

Educational Day of National Cervical Cancer Screening Programme ZORA

6 November 2015, Brdo pri Kranju, Slovenia

Cervical cancer screening in the EU How successful is the Slovenian programme?

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Acknowledgement

Most of the present slides are originals or slightly modified versions of the originals kindly provided by:

K. Miriam Elfström

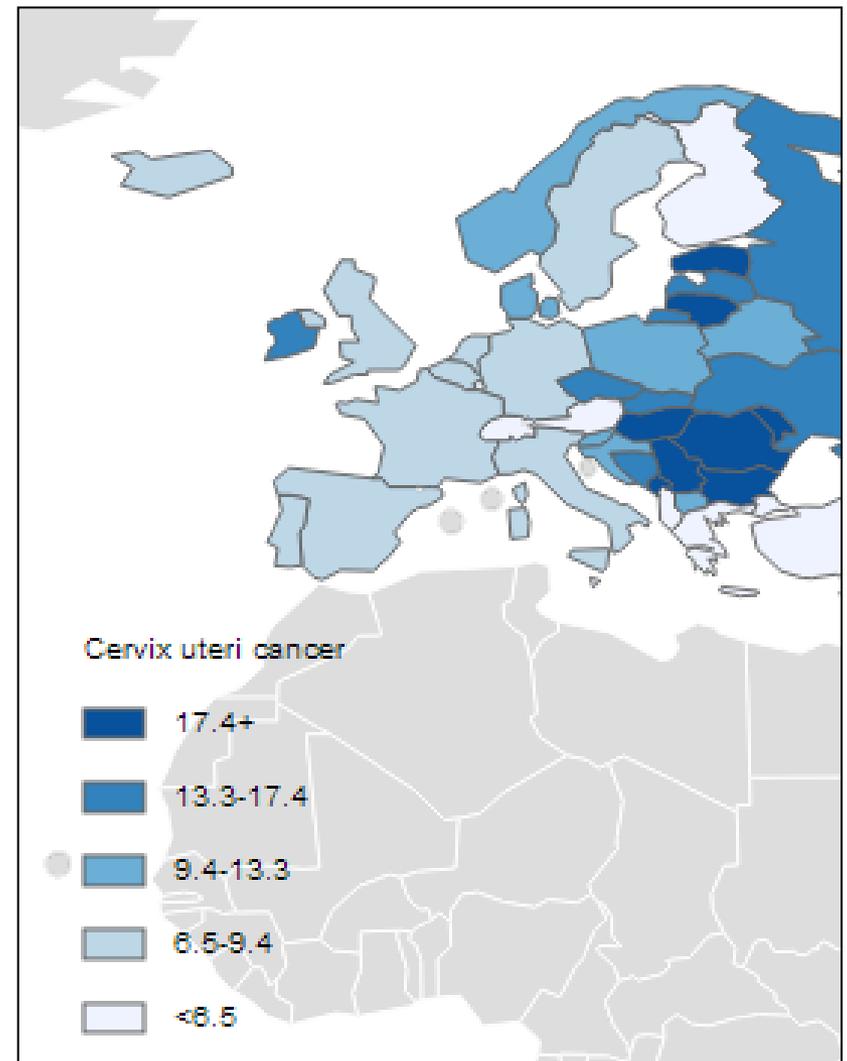
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The originals have been presented elsewhere in reporting on a study in the EU-financed FP7 PREDHICT Project that is also described in:

Elfström KM, Arnheim-Dahlström L, von Karsa L & Dillner J (2015) Cervical cancer screening in Europe: Quality assurance and organisation of programmes. *Eur J Cancer*, 51(8): 950–968

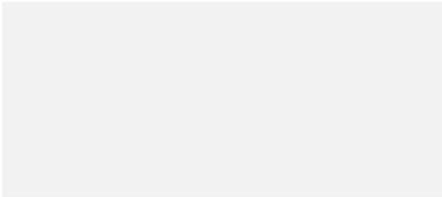
Background

- Cervical cancer burden varies substantially across Europe.
- The highest incidence is in the East, where organized screening programmes with comprehensive quality assurance are not yet implemented or fully developed.



Globocan, retrieved from <http://globocan.iarc.fr/Pages/Map.aspx#> 20150531

Rationale



- The EU recommends implementation of organized, population-based programmes for cervical cancer screening following the European Quality Assurance Guidelines to achieve the most benefit with appropriate cost and acceptable risk (Council of the EU 2003).
- The European Guidelines recommend adequate, sustainable resources for comprehensive quality assurance (**10%-20% of overall resources** based on a fully developed screening programme (Supplements to quality assurance guidelines for breast and cervical cancer screening)).

Rationale, cnt'd

The European Guidelines also point out:

- Clinical trials have shown the current prophylactic HPV vaccines to be safe and highly effective among women who were not infected with the respective HPV types at the time of vaccination (see also ECDC 2012; WHO 2009; WHO 2014; see also EMA 2014).
- Cost-effectiveness of HPV vaccination tends to be largest in countries with the highest cervical cancer burden, ie in many of the EU countries that have not yet implemented HPV vaccination programmes (Estonia, Hungary, Lithuania, Poland, Slovakia, Cyprus and Croatia).
- An organized, population-based approach to vaccine delivery, and monitoring and evaluation will be essential to improve vaccine coverage and effectiveness in the EU.

Aim of survey

- To characterize current organization and quality assurance of screening programmes in Europe and to estimate the financial resources required to monitor them using a questionnaire circulated to all EU/EFTA countries
- To identify the key components of organization, evaluation and optimization of preventive policies that are required for ensuring that the potential health gains of cervical screening are attained

Content

- Comprehensive review of the literature and existing guidelines and protocols

Piloting

- Questionnaire circulated among select set of countries with organized programmes (Norway, Sweden, UK), and IARC for commenting

Data

- Survey sent to individual research and programme contacts as well as Ministries of Health
- Sent to 34 EU/EFTA countries. Sent individually to England, Northern Ireland, Scotland, and Wales

Info

- Detailed aspects of programme organization, quality assurance, monitoring, evaluation and corresponding line-item costs were recorded.
- Documentation of programme guidelines, protocols and publications was requested.

Questionnaire structure

Cervical cancer screening and audits

- Screening programme organization, infrastructure, & operational costs
- Screening programme quality control and effectiveness
- Screening programme monitoring system
- Cervical cancer audits

HPV vaccination

- HPV vaccination programme details and implementation
- Vaccination monitoring and evaluation programme
- HPV vaccination programme costs

Data collection – response status

Country	Response	Data submitted
Austria	X	X
Belgium	X	X
Bulgaria	X	
Cyprus		
Czech Republic	X	X
Denmark	X	
England	X	X
Estonia	X	X
Finland	X	X
France	X	X
Germany	x	X
Greece	X	X
Hungary	X	X
Iceland	X	X
Ireland	X	X
Italy	X	X
Latvia	X	X

Country	Response	Data submitted
Liechtenstein	X	X
Lithuania	X	X
Luxembourg	X	X
Malta	X	X
Northern Ireland		
Norway	X	X
Netherlands	X	X
Poland	X	X
Portugal	X	
Romania	X	X
Scotland	X	
Slovakia		
SI Slovenia	X	X
Spain	X	X
Sweden	X	X
Switzerland	X	X
Wales		

SI

Responses have been received from both individual program/research/key informant contacts as well as ministries of health in some countries.
Data submitted is all or partial depending on the country.

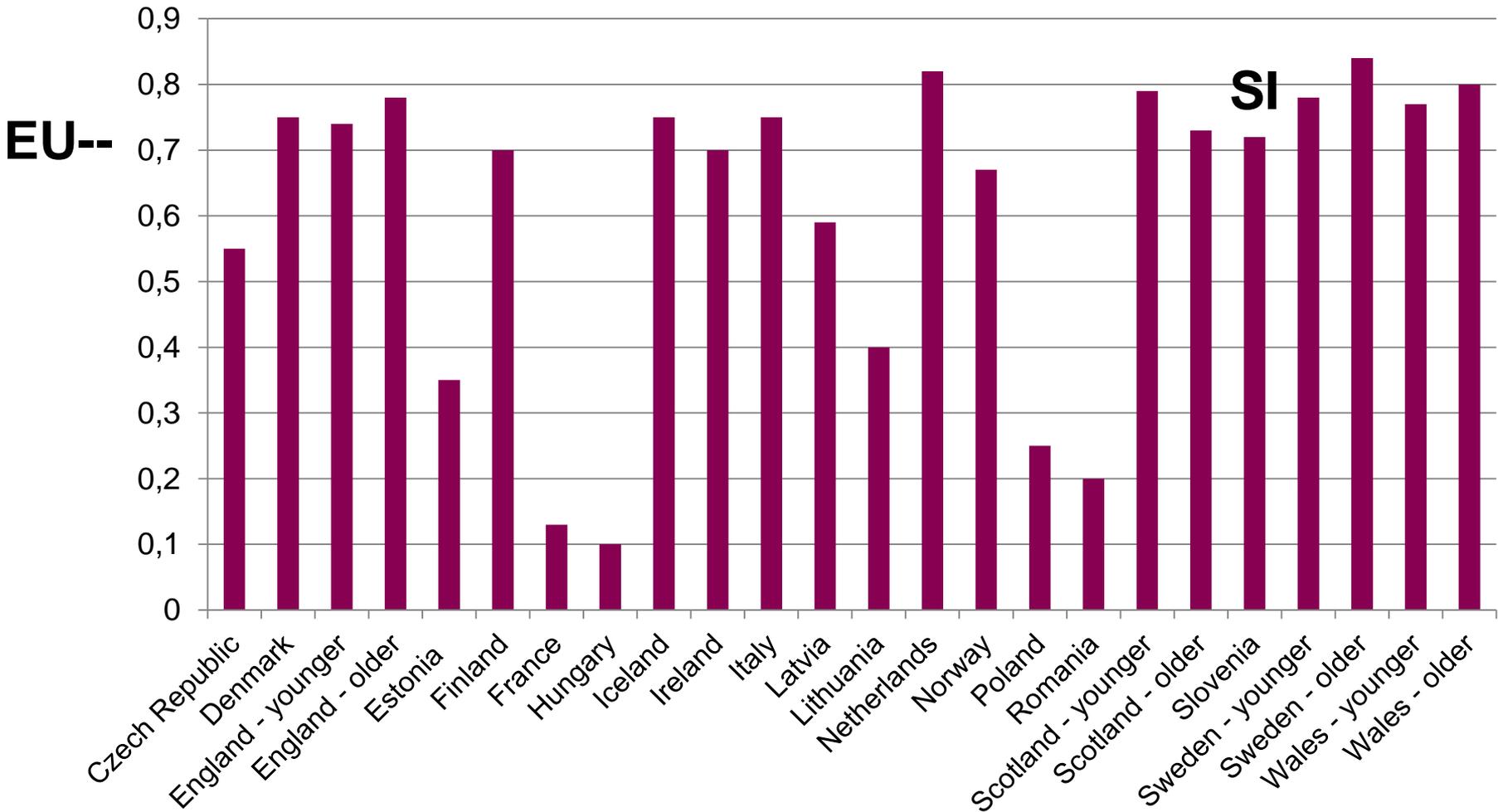
Results – Screening programme details

Country	Exam interval & age-range	Further eligibility criteria	Financing source	Co-payment
Czech Republic	1 year	All adult women	Public health insurance	No
England	3 years (ages 25 - 49) 5 years (ages 50 - 64)	Women with a cervix in situ	Primary Care Trusts through the Department of Health	No
Estonia	5 years (ages 30 - 59)	Women with health insurance	Health Insurance Fund	No
Finland	5 years (ages 30 - 60)	Some regional variation in age-range	Municipality health care budget	No
France	3 years (ages 25-65)	Women with a cervix in situ & have had intercourse	Health Insurance Plan, Ministry of Health, National Cancer Institute	Unknown
Hungary	3 years (ages 25 - 65)	Women who have not participated in opportunistic screening	Health Ministry, National Health Insurance Fund Administration	No
Iceland	2 years (ages 20-39) 4 years (ages 40-69)		Department of Welfare	Yes
Ireland	3 years (ages 25 - 44) 5 years (ages 45 - 60)	Immunosuppressed women start at age 20	Department of Health	No
Italy	3 years cytology 5 years HPV (ages 25 - 64)	Opportunistic screening, women with other health concerns excluded	Regional health funds	No
Latvia	3 years (ages 25 - 70)		Health Care budget	Yes
Liechtenstein	2.5 years (older than 17)		Governmental funding	No
Lithuania	3 years (ages 25-60)		National Health Insurance Fund	No
Netherlands	5 years (ages 30 - 60)	Women with a cervix in situ, no recent smear for other indications, not currently pregnant	Ministry of Health, Welfare, and Sport	No
Norway	3 years (ages 25 - 70)	Women with a cervix in situ, no recent opportunistic smear		Yes
Poland	3 years (ages 25 - 59)	Women with a cervix in situ, have an identify card, and proof of health insurance	National Healthcare Fund	No
Romania	5 years (ages 25 - 64)		Ministry of Health	No
Slovenia SI	3 years (ages 20 - 64)		Health Insurance Institute of Slovenia	No SI
Sweden	3 years (ages 23 - 50) 5 years (ages 50 - 60)		Regional health funds	Varies by region

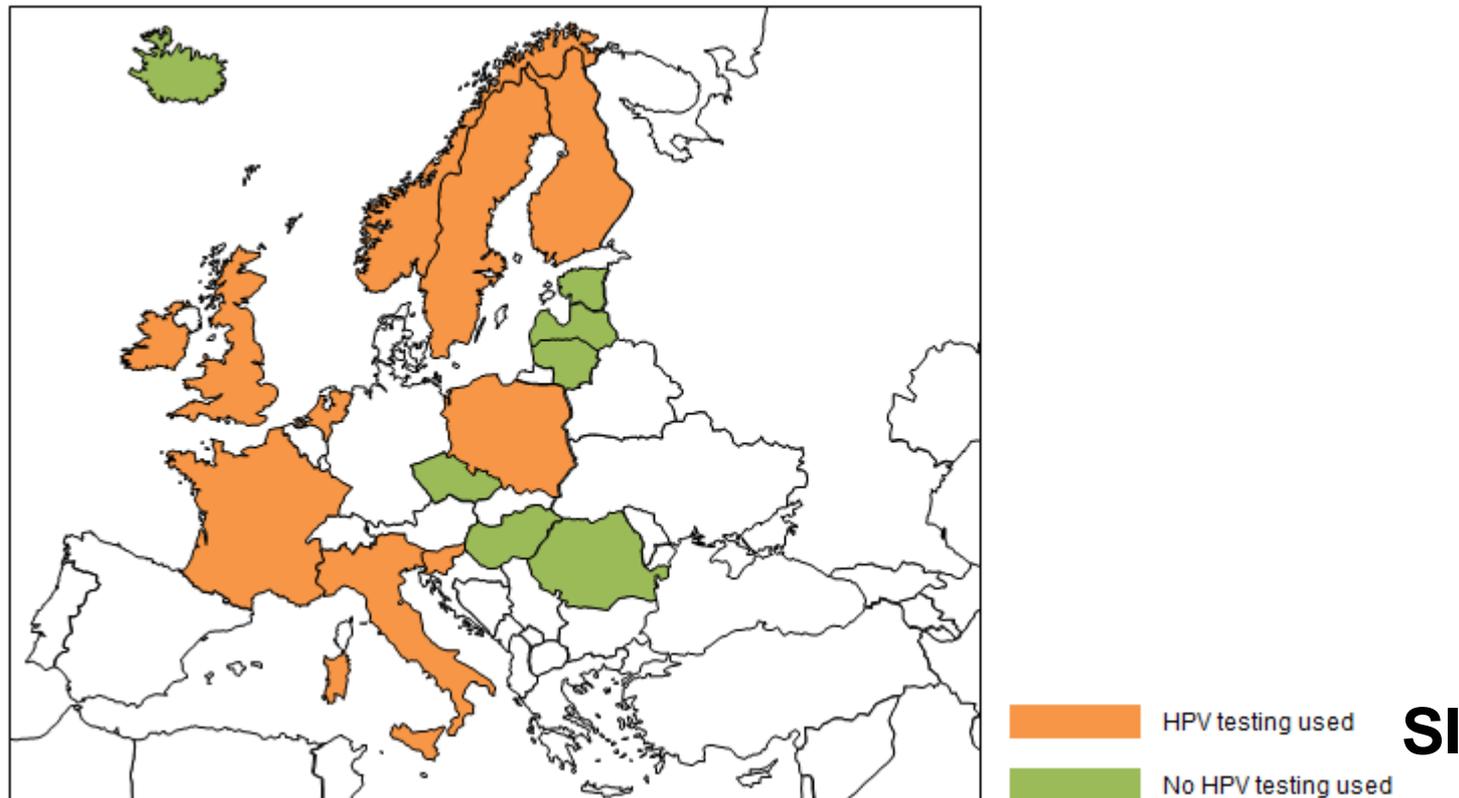
Results – Test coverage

Screening interval as used in different countries

Test coverage (%)

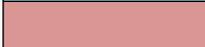


Results – Use of HPV testing in organized programmes



Results – Specific uses of HPV testing

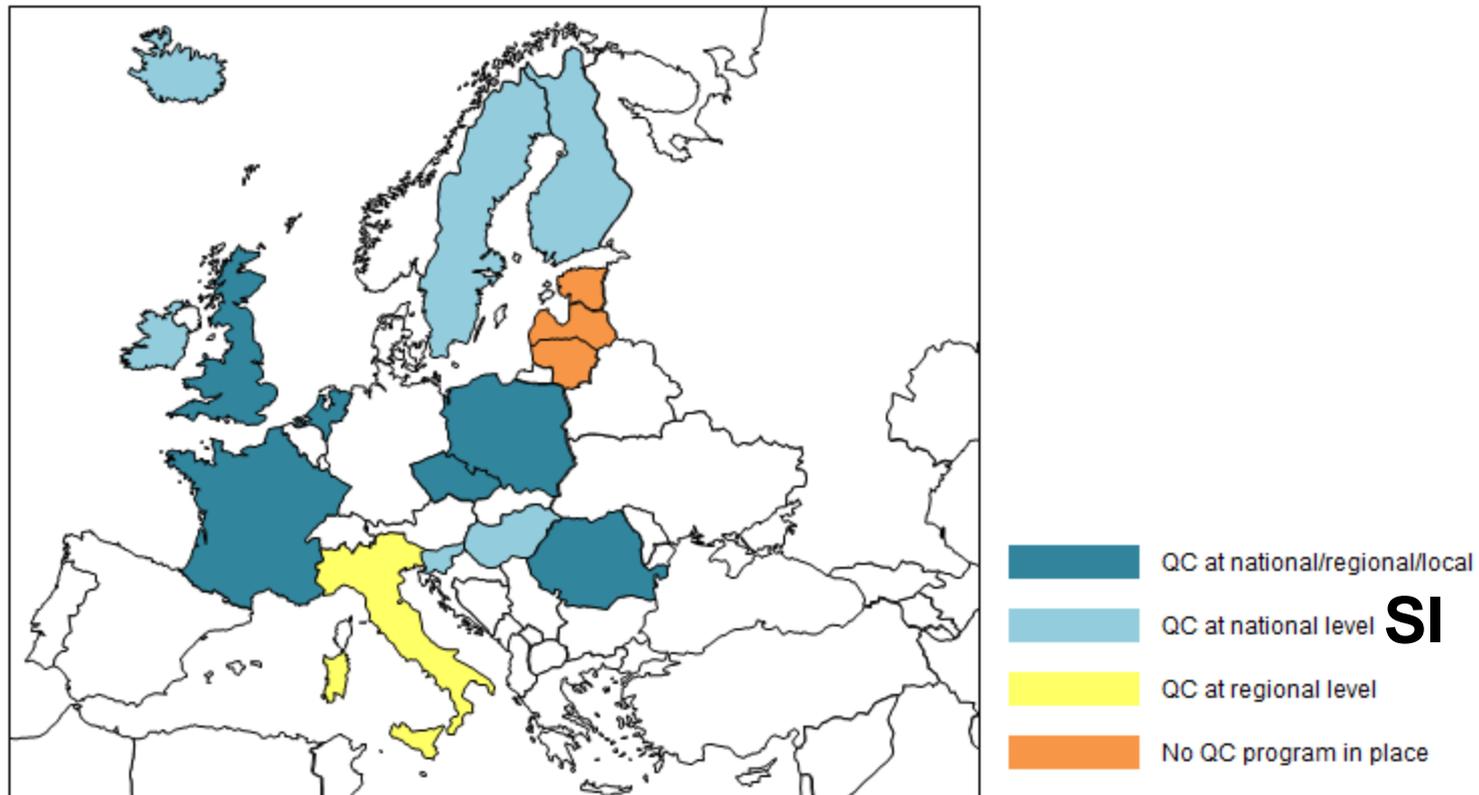
Country	Primary HPV testing	HPV with cytology (co-testing)	Triage of cytology	Triage of cytology - LSIL	Triage of cytology - ASCUS	Test of cure
Belgium	No	Yes	Yes	No	Yes	Yes
England	No	No	Yes	Yes	Yes	Yes
Finland	Yes	No	Yes	No	Yes	Yes
France	No	No	Yes	No	Yes	No
Ireland	No	No	No	No	No	Yes
Italy	Yes	No	Yes	Yes	Yes	Yes
Liechtenstein	Yes	Yes	Yes	No	No	No
Netherlands	Yes	No	Yes	No	No	Yes
Poland	No	No	Yes	Yes	Yes	No
Slovenia	No	No	Yes	Yes	Yes	Yes
Sweden	Yes	No	Yes	Yes	Yes	Yes

 Yes
 No

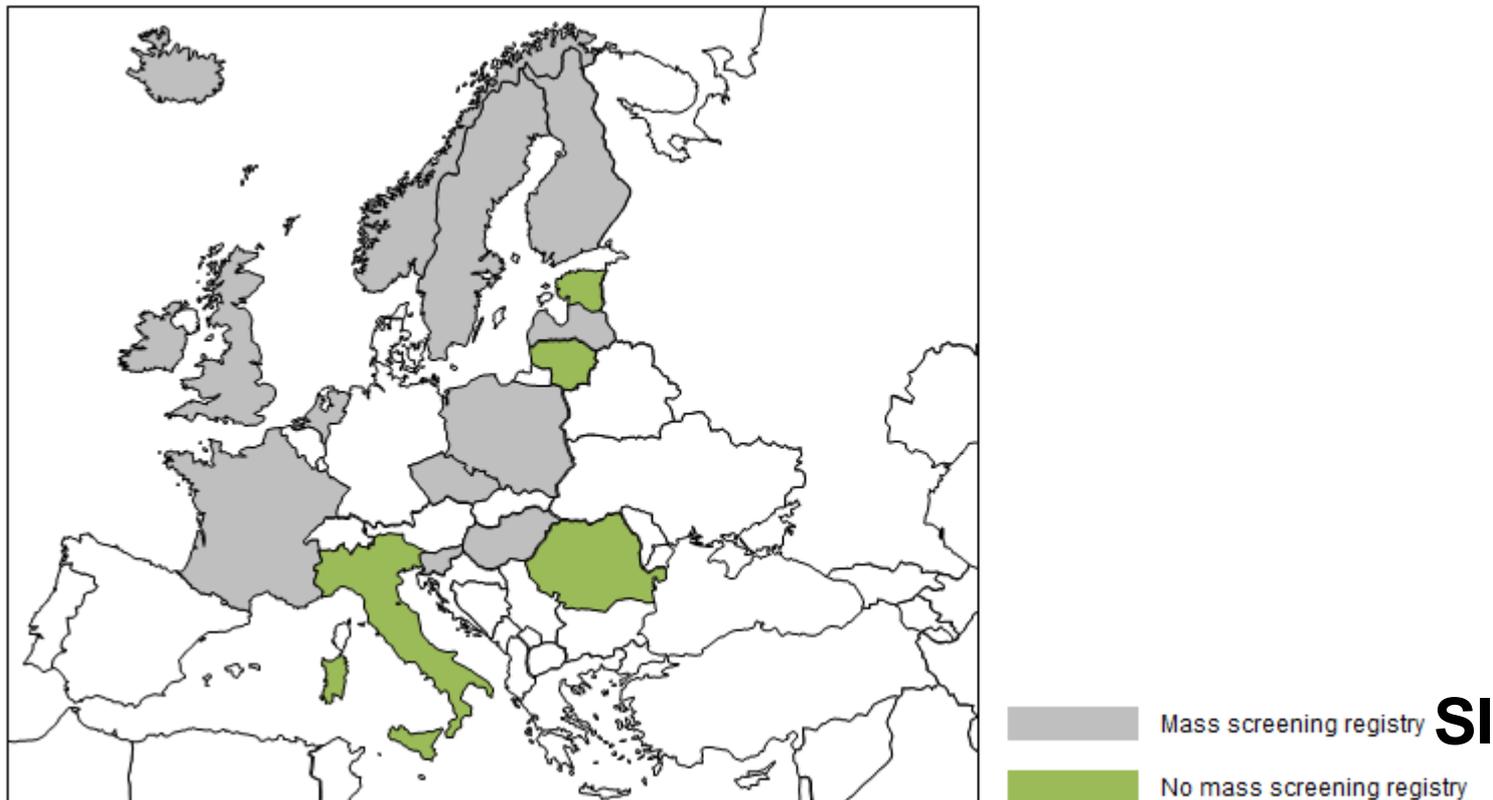
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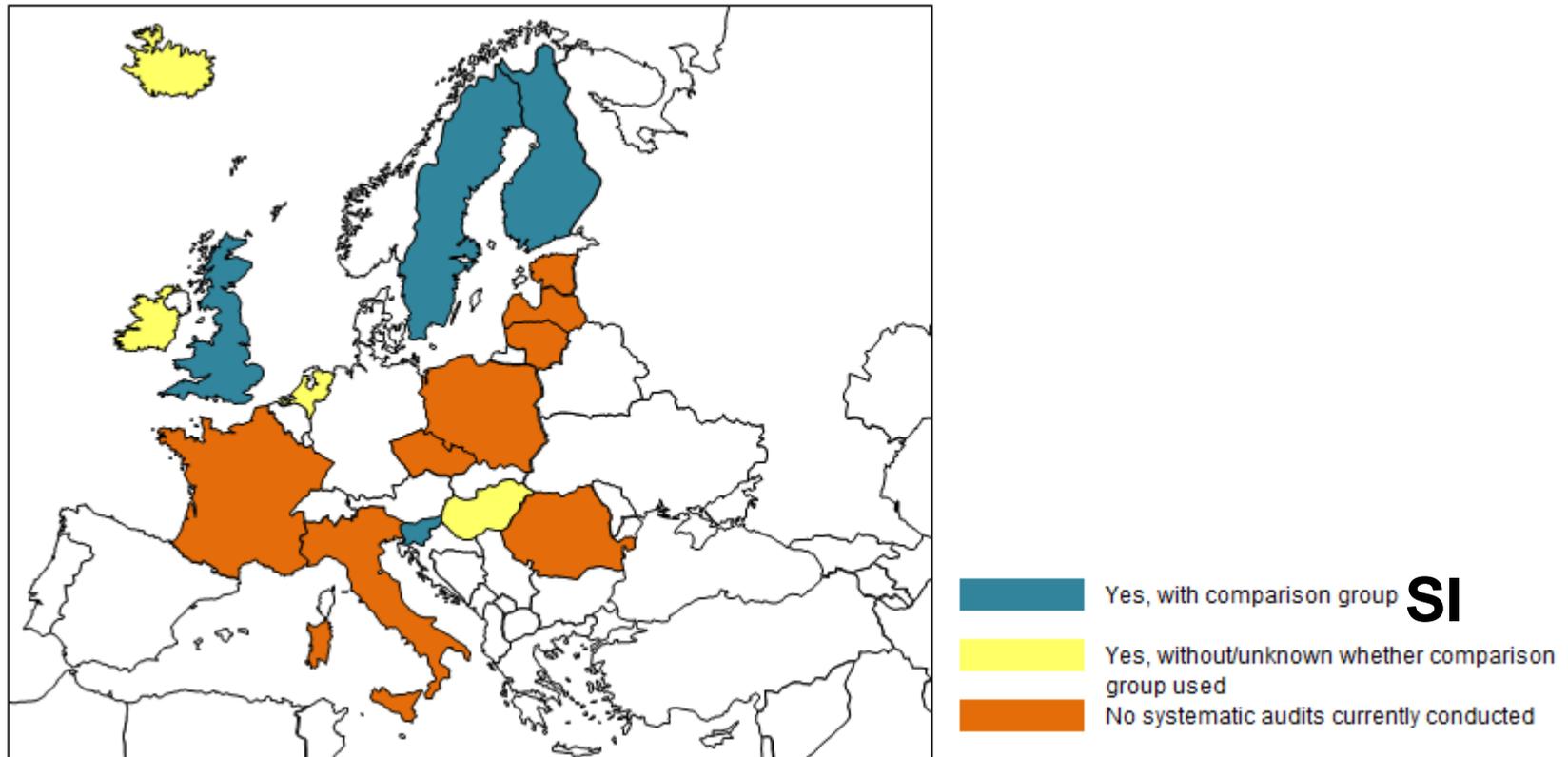
Results – Status of organization of quality control programmes



Results – Status of comprehensive mass screening registries



Results – Status of conducting systematic cervical cancer audits

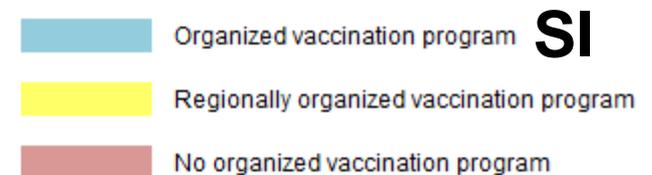
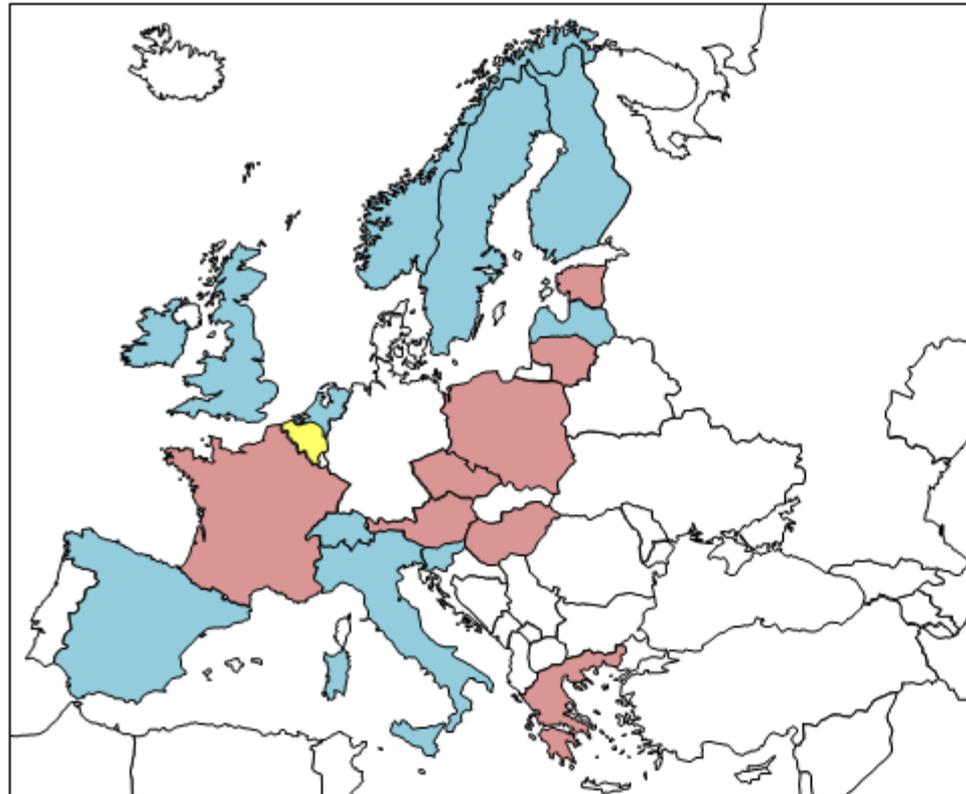


Results – Costs of the screening programme

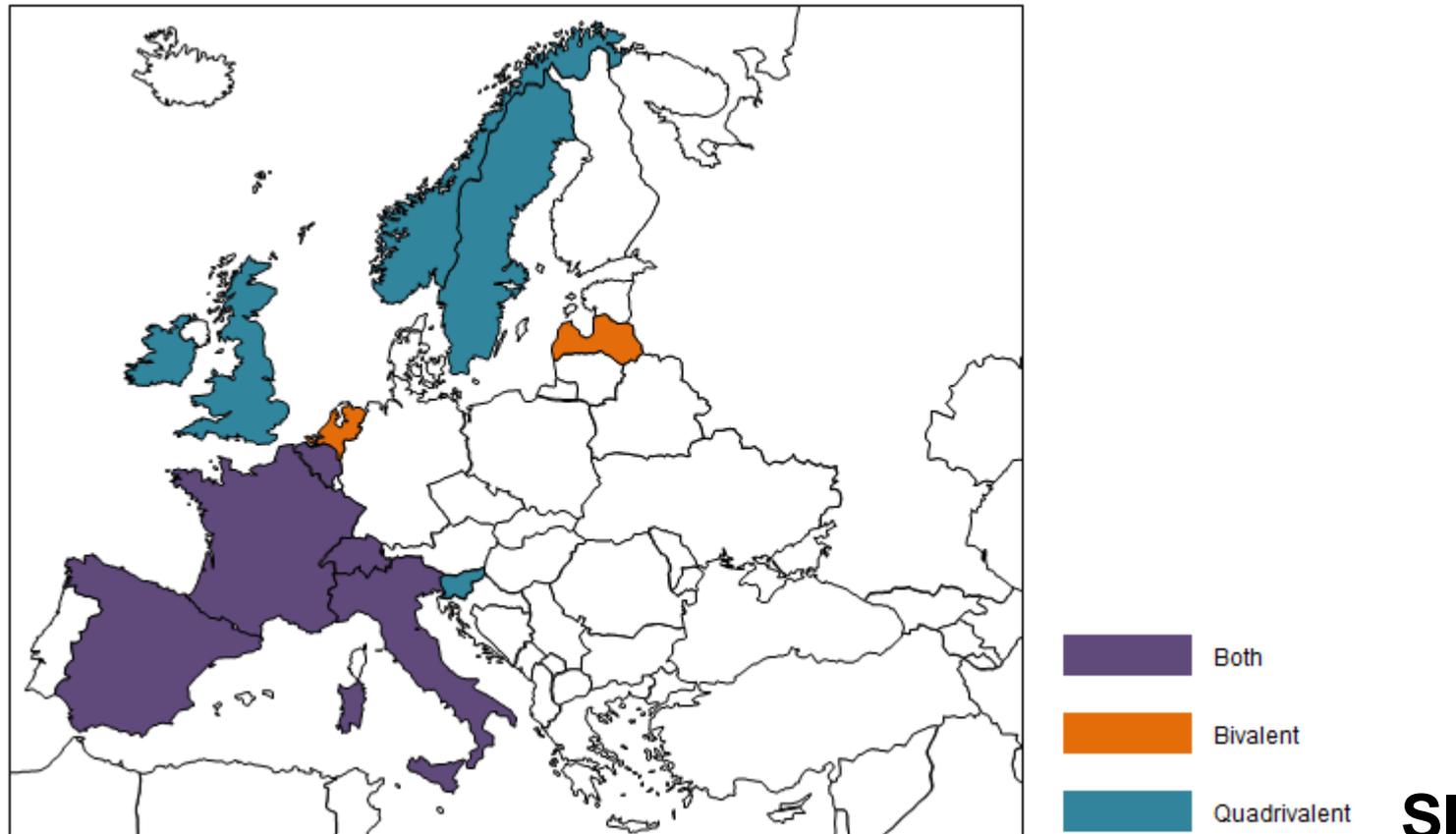
Country	Invitations	Smear-taking	Processing & interpreting slides	Registration & communication of results	Monitoring & evaluation of the program
Countries reporting per woman/test costs					
Belgium		19,48	21,77		
Finland	3,00	12,00	15,00	1,00	1,00
Italy	7,63	7,63	13,99		
Latvia	0,30	10,00	3,00		
Netherlands		12,09	24,00		1,05
Poland	0,40	6,00	25,50		
Romania	3,00	6,00	8,00	2,00	2,00
Slovenia		10,00	8,00		
Sweden		24,00			
Total average	2,87	11,91	14,91	1,50	1,35
Countries reporting costs for the entire program					
Czech Republic		3 028 983,00	17 919 243,00		25 000,00
England	12 300 123,00	92 250 923,00	36 900 369,00		
Estonia	10 643,50	125 124,38	228 306,28	25 560,00	
Hungary	233 333,00	340 000,00	4 917,00		66 667,00
Lithuania	232 418,00	399 833,00	556 565,00		
Total average	3 194 129,38	19 228 972,68	11 121 880,06	25 560,00	45 833,50

*Conversions from local currency calculated using December 2012 average conversion rate unless the country provided a conversion rate.

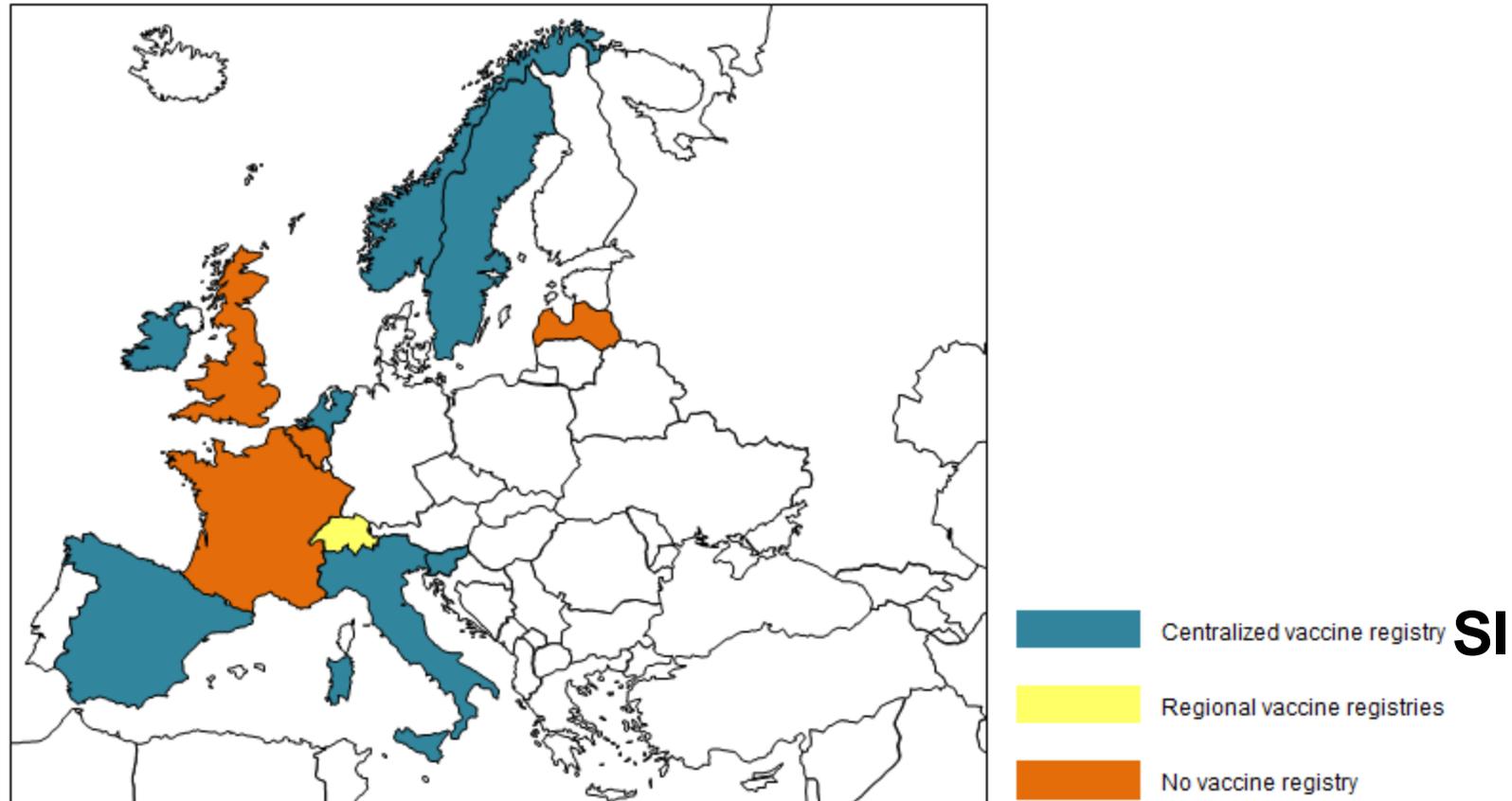
Results – Organization status of HPV vaccination programmes

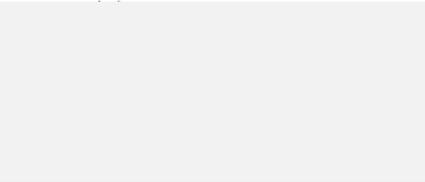


Results – Vaccine used in organized vaccination programme



Results – Monitoring and evaluation of vaccine programme efforts





Considerations

- Use of terminology can differ across contexts and may present interpretation challenges
- Potential for reporting bias given political (non-validated self-reporting) nature of the survey
- Responses reflect current prevention efforts, policies have and will change further – need for repeated survey.

Conclusions

- Critical to have information on organization and quality assurance to incrementally optimize cervical screening and vaccination programmes.
- Organized efforts for quality assurance, monitoring, and evaluation are implemented to a differing extent across European countries.
- Most countries found it difficult to estimate cost associated with launching and operating the screening programme.
 - Difficult to compare the cost-effectiveness of different prevention strategies
- The Slovenian cervical screening programme has a high degree of organization, and has well-organized infrastructure for quality assurance, monitoring and evaluation of cervical cancer prevention through both screening and vaccination.
- Adequate sustainable institutional and financial support should be provided to assure that best use is made of this potential in the future.

Thank you for your attention!