European Guidelines and Training in Implementation of Population-based Cancer Screening

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1. Implementation of cancer screening programmes

(a) Offer evidence-based cancer screening through a systematic population-based approach with quality assurance at all appropriate levels. The tests which should be considered in this context are listed in the Annex;

(b) Implement screening programmes in accordance with European guidelines on best practice where they exist and facilitate the further development of best practice for high quality cancer screening programmes on a national and, where appropriate, regional level...
Need for Quality Assurance in Cancer Screening

- Screening is for predominantly asymptomatic populations
- At any given time, only a few people will have a health benefit from screening
- The risks are slight, but all participants are exposed
- Due to the very large number of people involved - the risks add up
- Quality assurance keeps the balance between benefit & harm in an appropriate range.

L. v. Karsa, IARC
To achieve an appropriate balance between benefit and harm - quality must be optimal at every step in the screening process:

- Information & invitation of the target population
- Performance of the screening test
- Diagnosis for people with suspicious test results
- Treatment of screen-detected lesions
- Surveillance & aftercare
Organised Screening Programmes

- **Responsible** national or regional **team** for implementation (coordinating service delivery, quality assurance, and reporting of performance and results)
- **Comprehensive** guidelines, **rules** & standard operating procedures
- **Quality assurance structure** with supervision & monitoring of the screening process
- **Ascertainment** of the population disease burden
Population-based programmes promote equity and quality assurance

- Personal invitation
  - Equal change of each eligible person to benefit

- Data bases for
  - Monitoring and auditing performance
  - Linkage with cancer registries for evaluating screening impact on the burden of disease
Organized, Population-based Screening Preferred

- Infrastructure of organized, population-based programmes facilitates QA
- Implementation of population-based programmes makes services performing to the high multidisciplinary standards accessible to the entire eligible population
- Large numbers of professionals undertake further specialisation in order to meet the screening standards
- These nationwide efforts also lead to widespread improvement in diagnosis and management of cancers detected outside of screening programmes

L. v.Karsa, IARC
EU Guidelines for Quality Assurance in Breast, Cervical and Colorectal Cancer Screening

4th Edition
2006a)

2nd Edition
2008a)

1st Edition
2010a), b)

Financial support through:

a) EU Health Programme,
   b) UEGF, ACS, CDC
Web links to relevant documents


European Guidelines for Quality Assurance in Colorectal Cancer Screening and Diagnosis

- **Print version**
  - 10 chapters, 400 pages
  - >250 recommendations
  - >750 references

- **Web version**
  - print version
  - 1000 page evidence base
European Guidelines for Quality Assurance in Colorectal Cancer Screening and Diagnosis

- 102 authors, editors, reviewers, contributors
- 23 European countries (21 EU)
  Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, United Kingdom
- Other countries
  Argentina, Australia, Canada, China, Israel, Japan, & the United States of America.
EU Guidelines - Main collaborators and partner institutions

- **J. Patnick**, Editor, Oxford University Cancer Screening Research Unit, Cancer Epidemiology Unit, University of Oxford, Oxford, United Kingdom; NHS Cancer Screening Programmes, Sheffield, United Kingdom

- **N. Segnan**, Editor, Unit of Cancer Epidemiology, Centre for Cancer Epidemiology and Prevention (CPO) and S. Giovanni University Hospital, Turin, Italy

- **S. Madai**, Network Meetings, Public Association for Healthy People, Budapest, Hungary

- **L. Faulds-Wood**, Advocacy, European Cancer Patient Coalition (ECPC), Utrecht, Netherlands

- **L. von Karsa**, Editor and Coordinator, Quality Assurance Group, Section of Early Detection and Prevention Section, IARC, Lyon, France
European Guidelines for Quality Assurance in Colorectal Cancer Screening and Diagnosis

Chapters in First Edition

1. Introduction
2. Organisation
3. Evaluation
4. FOBT
5. Endoscopy
6. Training
7. Pathology
8. Clinical management
9. Surveillance
10. Communication
European Schools of Screening Management

Principles, organization, evaluation, planning and management of cancer screening programmes

In collaboration with project on Cancer Screening and Early Diagnosis in Mediterranean Countries

Course overview

A Anttila, N Segnan, L von Karsa

ESSM course at the IARC Lyon 19.-23.11.2012 Module 1

Opening Session
European Schools of Screening Management
Participating Delegates and Faculty

- **26 Delegates**
  - Decision makers, programme planers and managers, professional staff

- **17 countries represented**
  - Albania, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Kosovo, Latvia, Lithuania, Morocco, Poland, Romania, Serbia, Slovenia, Spain, Sweden, Turkey

- **26 senior faculty**

- **9 EU Member States and IARC represented:**
  - Belgium, Denmark, Finland, Italy, Slovenia, Spain, Sweden, The Netherlands, United Kingdom

- **Co-financing:**
  - European Partnership for Action Against Cancer
  - Cancer Screening and Early Diagnosis in Mediterranean Countries
International collaboration in planning and conducting specialized training courses in cancer screening

Participating countries:
- Turin
- Rome
- Milan
- Paris
- Montpellier
- Birmingham
- Barcelona
- Valletta
- Haifa
- Helsinki
- Geneva
- Copenhagen
- Madrid
- Oslo
- Stockholm
- Sheffield
- Brussels
- Montpellier
- Rome
- Valletta
- Helsinki
- Geneva
- Copenhagen
- Madrid
- Oslo
- Stockholm
- Sheffield
- Brussels
- Montpellier
- Rome
- Valletta
- Haifa

Faculty members:
COURSE PROGRAMME

➢ First Module 19-23 Nov. 2012:
  8 sections with lectures on essential concepts & protocols for quality-assured cancer screening, each with peer discussion & exercises
  • European Guidelines

➢ Interim Group Work December - February
  • considering actual activities & quality improvement within existing programmes, to prepare for the Second Module

➢ Second Module 11-15 March 2013:
  • with reports from the programmes, & complementary lectures on applied issues

International Agency for Research on Cancer
World Health Organization
Lecture content / exercise was relevant to the respondent's work

0 = strongly disagree; 1-5 = degrees in between; 6 = strongly agree; NA = not applicable

Good scientific quality (lectures) / promoted understanding (exercises) helped link to course content (prep. group work on days 1-4)
ESSM Pilot Course Content – Module 2

Lectures, exercises and group presentations were relevant to the respondent’s work

Good scientific quality (lectures) / Understanding promoted (exercises) Helped respondent link to course content (group work overall)

0 = strongly disagree;   1-5 = degrees in between;   6 = strongly agree;        NA = not applicable

Modelling & Programme Impact
Managing the Process (decades)
WG3, Data Linkages
New technol. & protocols, Intro
Genetic Counseling, High Risk Screening
Breast: Overdiagnosis
Screening & Treatment, Quality & Treatment
Cancer Screening in Mediterranean Countries
QA & Prog Management, Key issues Cerv. Scr.
HTA for Screening
Prostate Cancer Screening
HPV testing
Familial Aspects
Basic Epidem. Cervical Cancer & CRC
Treatment Monitoring
WG2, Cancer Screening in Med. Countries
Prog. Management - Issues in problem solving
Quality of Life, Health Econ. Eval. e.g. Prostate CA
Lung Cancer Screening
Screening Other Cancers
Flexisig., Virtual Colonoscopy
Impact on Incidence & Mortality
WG1, Formalise Protocol of QA Systems
Primary Prev. Trials in Screening Setting
QA & Prog Management, Key issues CRC Scr
ESSM Module 1 Participants
Need to continue & expand ESSM

- A high quality screening programme takes at least 10 years to develop & implement

- Sustainability & adequate funding & other resources are essential for medium- & long-term programme development
  - Funding for EU Networks for Cancer Screening & Prevention
  - European Schools of Screening Management for providing expert support & multicentre research collaboration & advanced training platform
  - To continue collaboration with the Mediterranean cancer screening network
Thank you for your attention