

Implementation of sustainable investment practices in Slovenian healthcare system

Janez Poklukar,

Member of the Prime Minister's Strategic Council for healthcare of Slovenia

Riga, 1.11.2023

Content

- Slovenia ID
- Examples
- Conclusion

SLOVENIA ID

The basic values in Slovenian health care system

Universal Health Coverage

Everybody has access to health care

Solidarity

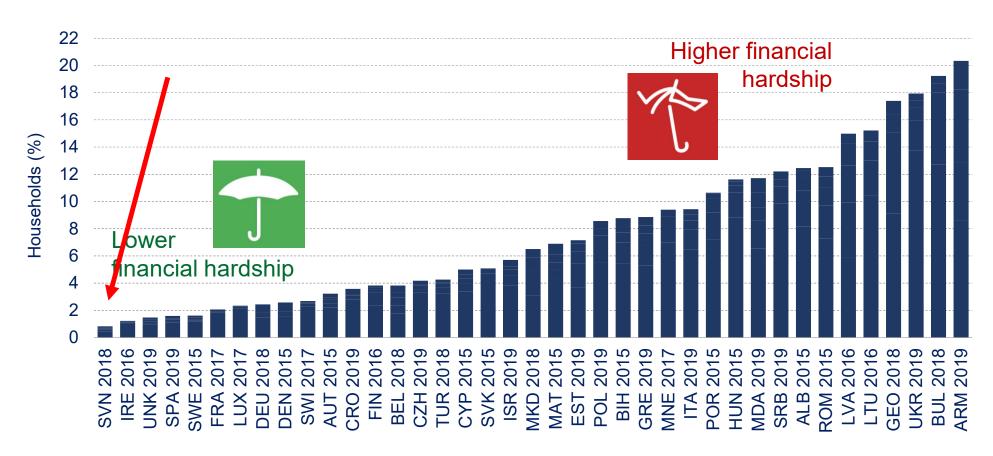
 All citizens contribute to health insurance fund in accordance with their income and use health care services in accordance with their needs

Equity

Equal access to all health care services for all population groups, including those most vulnerable.



Incidence of catastrophic OOPs across Europe

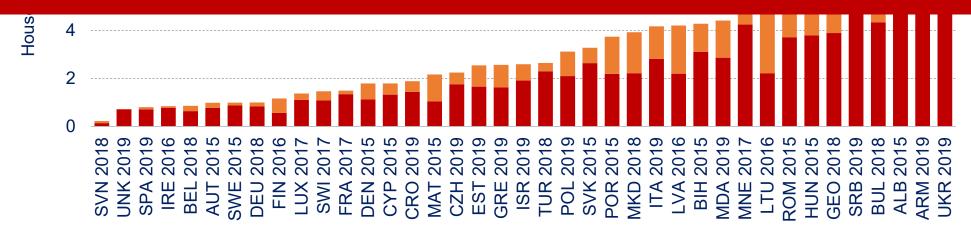


WHO Barcelona Office for Health Systems Financing (2023)

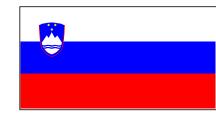
Out-of-pocket payments lead to (or worsen) poverty – even in Europe's richest countries



Health systems undermine social protection systems



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)

• 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:
 - € 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)

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
- ▶ 10-year national investment plan
- Institute of gatekeeper at primary level
- Regional equality of assuring primary health care services
- Concessionaires as a "mirror" to public providers

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 health care (according to the SILC methodology)

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

Mental health:

high suicide rates: 17.1 per 100.000 (EU average: 11.7)

Challanges of Slovenian Health Care System

- No. of physicians
- Unsystematic quality control
- Unsystematic transformation of wishes into real needs
- 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

EMERGENCY CENTERS	HEALTHCARE AND HEALTH INSURANCE	PHARMACY SERVICES	HEALTH SERVICES	WAITING TIMES
MORE RESOURCES FOR HEALTHCARE	PUBLIC PROCUREMENT	TOGETHER FOR A HEALTHY SOCIETY	INVESTMENTS	HEALTHCARE WORKFORCE
MANAGEMENT	e-HEALTH	JALITY AND SAFE	PATIENT RIGHTS	COMPETENT INSTITUTION LEADERSHIP

EXAMPLES

Strategic Approach to Planning Healthcare Network

Addressing Healthcare Infrastructure Challenges in Slovenia

- In 2021, Slovenia passed the Law on Allocating Resources for Investments in Slovenian Healthcare for the Period 2021 2031.
- This decision was prompted by the fact that the annual investments in healthcare resembled unfulfilled wishes of healthcare institutions from previous years.
- Due to underfunding during the economic crisis years, healthcare institutions in Slovenia had amortized approximately 80 to 85% of their infrastructure and costly medical equipment become outdated.
- The severity of the situation was further highlighted by the epidemic.
- Planning funds for significant, multi-year projects has always been a challenge, as the majority of funding is tied to the state's annual budgets.

Strategic Approach to Planning Healthcare Network

Addressing Healthcare Infrastructure Challenges in Slovenia

- To address this issue, we collaborated with healthcare institution leaders, considering population needs, demographic and epidemiological data, and 20-year projections, to create a 10-year infrastructure investment plan.
- For the first time, primary healthcare institutions and schools training healthcare professionals were included in this planning process.
- The result was a detailed investment plan with precise projects, financial estimates, and timelines.
- This approach secured €250 million for educational institutions, 25 times more for primary healthcare institutions, and six times more for other healthcare institutions.
 The law comprises only 8 articles, specifying a yearly allocation breakdown for healthcare and education, and includes detailed project descriptions.

Z A K O N O ZAGOTAVLJANJU FINANČNIH SREDSTEV ZA INVESTICIJE V SLOVENSKO ZDRAVSTVO V LETIH OD 2021 DO 2031 (ZZSISZ)

1. člen (vsebina zakona)

- (1) S tem zakonom se ureja zagotavljanje finančnih sredstev za izvedbo najpomembnejših investicij v slovensko zdravstvo v letih od 2021 do 2031 (v nadaljnjem besedilu: investicije), ki so določene z Resolucijo o nacionalnem planu zdravstvenega varstva 2016–2025 »Skupaj za družbo zdravja« (Uradni list RS, št. 25/16; v nadaljnjem besedilu: ReNPZV16–25) in načrtom razvojnih programov za področje zdravstvenega varstva in javne srednje in višje strokovne šole ter visokošolske zavode (v nadaljnjem besedilu: izobraževalni zavodi) s področja zdravstva, zaradi zagotavljanja vzdržnega in odpornega zdravstvenega sistema za učinkovito uresničevanje pravic do zdravstvenega varstva.
- (2) Finančna sredstva na podlagi tega zakona so namenjena javnim zdravstvenim zavodom, izobraževalnim zavodom s področja zdravstva ter negovalnim bolnišnicam in negovalnim domovom v okviru sistema dolgotrajne oskrbe.

2. člen (zagotavljanje finančnih sredstev)

- (1) Za izvajanje investicij iz prejšnjega člena se v proračunu Republike Slovenije zagotovi skupno 2.093 milijonov eurov, in sicer na posebni proračunski postavki pri ministrstvu, pristojnem za zdravje, od tega za:
- 1. univerzitetna klinična centra Ljubljana in Maribor 763 milijonov eurov,
- 2. splošne bolnišnice, negovalne bolnišnice in negovalne domove 557 milijonov eurov,
- 3. specialne bolnišnice 214 milijonov eurov,
- 4. psihiatrične bolnišnice 50 milijonov eurov,
- 5. porodnišnice 26 milijonov eurov,
- 6. zdravstveno dejavnost na primarni ravni 200 milijonov eurov,
- Nacionalni laboratorij za zdravje, okolje in hrano, Nacionalni inštitut za javno zdravje in Zavod Republike Slovenije za transfuzijsko medicino 33 milijonov eurov,
- visokošolske zavode za enoviti magistrski študijski program medicine, dentalne medicine in farmacije ter pripadajoče študijske in raziskovalne dejavnosti 200 milijonov eurov, ter
- srednje šole, višje strokovne šole in visokošolske zavode s področja zdravstva, ki niso navedeni v prejšnji točki, v višini 50 milijonov eurov.
- (2) V letu 2021 se zagotovi 127,27 milijona eurov iz prejšnjega odstavka, v letu 2022 197,62 milijona eurov, v letu 2023 219,66 milijona eurov, v letu 2024 233,22 milijona eurov, v letu 2025 227,74 milijona eurov, v letu 2026 252,64 milijona eurov, v letu 2024 milijona eurov, v letu 2028 172,12 milijona eurov, v letu 2029 169,91 milijona eurov, v letu 2030 136,84 milijona eurov in v letu 2031 135,51 milijona eurov, in sicer:

Ministrstvo za zd	avje Ministrstvo za izobraževanje, znanost in šport
-------------------	---

- Article 2 (providing financial resources)
- (1) For the implementation of investments from the previous article, the budget of the Republic of Slovenia provides a total of 2,093 million euros, namely on a special budget item at to the ministry responsible for health, of which for:
- 1. University Clinical Centers Ljubljana and Maribor EUR 763 million,
- 2. general hospitals, nursing hospitals and nursing homes EUR 557 million,
- 3. special hospitals, 214 million euros,
- 4. 50 million euros for psychiatric hospitals,
- 5. maternity hospitals, 26 million euros,
- 6. health activity at the primary level, 200 million euros,
- 7. National Laboratory for Health, Environment and Food, National Institute for Public Health and The Institute of the Republic of Slovenia for Transfusion Medicine 33 million euros,
- 8. higher education institutions for the unified master's study program in medicine, dental medicine and pharmaceuticals and related study and research activities, 200 million euros, and
- 9. secondary schools, higher professional schools and higher education institutions in the field of healthcare, which are not mentioned in the previous point, in the amount of 50 million euros.

	Postavke 1, 2, 3, 4, 5, 6, 7	Postavke 8,9
Leto	EUR	EUR
2021	127.278.136,30	0,00
2022	194.625.842,60	3.000.000,00
2023	205.665.180,14	14.000.000,00
2024	213.224.157,63	20.000.000,00
2025	204.740.732,92	23.000.000,00
2026	210.141.720,88	42.500.000,00
2027	162.941.630,88	57.500.000,00
2028	152.120.027,31	20.000.000,00
2029	144.908.686,42	25.000.000,00
2030	111.839.493,01	25.000.000,00
2031	115.514.391,92	20.000.000,00
SKUPAJ	1.843.000.000,01	250.000.000,00

- (3) Ne glede na prejšnji odstavek je letni znesek zagotovljenil lahko tudi višji za znesek, ki ga ni bilo mogoče izvesti v preteklih letih. N porabe proračunske postavke ministrstva, pristojnega za zdravje, za izve 2., 3., 4., 5., 6. (kolikor se nanašajo na zdravstveni dom za študente) odstavka tega člena se v celoti prenesejo in izločijo na poseben proračunskega sklada pri ministrstvu, pristojnem za zdravje, ne glede na 2. in 3. točke prvega odstavka 5. člena Zakona o investicijah v javne z katerih ustanovitelj je Republika Slovenija (Uradni list RS, št. 90/15) neporabljene pravice porabe štejejo razlike med sprejetim proračuno podpisanimi odredbami po stanju na dan 8. decembra tekočega leta. Sk finančnih sredstev v letih od 2021 do 2031 ne sme presegati zneskov tega člena, razen če gre za temeljno financiranje na podlagi petega odst
- (4) Če se za investicije projektov iz letnega načrta iz 3. zagotovijo finančna sredstva iz drugega vira, ki neposredno ne pomeni č proračuna (na primer iz strukturnih skladov ali proračuna Evropske u Republike Slovenije iz prvega in drugega odstavka tega člena sorazmern
- (5) Finančna sredstva iz prvega in drugega odstavka tega člen dejavnost iz 6. točke prvega odstavka tega člena, pomenijo za njeno dovoljeni obseg finančnih sredstev iz državnega proračuna.
- (6) Dodatno financiranje investicij za dejavnosti iz 8. in 9. toč tega člena se lahko izvede na drugi pravni podlagi, v okviru proračunske okviru sredstev Evropske unije.
 - 3. člen (letni načrt)

- (1) Investicije iz 1. člena tega zakona se v posameznem letu določijo z letnim načrtom, ki ga sprejme Vlada Republike Slovenije (v nadaljnjem besedilu: Vlada) na podlagi ReNPZV16–25 in načrtom razvojnih programov za področje zdravstvenega varstva in izobraževalnih zavodov s področja zdravstva. V letni načrt iz prejšnjega stavka se vključijo projekti, s katerimi se zagotavljajo operativne zmogljivosti zdravstvene dejavnosti (na primarni, sekundarni in terciarni ravni) ter izobraževalnih zavodov s področja zdravstva zaradi povečanja števila vpisnih mest v programe medicinske, farmacevtske in zdravstvene smeri. Pri določitvi teh projektov se poleg investicij v obnovo sedanjih in zgraditev novih prostorov in objektov ter nakup potrebne medicinske opreme upoštevajo tudi kadrovske, logistične, infrastrukturne in druge potrebe.
- (2) Letni načrt investicij iz prejšnjega odstavka mora biti usklajen z načrtom razvojnih programov za področje zdravstvenega varstva in izobraževalnih zavodov s področja zdravstva, kot ga določa zakon, ki ureja javne finance.

4. člen (prevzemanje obveznosti)

- (1) Ministrstvo, pristojno za zdravje, za izvajanje investicij v skladu s tem zakonom lahko sklepa pogodbe, s katerimi prevzema obveznosti za celotno obdobje veljavnosti tega zakona.
- (2) Razen če s posebnimi predpisi ni določeno drugače, pogodbe za izvajanje investicij v skladu s tem zakonom lahko neposredno sklene tudi posamezni upravičenec iz tega zakona na podlagi predhodnega pisnega pooblastila ministra, pristojnega za zdravje.
- (3) Določbe prvega in drugega odstavka tega člena ne izključujejo uporabe zakona, ki ureja javno naročanje.

5. člen (evidenca sredstev)

Ministrstvo, pristojno za zdravje, zagotovi ločeno evidenco investicij v obnovo sedanjih in gradnjo novih prostorov in objektov ter v nakupe potrebne medicinske opreme v ta namen, vključno z investicijami za kadrovske, logistične, infrastrukturne in druge potrebe, za katere se zagotavljajo finančna sredstva na podlagi tega zakona.

6. člen (storitve investicijskega inženiringa)

- (1) Inženiring v zvezi z izvedbo investicij na podlagi tega zakona lahko izvaja tudi gospodarska družba v 100 odstotni lasti Republike Slovenije, ki je ustanovljena, da kot notranji izvajalec za državo, njene organe in pravne osebe javnega prava, opravlja storitve investicijskega inženiringa.
- (2) Inženiring iz prejšnjega odstavka obsega zlasti pripravo, organiziranje in koordinacijo investicij v vseh fazah investicijskega procesa ter organiziranje in izvajanje recenzij ali revizij projektne dokumentacije.

7. člen (poročanje)

8. člen (začetek veljavnosti)

akon začne veljati petnajsti dan po objavi v Uradnem listu Republike

259. septembra 2021

Državni zbor Republike Slovenije Igor Zorčič predsednik

Digitalization

- in the last EU perspective, we invested 10 million EUR in digitization,
- in the plan for recovery and resilience we are allocating 73 million EUR for this.

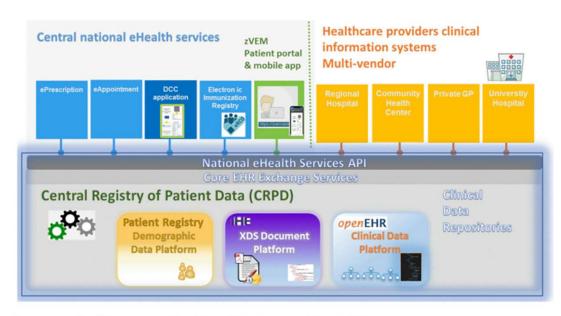


Figure 1. The Slovenian eHealth architecture and the CRPD.

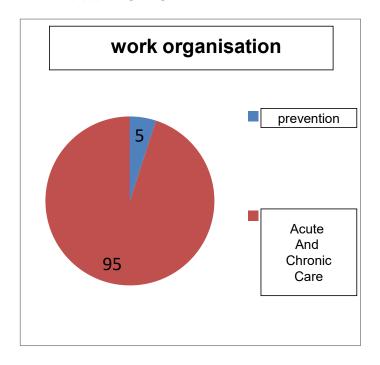
Reference practicies (RP)

The aim

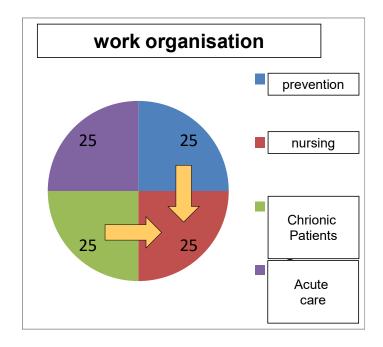
- increase quality, safety and cost effectiveness in patient treatment
- performance of certain activities in part by the certified nurse in accordance with their jurisdiction and responsibilities
- In RP physicians already work in the public health care network, but are at a high level as far as their expertise is concerned regarding:
 - integrated care
 - chronic patient treatment per protocols
 - prevention
 - quality indicators
 - optimal use of laboratory services

RP reorganisation in 2010

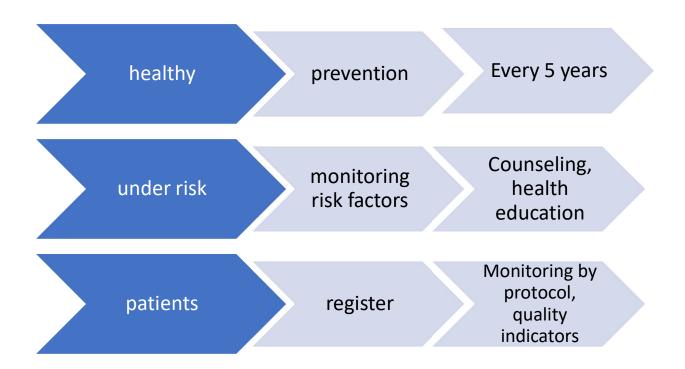
- New team: 1 doctor, 1,5 nurse (+0,4), 0,5 (+0,14) administrative worker
 - Till 2010



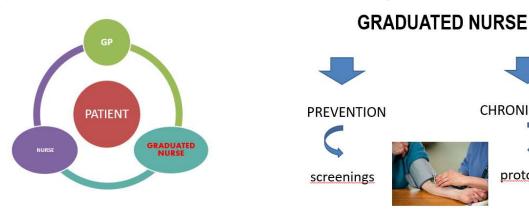
Today



Three groups of citizens



Reference practicie: family medicine practice, reinforced by graduated nursee



PREVENTION - GRADUATED NURSE



PREVENTION AT HOMEcommunity nurse



- Physically disabled people
- · People with specific psychological problems

CHRONIC DISEASES

protocols

· People in social isolation





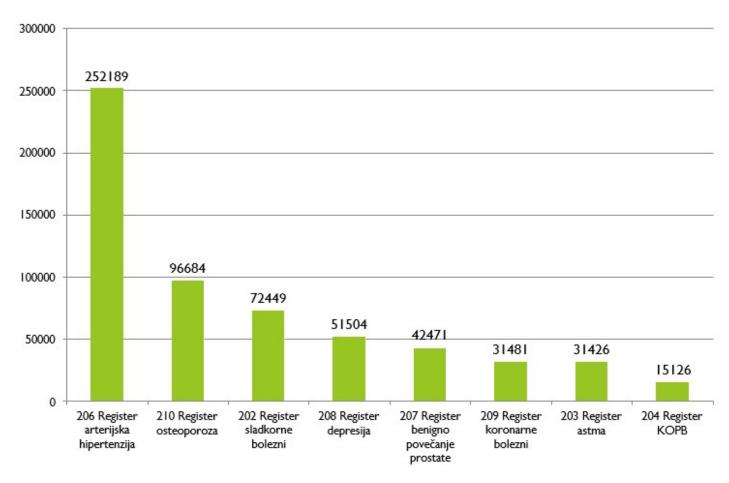
Geografical distribution of RA candidates – 31.1.2011

Year	Number	Additional funds	OE Murska Sobota 155 158 031 161 152 078 040 040 040 040 040 040 040 040 040 04		
2011	105		178 Q70 165 166 187 188 Q26 187 185 182 Q26 187 Q26 18		
2012	164				
2013	245	8.980.993	93 5 137 12 120 144 200 198 069 172 OE Maribor		
2014	328	12.248.869	154 092 OE Celle		
2015	583	15.595.957	MoH goal: 40 RA in 2011 Condition:		
2016	649	20.005.722	 excellence clinics specialist family/general medicine as a leader regional representation real-time reporting and once per year evaluation Dynamics: 105 (2011) and 164 (2012) 		
2017	775	22.539.223			
2018	812	27.725.507			

Management of patients with chronic diseases

- Protocols: consensus between primary and secondary/tertiary health care on treatment of chronic patients
- Registers of chronic patients: 8 chronic diseases
- Quality indicators: a total of 28 quality indicators (registers, frequency of checking parameters defined in protocols, risk factors, vaccination rate for influenza and pneumococus, etc...)

Chronic patients in registers, 2017



Nurse learning - new aproach

- e-courses ("blended learning") for nurse
- lectures of top experts are recorded and accessible at any time on the website (www.referencne-ambulante.si)
- regular checks conquered content in e-learning environment



Health promotion centres (HPC)

- First created in 2002 in all primary health care centres across Slovenia
- Main role: provide lifestyle interventions against key risk factors for noncommunicable diseases by combining population and individual approaches
- 2013 2016 NEW PARADIGM (using Norwegian grant) integration of different services targeting vulnerable groups with the help of creating partnership with key stakeholders, including social services and NGOs
- 2018 2019 based on previous experience with the financial help of European Social Found we are now implemented this practices in 25 health care centres



- ✓ Additional preventive activities by community nursing
- ✓ Ensuring equality in health care for vulnerable groups
- ✓ Community-based approach
- ✓ Individual and group classes on lifestyle changes

Health Promotion Centre



Reproductive and newborn preventive care

Community Nurse

Dental team, including dental hygienist

> Preventive dental care

Quality parenthood for Parenthood for Children and

adolescents (and parents)

Dental health Health promotion programme children and adolescents

Children and youth preventive care

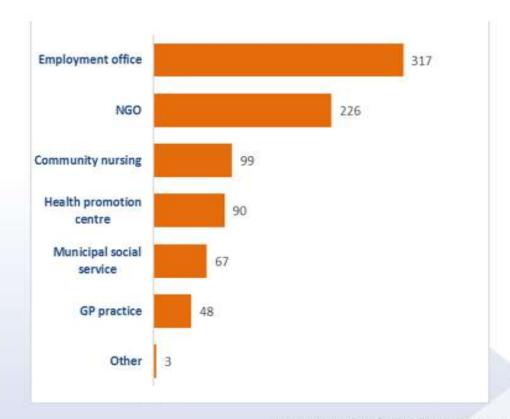
Multidisciplinary team:

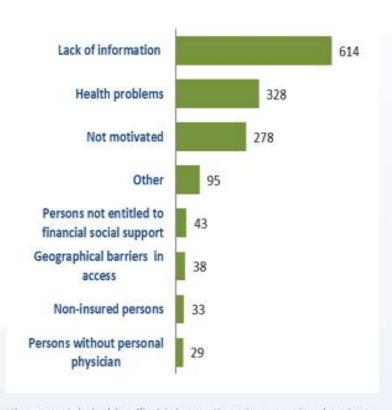
- · Registered nurse
- Physiotherapist
- · Psychologist
- Dietitian
- Kyneziologist
- · Physician (family medicine, pediatrician)

Adult preventive care (GPs)



Vulnerable groups







Project Together for health; Participants in intervention per stakeholder (first interventions in removing barriers in accessibility).

Perceived barriers in access to preventive interventions for vulnerable populations (the sum value in the table is higher than the number of participants, because of multiple-choice questions). Source: NUZ.

Upgrading preventive services in Primary Health Centres 2019 – 2022 – Health promotion for vulnerable populations:

Upgrading preventive services in Primary Health Centres 2019 – 2022 – Health promotion for vulnerable populations:

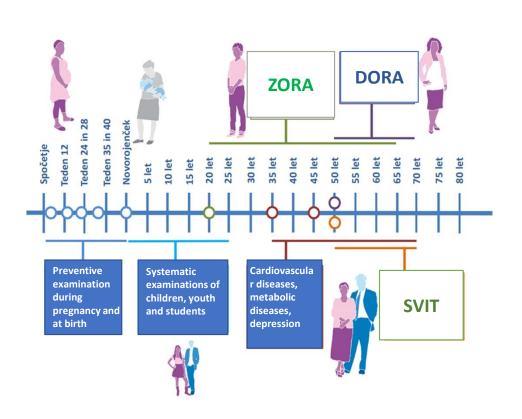
- Piloting 25 new Health Promotion Centres in PHC
- Focus on vulnerable populations
- Upgrading services of community nursing
- Developing new structures and action plans at local communities
 Involving social services, schools, local communities and NGOs

Key factors of success were:

- Longstanding cross-sectoral collaboration Health Promotion Centre in the leading role
- Involving NGOs at local level to assess and assist in addressing the needs of the most vulnerable populations
- Municipality health data

https://iris.who.int/bitstream/handle/10665/345843/WHO-EURO-2018-3397-43156-60430-eng.pdf?sequence=3&isAllowed=y

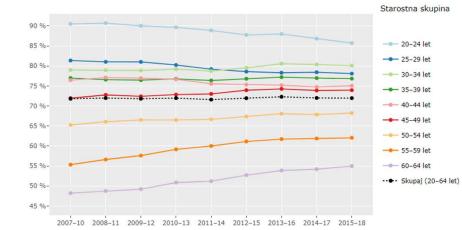
SCREENING PROGRAMS

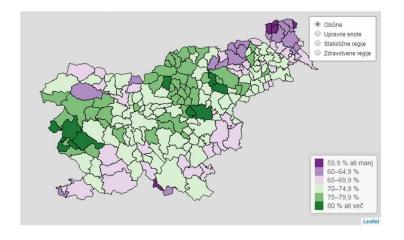


- ✓ Dora breast cancer screening program for women between the age of 50-69
- ✓ **Zora** a screening program for detecting cancer on the cervix, intended for women aged 20-64
- ✓ **Svit** a screening program for the diagnosis of colon and rectal cancer, aimed at both men and women aged

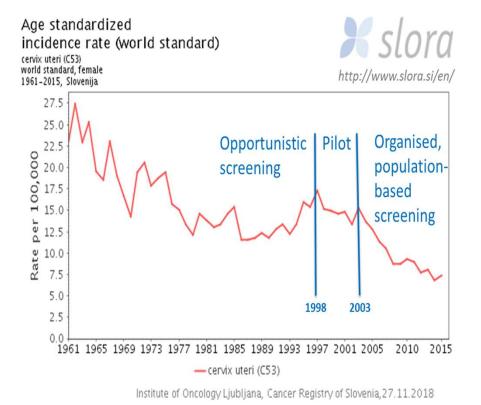
ZORA

- ✓ As part of the ZORA program, gynecologists will detect those women who have a pre-stage or initial stage of cervical cancer by examining healthy women in time. It is then possible to prevent or completely heal with simple therapeutic treatments.
- ✓ ZORA is a national screening program, every 3 y. women get a written invitation on their home address.
- ✓ Because RMV is growing slowly and requires several years to progress from cancer to pre-cancerous forms, it is possible to find out and treat the majority of dangerous changes in the cervix at three-year intervals.
- ✓ In the last 3-year period (July 1, 2015-30, June 6, 2018), the screening of the target population of ZORA exceeds 70%, which is gratifying.





IMPACT OF CERVICAL SCREENING – SLOVENIA



Slovenia one of the EU countries with organised screening with highest recorded decrease in cervical cancer incidence (Elfstrom,

DORA

- ✓ In the DORA program for breast examination with screening mammography we invite women aged 50 to 69 years every two years. In that life period breast cancer is the most common.
- ✓ Women get written invitation on their home address.
- ✓ Images are examined by two radiologists, independently, which contributes to greater reliability.
- √ No waiting times, no referral, no extra charge

73% national participation



13 stationary centres + mobile centres



Stacionarni presejalni centri programa DORA:

IZOLA • NOVA GORICA • KRANJ • LJUBLJANA • DOMŽALE • TRBOVLJE • BREŽICE NOVO MESTO • MARIBOR • PTUJ • MURSKA SOBOTA • SLOVENJ GRADEC • CELJE

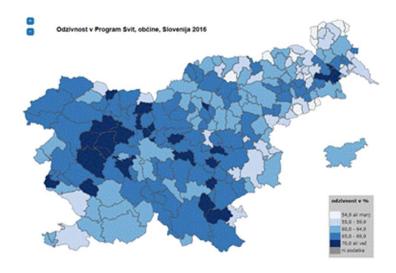
SVIT

SVIT

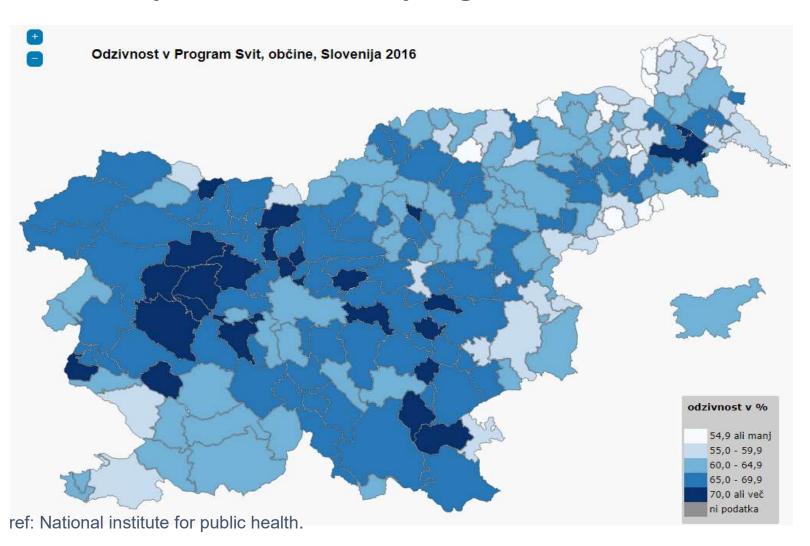
- √ The Svit program is a preventive health program designed to prevent and detect early cancer of the colon and rectum.
- ✓ Svit includes men and women aged 50-74
- ✓ With the Svit program, many cancers of the colon and rectum can be prevented, because we uncover and remove polyps that are pre-cancerous.
- ✓ Participation in Svit program is for target population free of charge. Costs are covered by Health Insurance Institute of Slovenia.

62,74% national participation





Responsiveness in program Svit 2016



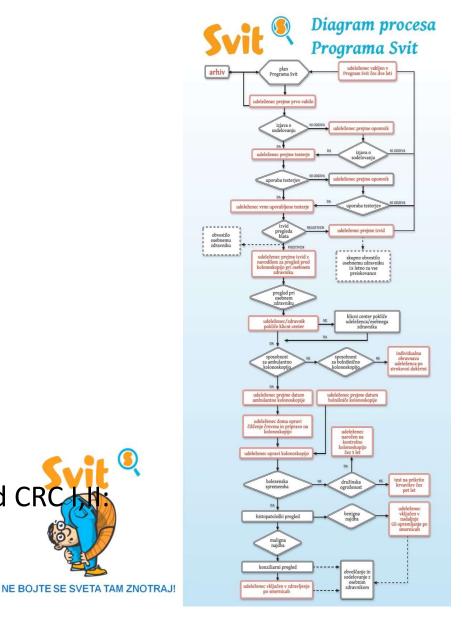
SVIT – results

- Response rate:
 - 36% (2009) 66% (2011)
- Detected
 - 846 carcinomas
- Detected and treated:
 - 5145 advanced adenomas

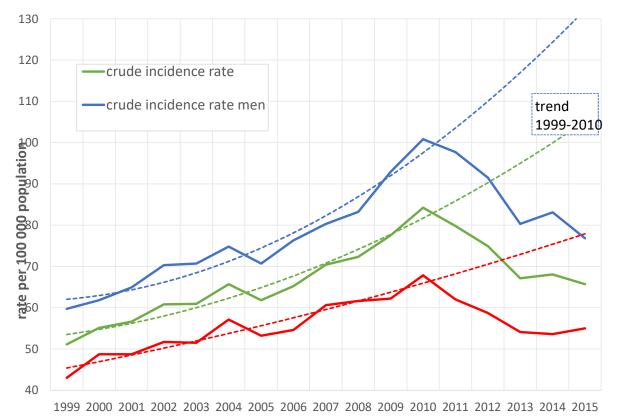
Stage shift in scren-detected CRC

• from 12-14% (before Svit)

• to more than 70% (with Svit)



COLORECTAL CANCER INCIDENCE In Slovenia









Conclusion

- Slovenian presedncy: Council conclusion: EC, with its technical and financial mechanisms, should support a country or several countries in a more targeted and faster way when they are looking for innovative solutions to face challenges.
- Pilot: Austria, Belgium and Slovenia

- They will test how to establish a one stop shop in the EC in order to support countries in such initiatives and to advise them on various mechanisms in different parts of the commission (DG Santa, digital, reform...) to support the development and implementation of innovative solutions.
- Slovenia is piloting the new method in the field of primary helathcare reform, Austria introduces green hospitals and Belgium integrated treatment of chronic diseases.

Thank you!

janezpoklukar@gmail.com



