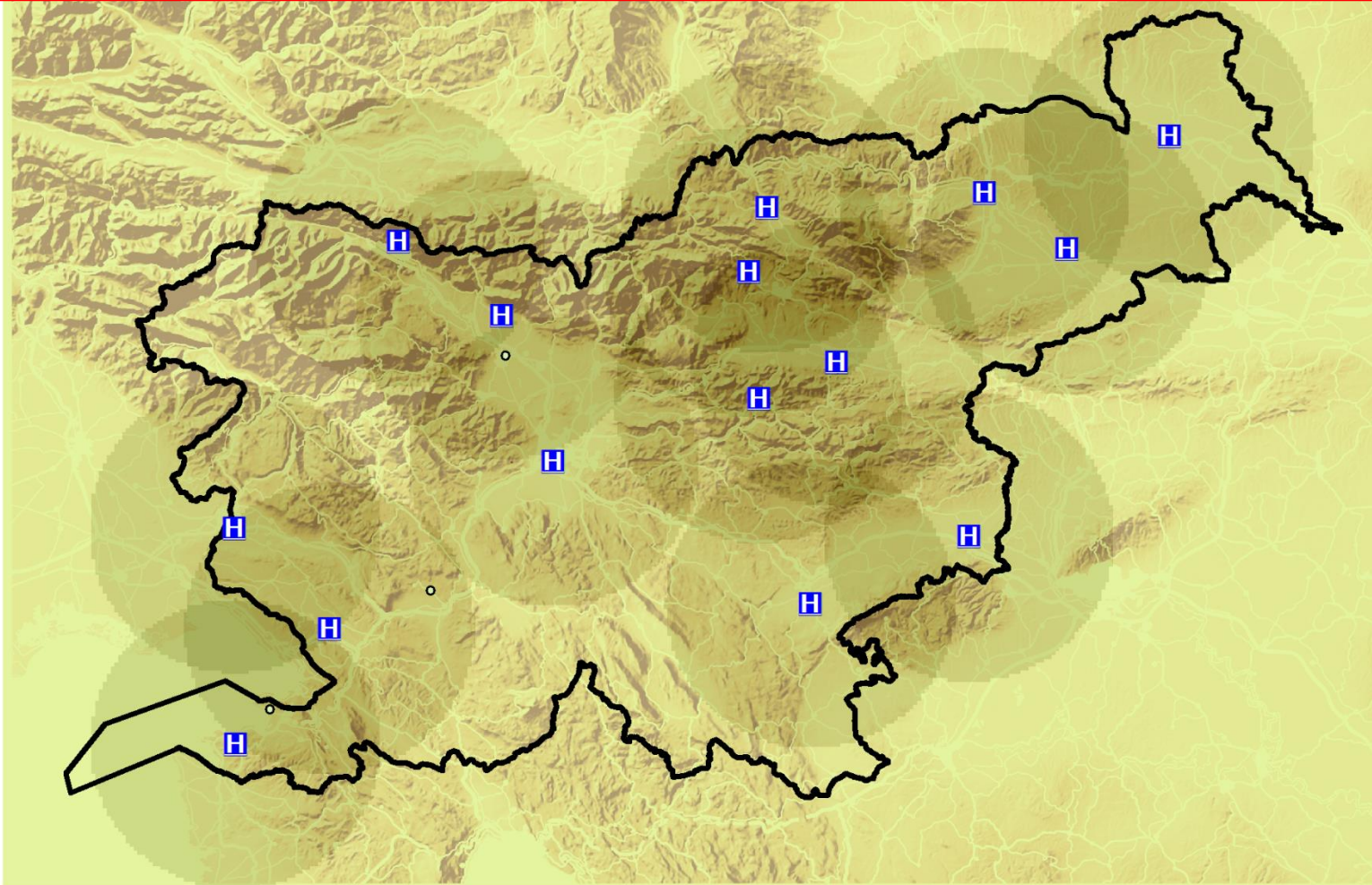


Secondary Level - Hospitals

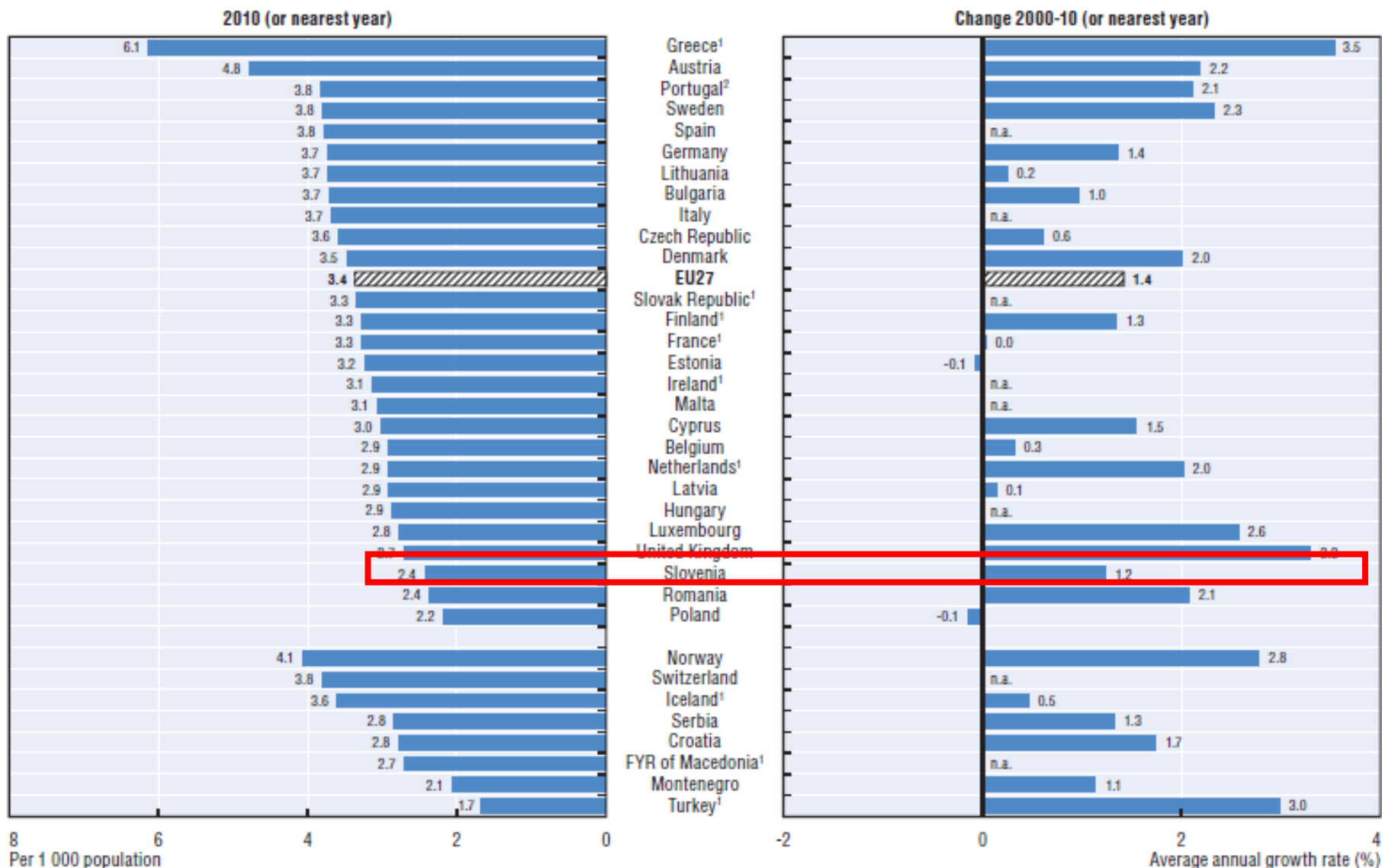


If health institutions on the same or different level of health care services can establish a network of health care institutions due to easier common undertaking of performing health care services or other administrative, information, technical and other tasks. The common tasks, performed by such network, are defined legally when network is established. A network is a legal entity.

It is up to the minister of health to decide which health care institutions can be connected into a network of health care institutions.

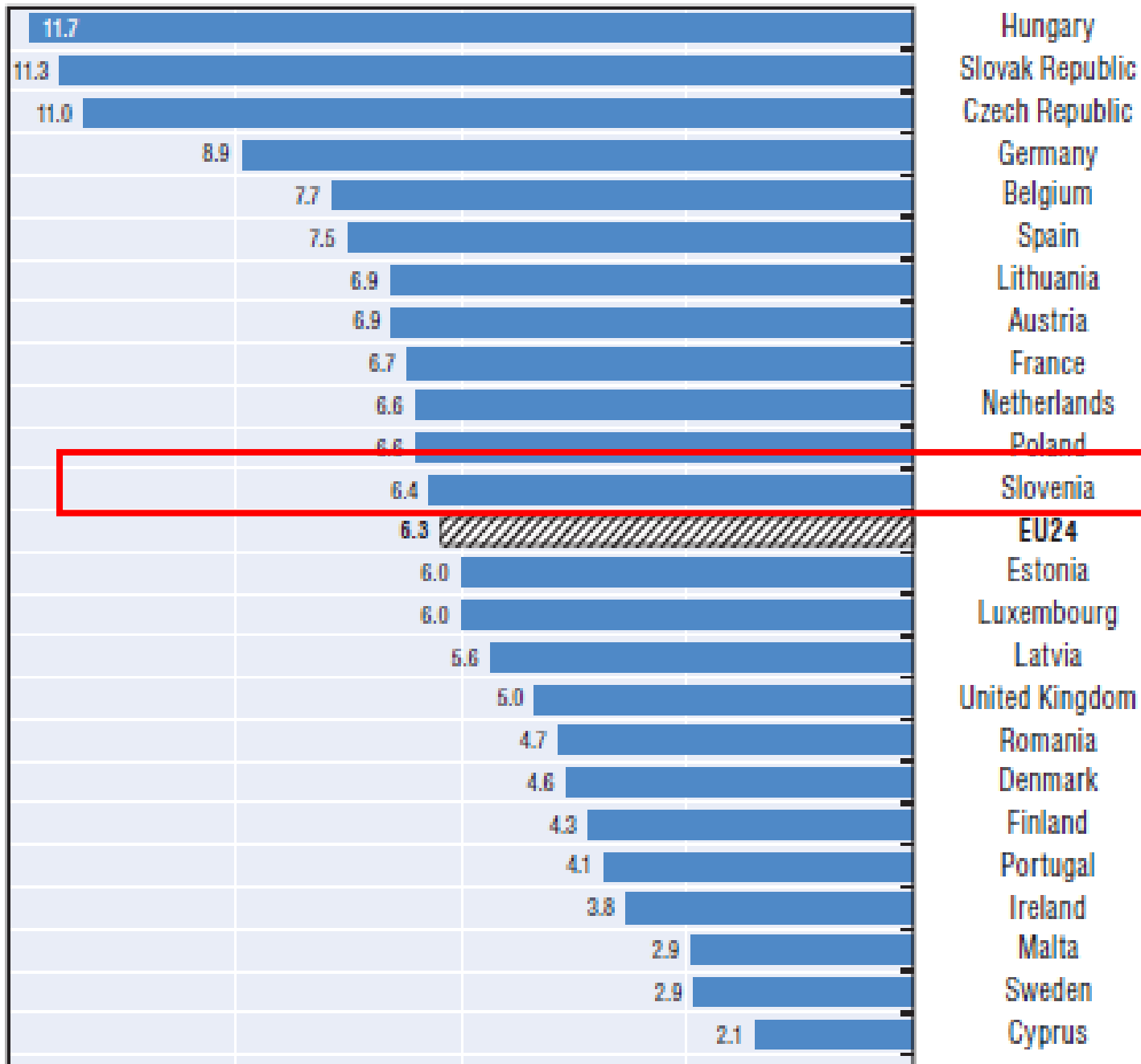


Licensed doctors per 1,000 inhabitants; change from 2000 to 2010



1. Data include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors).
2. Data refer to all doctors who are licensed to practice.

2010 (or nearest year)

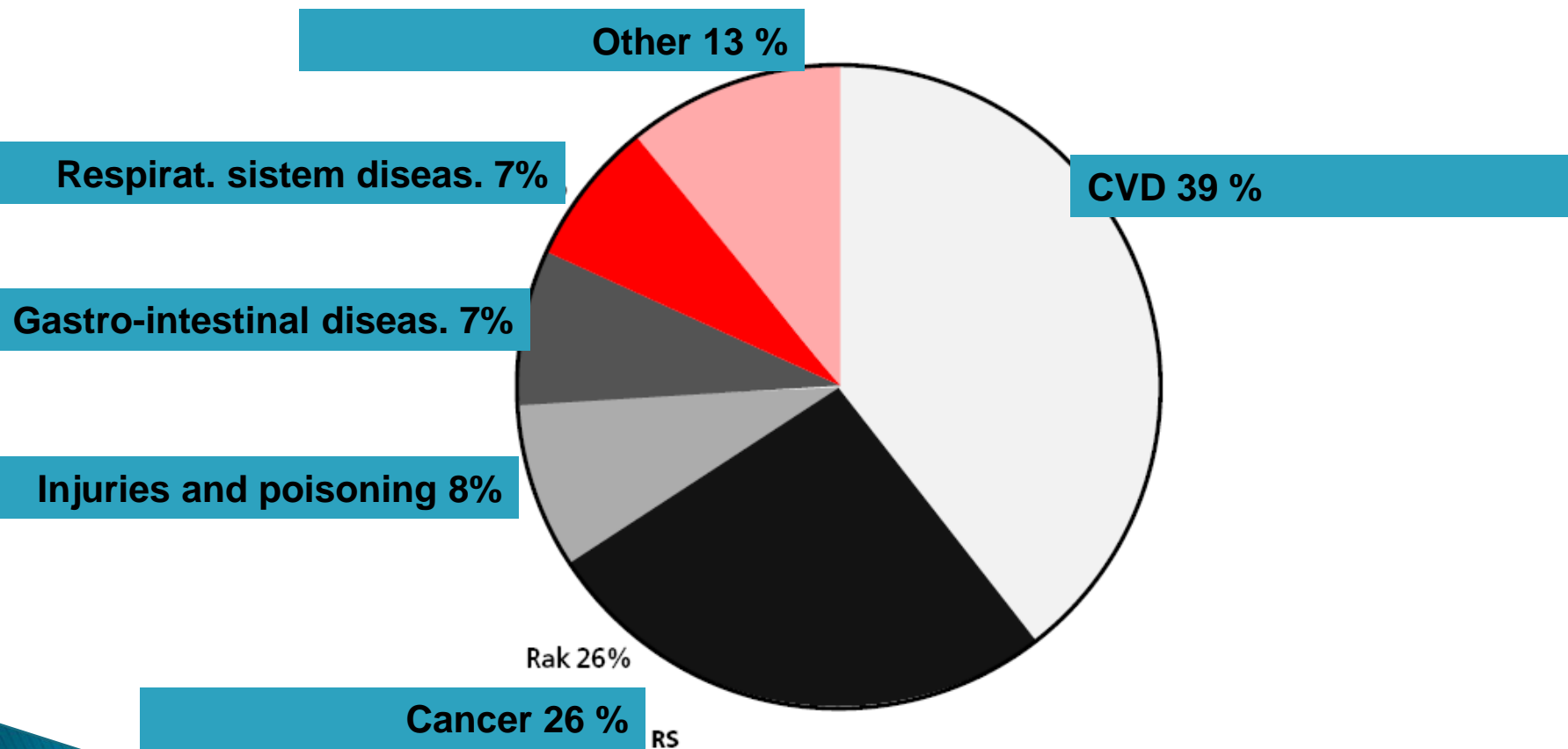


**Doctors
visits per
1.000.000
inhabitant**

HEALTH CARE NEEDS

Chronic non-communicable diseases in Slovenia – mortality rates

Slika 9: Vzroki smrti pri umrlih v Sloveniji, 2001, oba spola, vse starosti



Source: National Institute of Public Health, 2010

Cardiovascular diseases

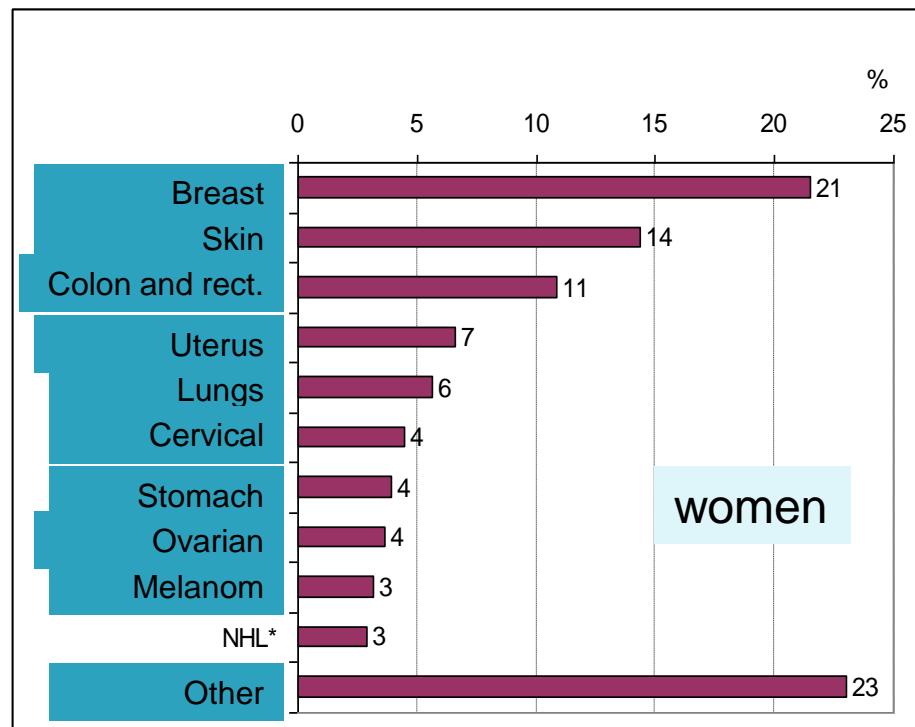
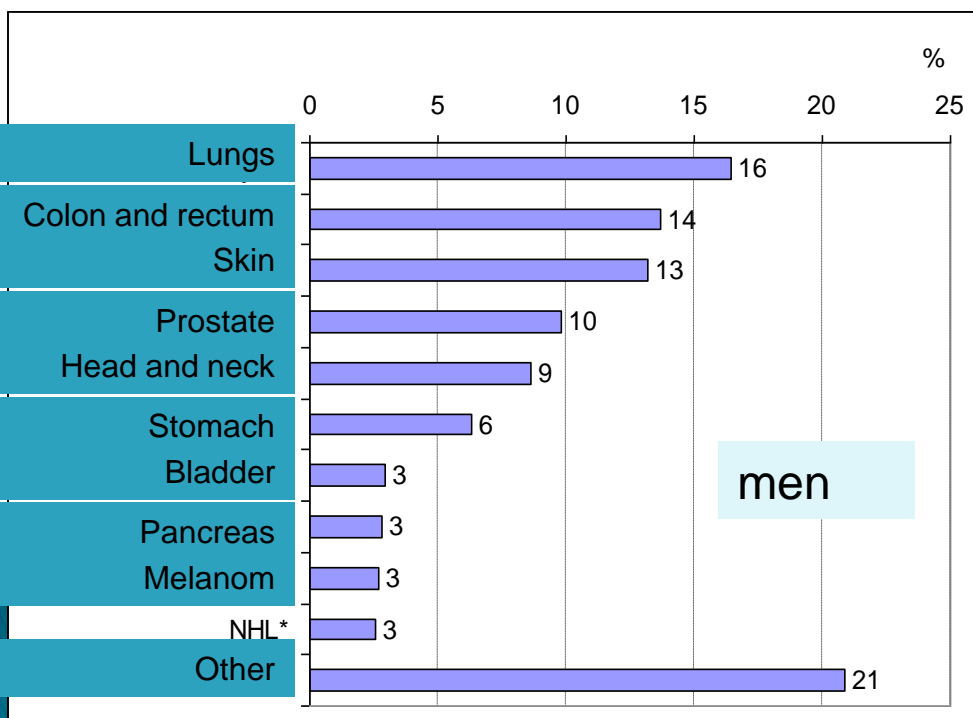
- ▶ Leading cause of mortality (38 % cases per year)
- ▶ Prevails the ischemic heart diseases
- ▶ Quarter of the population had high blood pressure (2014)
- ▶ Prevalence of CVD is divided into the eastern and western part
 - Mortality is higher in eastern part of Slovenia (Pomurje region)



Traditional nutrition patterns

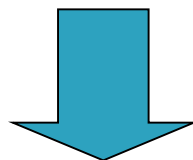
Cancer

- ▶ The second leading cause of premature mortality
- ▶ 33 % of deaths
- ▶ In 2014
 - men: prostate (138.6 new cases per 100.000 men)
 - women: breast cancer (116.9 new cases per 100.000 women).



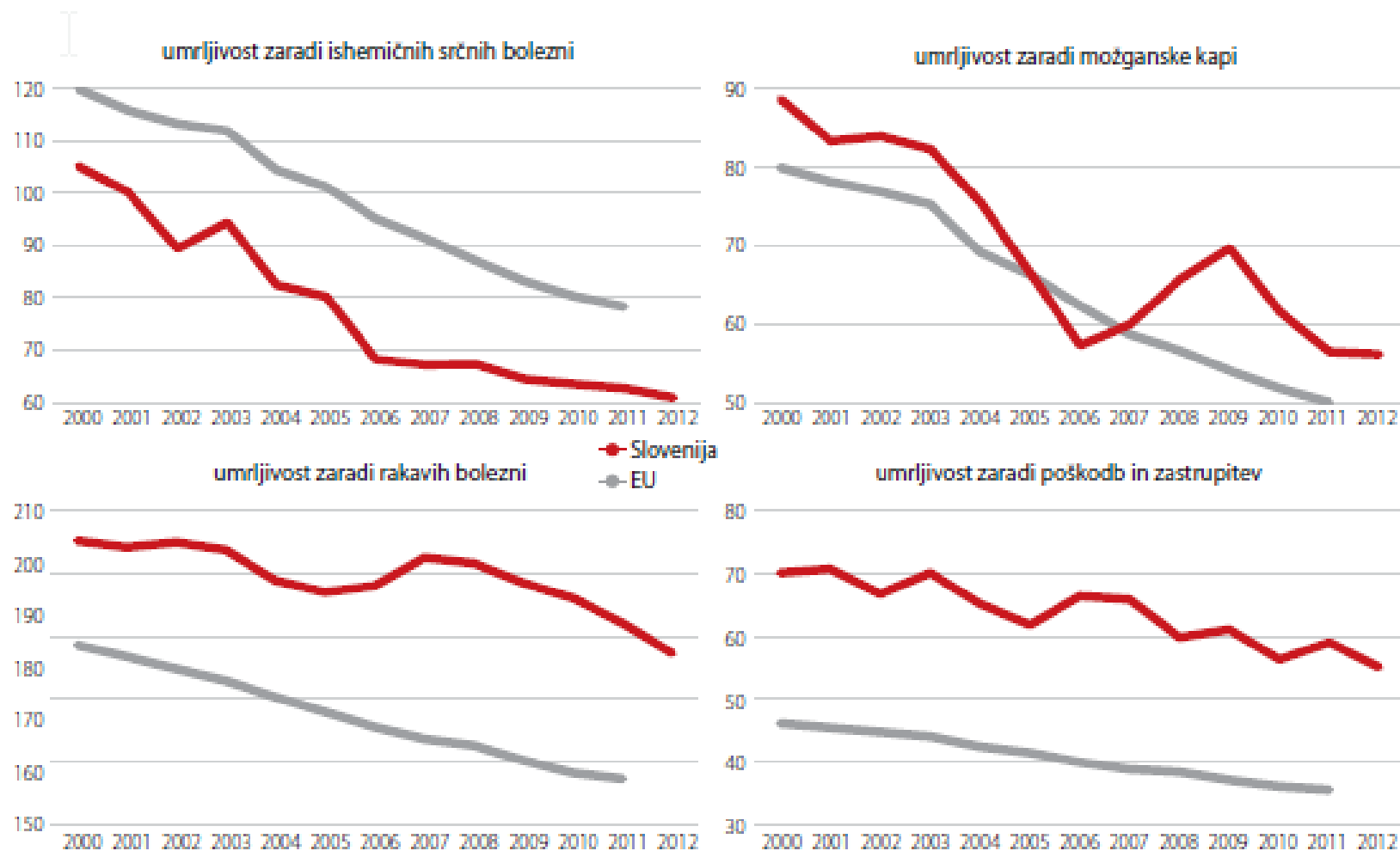
Injuries

- ▶ 8 % from injuries and poisoning
- ▶ Suicides: 17.1 per 100.000 (EU average: 11.7)
- ▶ Traffic accidents
 - 293 fatal cases in 2007 (significant decrease in 2008)
 - Below 100 in 2018



Road Safety Law (2008)

SDR for main diseases



Viri: Eurostat, HEIDI data tool.

Slika 3. Standardizirane stopnje umrljivosti na 100.000 prebivalcev zaradi nekaterih izbranih bolezni med letoma 2000 in 2012 v Sloveniji in v primerjavi s povprečjem v Evropski uniji.

EXAMPLE: SVIT

SVIT – national screening program for colorectal cancer

- ▶ national, organized, centrally managed, population based CRC screening programme
- ▶ based on scientific evidence, quality standards and best practice experiences
- ▶ adapted to local needs and capacities;
- ▶ preparation – pilot phase – national implementation (4 years)
- ▶ target population: 560 000 men and women aged 50 – 69 with basic health insurance, invited every two years; based on
 - immunochemical FOBT test with automatic readings,
 - screening colonoscopy for all FOBT positive cases;
- ▶ financially and professionally supported: MoH, Health Insurance Institute of Slovenia, National Institute of Public Health, Program council, executors (Center Svit, personal physicians, authorized colonoscopists, authorized pathohistologists, health education centres in PHC, NGOs, Pharmacies)

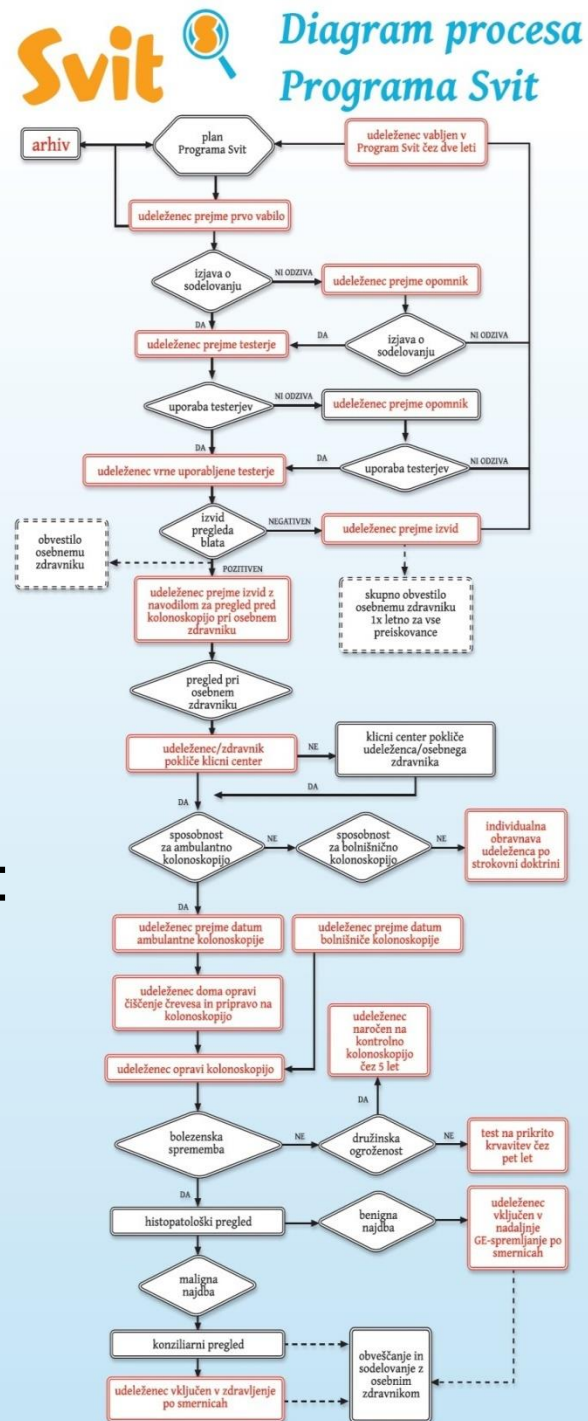
Level integrated care: primary – secondary – tertiary

SVIT – results

- ▶ Response rate:
 - 36% (2009) – 66% (2011)
- ▶ Detected
 - 846 carcinomas
- ▶ Detected and treated:
 - 5145 advanced adenomas
- ▶ Stage shift in screen-detected CRC I,II:
 - from 12–14% (before Svit)
 - to more than 70% (with Svit)



NE BOJTE SE SVETA TAM ZNOTRAJ!



Parts of the Slovenian health care story

- ▶ <http://www.2.gov.si/mz/mz-splet.nss>
- ▶ <http://www.2.gov.si/mz/hsmp/hsmp.nsf>
- ▶ Health Care System in Transition – Slovenia (Vol.4 No.3 2002)
- ▶ Health care system situation analysis – Slovenia
- ▶ <http://www.euro.who.int/Document/E92607.pdf>
- ▶ http://www.vlada.si/fileadmin/dokumenti/si/projekti/2011/zdravstvena/NADGRADNJA_ZDRAVSTVENEGA_SISTEMA_DO_LETA_2020_pdf_160211.pdf

Thank you!

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