iPAAC – an overview

Budapest, 20 May 2019
Tit Albreht with the collaboration of Tina Lipušček and Karmen Hribar
iPAAC Kick-off meeting a year ago…
1st GOVERNMENTAL BOARD MEETING

27 June 2018 Brussels

35 participants & 20 countries represented!

PARTICIPANTS:

➢ Representatives of Member States
➢ WP Leaders
1st STAKEHOLDER FORUM

20 September 2018 Brussels

PARTICIPANTS:
➢ Work Packages Leaders
➢ iPAAC's Collaborating Partners

Attendance of a large range of stakeholders who had an opportunity to provide input that can support the iPAAC Joint Action!

2 thematic main sessions

Nearly 60 participants!
2nd GOVERNMENTAL BOARD MEETING

PARTICIPANTS:
- Representatives of Member States
- WP Leaders

40 participants & 19 countries represented!
The iPAAC Roadmap – key deliverable

Key deliverable of the iPAAC Joint Action:

Roadmap on Implementation and Sustainability of Cancer Control Actions, which will support Member States in implementation of iPAAC and CANCON recommendations.

Information for the iPAAC ROADMAP will be gathered from 3 sources:

1. WP 4 Country visits
2. WP 5 - 10 work
3. Other Joint Actions
It is important to remember that:

✓ Actions need to be implemented throughout the Joint Action and not only at its end;

✓ There is a need for close collaboration between the JA and the Member States;

✓ Priority in planning in the first 18 months needs to be given to the actions and recommendations from the previous JAs;

✓ The new actions and recommendations proposed by the current JA need to be defined and proposed timely with the view of the finalisation of the project.
IPAAC WP5 Timeline of key activities

February 2019: Survey on attitudes of barriers (M1)
March 2019: Report based on the survey

20 May 2019: Conference on early detection, Budapest with ECL
September 2019: Report on innovations, including benefit and harm from risk-stratified screening (M2)
December 2019: Conference on cancer screening, Helsinki with ECL

May 2020: Conference on prevention, Brussels with ECL
June 2020: Review of the European Code Against Cancer with IARC - plan on sustainability and follow-up
March 2021: Deliverable

Roadmap of Implementation and Sustainability of Cancer Control Actions in the field of cancer prevention
WP6 Genomics and Cancer

Scope: Develop practical guidance for Member States on:

1) organizing the *societal debate* on ethical, legal and privacy issues on the use of genome information in healthcare
2) installing stratified screening by *genetic testing* of high-risk cancer patients
3) implementing *precision genomics* in medical care
4) how to deal with ‘Direct to Consumer’ testing
5) *education and training* on genomics of health professionals, policy makers and the citizens
WP6 - Genomics and Cancer

• Task 6.1: Applying genome information in health care: a paradigm shift in healthcare

• Task 6.2: Concept for the implementation of risk-adjusted prevention: the breast cancer case

• Task 6.3: Requirements and prerequisites for implementation of ‘omics’ in routine molecular diagnosis in oncology

• Task 6.4: ‘Direct to Consumer’ genetic testing

• Task 6.5: Education and training on genomics for healthcare professionals
Topics

1. Citizen participation methodologies
   Citizen forum Belgium (case study)
   French approach on genomics acceptance (case study)
   Sienna project results (research)
   Wellcome Trust initiative (research)

2. Roadbook genomics in HCS (Be, F, It) (case studies)
3. WGS in HCS (UK, F, 1M Genomes project) (case study)
4. DTC policy
5. Tool for education & training on genomics
WP 7 – Cancer information and registries

Task 7.1: Mapping data sources and state-of-art of integrated cancer information systems
Task 7.2: Piloting the integration of data on care pathways
Task 7.3: Piloting the integration of data on cancer costs
Task 7.4: Piloting the integration of data on long-term follow up of cancer survivors
Task 7.5: Piloting longitudinal integration of administrative health care records and centralised coding systems at national level
Task 7.6: Delivering informative epidemiological indicators on cancer prevalence and survivorship
Task 7.7: Support to the Road Map – cancer information and registries
Task 8.1: Definition of neglected cancers: the case for pancreatic cancer
- Preliminary list of core clinical variables for cancer registries in pancreatic cancer circulated (March 2019)
  Report expected before June 2019

Task 8.2: Neglected cancers: proposal of criteria for reorganisation of treatment delivery
Task Leader: ICO, Participating Partners: SAM (VUHSK), WIV-ISP, IPHS
• Literature review carried out (March / April 2019) with a focus on policy measures to reorganize treatment delivery of pancreatic cancer.
• Workshop planned for discussion in September 2019, Bratislava; with scientific societies, patients representatives, experts and national cancer plans.
• Final report expected November 2019
• ECCO (subcontract): Essential requirements for pancreatic cancer. December 2019

Task 8.3: MDTs and potential impact of new technologies and systems. Assessment of the opportunities for improving integration of cancer care
Task Leader: ICO, Participating Partners: IPHS, BcSAS, NIJZ, SAM (VUHSK)
• Selection of care studies: ongoing with the support of ECCO.
• Report delivered in November 2019
Task 8.4: Economics of cancer care

Task Leader: ISS, Participating Partners: ICO, SAM (VUHSK), NIJZ, NIPH (IPMN), ISS (MoH)

4.1: To review international experiences in promoting allocative efficiency and identifying low-value or inappropriate cancer care and to map the desirable characteristics of interventions targeted to health care providers for improving the level of appropriateness in clinical care.

- Survey prepared and circulating.
- Meeting in September 2019

4.2. To review the recent developments in reimbursement models and experiences in introducing innovative treatments in European health systems, with special focus on radiation oncology and complex cancer surgery as case studies

- Literature review for reimbursement in radiotherapy oncology (expected May 2019)
- Literature review for reimbursement in surgical oncology (expected September 2019)
- Workshop to review the pros and cons of each reimbursement model with scientific societies, patients representatives and experts (January 2020)
Task 8.5: Pain management in the context of cancer care
Task Leader: ISS, Participating Partners: ICO, ISS, THL

- Literature review on pain prevalence, barriers to adequate pain management either focus survivors.

  Report expected September 2020

Task 8.6: Palliative care
Task Leader: ISS, Participating Partners: ICO, THL

- Report expected September 2020
WP 9 – Innovative Therapies in Cancer

French National Cancer Institute (INCa)

KEY HIGHLIGHTS OF THE PAST YEAR – Tasks 1 & 2

WP9 Kick-off meeting
02-03 July 2018

WP9 meeting task 1
02 Oct 2018

Literature review

Questionnaires

Analysis of results and writing of first deliverable (current activities)

Milestones: 1st draft for May 2019

Main results from lit. review:
- 120 CPG placing innovative immunotherapies (ITS)
- Off-label recommendations identified mainly for small target groups, rare cancers
- Place of innovative immunotherapies could differ between guidelines, especially when comparison data are missing
- Hard to keep updated GPC in this fast evolving field

Main results from questionnaire:
- Only half of the EU countries have included innovative ITS in at least one CPG
- Comparison between countries and between therapeutic indications regarding access in terms of reimbursement and restrictions of uses
- Existing early access programs
WP 9 – Innovative Therapies in Cancer

French National Cancer Institute (INCa)

KEY HIGHLIGHTS OF THE PAST YEAR – Task 2 & 3 - Horizon scanning systems & Biomarkers

WP9 Kick-off meeting 02-03 July 2018

WP9 meeting task 2 & 3 06 March 2019 - Bruxelles

WP9 Horizon scanning meeting November 2019 - INCa

Preparation of the task
- Literature review
- Meetings with Euroscan, IHSI

Presentation of methodology for retrospective analysis to evaluate the efficiency of HS in oncology

- Highlight methodological specificities needed in HS systems in the field of oncology, especially for
  - cell and gene therapies
  - Biomarkers

- Assessment of inequalities between European Countries

iPAAC WP5 Conference, Budapest, 20 May 2019
WP 9 – Innovative Therapies in Cancer

French National Cancer Institute (INCa)

PLANS FOR THE NEXT YEAR – Task 1 & 2

• Consolidation of the deliverable linked to task 1 to present results from literature review and questionnaires

• Review and validation of the deliverable by WP9 partners. Finalized version expected for September 2019

• Consolidate main fields of interests for the roadmap:
  • List of clinical practice guidelines providers in Europe in the field of oncology
  • Examples of fruitful collaborations for the production of CPG; and of endorsement methods
  • Examples of reimbursement models enabling fast access
  • Examples of frameworks enabling early access to innovative immunotherapies for an unauthorized indication
  • Innovative cancer therapies in clinical practice guidelines: remaining challenges (acceptability of off-label recommendations, how to improve production and update of CPG, visibility?, need to create a public financing system to implement studies comparing several innovative therapies between them when no comparison data are available)
  • Remaining challenges: Link with ECL – European Fair Pricing Network (increase transparency of innovative therapies prices – joint negotiations in EU)?
  • Remaining challenges for access to innovative therapies across Europe (including inequities)
French National Cancer Institute (INCa)

PLANS FOR THE NEXT YEAR – Task 2 & 3 – Horizon Scanning systems

- Conduction of the retrospective analysis with the help of the questionnaire
- Additional meeting will be organized in November 2019 to validate task 3 deliverables
- For the roadmap, the following points could be included:
  - Generalities on Horizon scanning systems: definition, purposes, main methodological steps to follow to implement an HSS
  - Present some existing European HSS in place
  - Present the main ongoing collaboration initiatives existing in Europe
  - Present specificities to be considered in the HS methodology for the oncology field with a focus on innovative immunotherapies, gene and cell therapies (with the example of CAR-T cells) and biomarkers
  - Highlight challenges related to the assessment of impact of innovative therapies in the field of oncology

PLANS FOR THE NEXT YEAR – Task 4 – Real-life monitoring of innovative immunotherapies

- Meeting dedicated to task 4 to be organized in February 2020
German Federal Ministry of Health (BMG) and German Cancer Society (DKG)

KEY HIGHLIGHTS OF THE PAST YEAR 2018/19

Goal: “…develop practical instruments (…) (to ensure) a standardized (…) comprehensive oncological care in all Member States that is tumour-specific and delivers (…) high-quality care to all patients. These instruments should be used by NCCPs for the governance of oncological care”.

Task 1: Assess and review NCCPs; develop recommendations on how the results of tasks 10.2-10.5 could be included in updated NCCPs
- 1.1. Survey on National Cancer Control Programmes/Cancer Documents in EU (M12)
- 1.3. Preliminary literature research on the conceptual model of governance and stewardship of cancer care (M12)

Task 2: Review and assess existing models of oncological patient pathways; develop a generic patient pathway for CCCNs
- 2.1. Literature Review of existing models of oncological patient pathways (M12)
- 2.1. Agreement of definition of patient pathways (M12)

Task 3: Review and assess implemented QI; develop standardized methodology; develop set of general and tumour specific QI for CCCNs
- 3.1. Literature Review of already implemented QIs and their respective methodology which was used (M12) - delayed ready in M14
WP 10 – Governance of Integrated and Comprehensive Cancer Care

German Federal Ministry of Health (BMG) and German Cancer Society (DKG)

KEY HIGHLIGHTS OF THE PAST YEAR 2018/19 (cont.)

Task 4: Review and assess existing PROMs; develop a framework for the implementation and pilot the framework in CCCNs

• 4.1. Preliminary results of literature review of existing models of collecting PROMs (M18)

Task 5: Develop a set of generic and tumour-specific requirements (including PP, QI and PROMS) for the setup of CCCNs; develop framework to monitor the successful implementation of the set of requirements

• 5.3. Establishment of CCCN pilot sites: Charitè Hospital, Berlin/Germany & Lower Silesian Oncology Centre, Wroclaw/Poland (M3)
• 5.1. Generic and tumour-specific requirements for the set-up of CCCN developed and agreed (M12)

Overall: Synergies between work packages identified

• Task 3 QI and WP 7.2 (= Piloting the integration of data on care pathways)
• Task 4 PROMs and WP8.1 (= Definition of neglected cancers: the case for pancreatic cancer)
• Task 5 CCCN and WP 8.2 + WP 7.2 (8.2 = Neglected cancers: proposal for criteria for reorganization of treatment delivery [of pancreatic cancer]; 7.2 = with the goal to use the same key figures/quality indicators)

iPAAC WP5 Conference, Budapest, 20 May 2019
PLANS FOR NEXT YEAR 2020

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PREVENTION AND EARLY DETECTION OF ORAL CANCERS IN HUNGARY, CHALLENGES AND FUTURE PLANS

Éva Remenár MD. PhD.
National Institute of Oncology, Budapest

First WP5 iPAAC Conference
20th May 2019, Budapest
HEAD AND NECK CANCER

✓ „Common” head and neck cancers: squamous cell cancer arising from the mucosa of the upper aerodigestive tract (>90% of all head and neck cancers)

✓ Oral cavity (C00-C06)
✓ Oropharynx (C01, C05, C09, C10)
✓ Hypopharynx (C12, C13)
✓ Larynx (C32)

✓ Rare head and neck cancers:
✓ Nasopharynx (C11)
✓ Nose and paranasal sinuses (C30, C31)
✓ Salivary glands (C07, C08)

✓ Cancers of other organ systems with head and neck localisation
✓ Skin (C43, C44)
✓ Soft tissue and bone tumors (C49, C41)
✓ Thyroid and parathyroid gland cancers (C73)
CHARACTERISTICS OF THE „COMMON” HEAD AND NECK CANCERS

• **Etiology**: alcohol, smoking\(^1\)
  - Poor oral hygiene: chronic infection and irritation of the mucosa
• **HPV**: most oral cavity cancers are HPV-negative, with poor prognosis and increased resistance to therapy \(^2\)
• Verified squamous cell cancers are sometimes preceded by precancerous lesions, most commonly by leukoplakia, or erythroplakia\(^3\);  
• However in the majority of the cases cancer develops without any alarming abnormalities of the mucosa - following around 3-month symptoms.  
• At this point only 30 % of the patients have early stage diseases, characterized by good prognosis and can be treated with monotherapy (surgery or radiotherapy only)\(^4\).
• Advanced tumor-stage at diagnosis requires combined modality treatments, both local and/or regional: poor prognosis\(^4\)
  - Frequent tumor recurrence within 3 years
  - Occurrence of second primary cancers (3-5 % yearly)
  - Progression of the disease negatively influences quality of life

\(^2\) Dillon MT, Harrington KJ: J Clin Oncol 2015; 33: 3251-61  
\(^3\) Warnakulasuriya S, Ariyawardana A: J Oral Pathol Med 2016; 45: 155-166  
\(^4\) NCCN Guidelines v.2 2018. Head and Neck Cancers
• The increasing incidence or oral cavity cancer is an important healthcare problem worldwide, mainly in the low- and medium-income countries.

• Although the oral cavity has an easy access for examination, less than 30% of its cancers are diagnosed at an early stage with promising survival outlook.

• The prognosis of advanced stage oral cavity cancers is poor, 5-year survival is <50% despite their rather expensive multimodality treatment.

• In the last two decades the exponentially growing incidence and mortality figures of lip, oral cavity and pharynx cancers in Hungary attracted international attention for being not only the highest in Europe but are among the Top10 countries with the highest incidence and mortality in the world.
LIP AND ORAL CAVITY CANCERS

Hungary is among the Top 10 countries with the highest incidence and mortality rates in both sexes.
INCIDENCE OF ORAL CAVITY CANCERS

INCIDENCE OF LIP AND ORAL CAVITY CANCERS IN HUNGARY
National Cancer Registry
2000-2015

Changes in the incidence over 15 years:
Males: -34%
Females: +9%
LIP, ORAL CAVITY, AND PHARYNX CANCER MORTALITY IN EUROPE

IARC – WHO Data

2013
ORAL CAVITY AND PHARYNX CANCER MORTALITY IN EUROPE

Age-standardized death rates /100000 males

WHO-IACR 1955-2013
TOBACCO EPIDEMIC

• Manufactured cigarettes were introduced early in the 20th century
• Free distribution to soldiers and mass advertising promoted cigarette sales until the 1950s in the UK, and until the 1960s in the US
• When the hazards of smoking have been recognized, effective tobacco control policies have been introduced
  • tax on cigarettes,
  • smoke-free laws
• The decline of cigarette sales did not immediately resulted in decreasing number of deaths, on the contrary it continued to increase for several decades due to the aging of non-quitters with the longest lifetime exposition to actively inhaled smoke

SURVIVAL TRENDS OF HEAD AND NECK CANCERS IN EUROPE
The EUROCARE-5 population-based study

- Based on the data of **250000 HN cancer patients** from **86 registries** between **1999-2007**
- The 5-year RS **improved by 3-5%** for oral cavity, oropharynx and hypopharynx cancers, and remained **stable for larynx cancers**;
- **Five-year age-standardized RS:**

<table>
<thead>
<tr>
<th></th>
<th>All Europe</th>
<th>Eastern Europe</th>
<th>Northern Europe, UK, Ireland</th>
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<tbody>
<tr>
<td>Hypopharynx</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oropharynx</td>
<td>39%</td>
<td>28%</td>
<td>All but larynx</td>
</tr>
<tr>
<td>Oral tongue</td>
<td>43%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral cavity</td>
<td>45%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larynx</td>
<td>59%</td>
<td>47%</td>
<td>62%</td>
</tr>
</tbody>
</table>

Five-year RS was poor for: males, elderly persons, Eastern–Europeans

>50% of patients had local or distant metastasis at diagnosis

**Early detection and timely start of treatment is necessary**

IN-EQUALITIES IN THE EARLY DETECTION AND SURVIVAL RESULTS OF ORAL CAVITY AND PHARYNX CANCERS IN HUNGARY

- > 80% of head and neck (including oral) cancer deaths could be prevented, that develop due to tobacco use, unhealthy diets, alcohol consumption, inactive lifestyles and infection

- People at risk have:
  - History of smoking and alcohol consumption
  - Poor general and oral hygiene
  - Significant co-morbidities
  - Low educational level
  - Low socio-economic status

- Low-income groups are generally more exposed to these risk factors and have less access to the health services and health education that would empower them to make right decisions
DIAGNOSIS AND TREATMENT DELAYS

• As the stage at diagnosis is the most important prognostic factor for survival, early detection and treatment of cancer may result in cure and long-term survival, with good quality of life.
• These patients do not reach proper healthcare in time\(^1\)
• Higher rate of delayed discovery of the disease
• Patient delay: the most significant period of time between the first symptoms of cancer and the first consultation with a healthcare professional concerning the symptoms\(^2\)
• The mean delay is \(~3.5\) months (0-730 days)\(^2\)

REASONS FOR PATIENT DELAY

• <45 years old patients: majority heard of cancer, but did not think, that his/her symptoms were consistent with it
• ~40% used remedies before seeing a doctor
• Results of a psychosocial questionnaire revealed that cognitive and psychosocial factors influenced more the delay than sociodemographic or health-related ones¹

• The role of the dentists:
  • Annual dental check-up patients have significantly shorter delays
  • Dentists are more likely to diagnose cancer at an early stage than primary care physicians.

WHICH METHOD TO USE FOR ORAL CANCER SCREENING?

- **Population-based screening:**
  
  only one evidence-based randomized controlled trial in Kerala, India has proven that oral cavity screening performed by visual examination and palpation can result in decrease mortality during a 12-year long period:

  138 oral cancer death happened in the screened group of 87,655 healthy people ≥35 years old vs.

  154 in the control group of 95,356 healthy people ≥35 years old. This difference was not enough for the method to be accepted as basis for a population-based screening program.

WHICH METHOD TO USE FOR ORAL CANCER SCREENING?

• **Opportunistic screening**: non-planned examination of the oral cavity and the neck during any patient-physician meetings for any reasons. Dental visits serve as screening opportunities ordered by the law in Hungary.

• Family physicians are also advised to perform oral cavity screening examinations.

• Unfortunately some dentists, and GPs do not take seriously the importance of oral cavity examinations by visual assessment and palpation.

• **Targeted screening of risk groups**: selective screening of a targeted group of the population who are at special risk to develop oral cavity cancer. This type of oral cancer screening seems to be cost-effective.
EARLY CANCER CASES: LIP
EARLY CANCER CASES: ORAL CAVITY
Treatment options for early stage oral cavity cancer

- Early, TNM I-II stage: 5-year survival < 80%

**Monotherapy:** surgery or radiotherapy
cT1N0M0 CANCER OF THE MOBILE TONGUE

Clinical history:
28-year old female, non-smoker, non-drinker, good oral hygiene, 21-week pregnant.

She visited her dentist for some soreness in the right side of her tongue. The dentist discovered an ulcer of 1 cm in longest diameter and found it suspicious for being cancer. This was verified by biopsy: histology: Gr2 squamous cell carcinoma, p16 positive.

TNM stage: cT1 N0 M0

Therapy: excision of the primary cancer
PROGRESSION OF THE CANCER

Before surgery

3 months after surgery
The mother: following the delivery of his son by cesarean section in July 2007, a right radical neck dissection was performed and postoperative concomitant radio-chemotherapy administered. She is a 11-year survivor with complete remission of cancer.
CHALLENGES OF EARLY DETECTION OF LIP AND ORAL CAVITY CANCERS

• There is little knowledge of the public about etiology, signs and symptoms of oral cavity cancers
• People at risk (regular smokers, drinkers, who do not clean their teeth properly) are difficult to reach for any kinds of examination programs
• Preclinical phase of the disease is relatively short, validated methods for preclinical diagnosis are missing:
  • dyeing of the mucosa with toluidin-blue dye or fluorescein
  • brush – cytology examination or
  • salivary biomarkers
• There is not sufficient evidence to support their capacity for the early detection of subclinical stages of the pathogenic period before cancer phenotypes are manifested.
FUTURE PLANS
Selective screening of high-risk populations for premalignant and malignant oral cavity lesions

• Based on the files of family physicians, who voluntarily join to the project the recorded smokers and drinkers who skipped the regular dental visits for more than one year should be called by a written invitation to an oral cavity screenig by visual assessment and palpation.

• At the same time raising awareness can happen regarding the dangers of unhealthy lifestyles, and about the characteristic symptoms of head and neck cancer, should it occur later in the persons life.

• This short and simple examination can be taught to the primary care physicians easily, the only equipment they need is a head lamp and some spatula.
American Nicole Gibbs, 26, has withdrawn from this month's French Open after being diagnosed with a rare form of cancer that was found by her dentist.

The world number 117 will have surgery on Friday.

"Unfortunately I will be withdrawing from the remainder of the clay season and will not be competing at this year's Roland Garros," Gibbs said on Monday. "Fortunately this form of cancer has a great prognosis and my surgeon is confident that surgery alone will be sufficient treatment."

https://www.bbc.com/sport/tennis/48259956

CLOSING REMARK

Let us wish her all the best,

and let us hope time is coming and near when all the dentists will be on guard when they look into the mouth of their patients.
THANK YOU FOR THE ATTENTION!
TOBACCO EPIDEMIC/2
Sequence of four stages that apply worldwide

• Stage 1: beginning of the epidemic, <20% smoking prevalence
• Stage 2: >20% prevalence with a peak of 40%-80%. No of the tobacco attributable deaths begins to rise as a fraction of all deaths.
• Stage 3: flattening or downturn of smoking prevalence coinciding with a continuing steep increasing with the smoking-attributable deaths.
• Stage 4: Decline in both the prevalence and the smoking attributable deaths.
• WHO Framework Convention on Tobacco Control is at the centre of international efforts to reduce tobacco-related harms.
Social inequalities and Early Diagnosis of Cancer

Ana Molina-Barceló

First WP5 iPAAC Conference

Monday, 20 May 2019
National Institute of Oncology, Budapest, Hungary
European Guide on Quality Improvement in Comprehensive Cancer Control

Policy Paper on Tackling Social Inequalities in Cancer Prevention and Control for the European Population
1. Strategies for early detection of cancer
2. Effective solutions for population-based screening programmes
3. Cancer prevention & health promotion: implementation of the European Code Against Cancer

Inequality a **cross-cutting** theme integrated in above mentioned tasks
Deadline for submission is 10th August 2019

SOCIAL INEQUALITIES IN HEALTH

Social inequalities in cancer refer to health inequalities spanning the full cancer continuum across the life course (Krieger, 2005).

Risk Factors Secondary prevention Health care services Rehab, survival
SOCIAL DETERMINANTS OF HEALTH MODEL (WHO, 2010)

Cancer incidence higher is in Northern and Western European countries.

Cancer mortality higher is in Eastern and Southern ones.

Socioeconomic inequalities in cancer survival in England after the NHS cancer plan.

Figure 3  Excess hazard of death for the most deprived and most affluent groups, by cancer prognosis, England 1996–2006.
SURVIVAL AND STAGE OF DIAGNOSIS

TEN-YEAR SURVIVAL FOR EIGHT TYPES OF CANCER COMBINED

DIAGNOSED EARLY
(STAGE I + STAGE II)

81%

DIAGNOSED LATE
(STAGE III + STAGE IV)

SURVIVAL IS MORE THAN THREE TIMES HIGHER WHEN CANCER IS DIAGNOSED EARLY

26%

EQUITY IN EARLY DIAGNOSIS
Figure 1 Multilevel association between screening prevalence and type of screening program (prevalence ratio) and between educational level and cancer screening (RII) by type of screening program taking individual variables into account. PCV after taking into account the type of screening program.

Socio-economic inequalities in breast and cervical cancer screening practices in Europe: influence of the type of screening program.

CANCER SCREENING vs EARLY DIAGNOSIS

Guide to cancer early diagnosis.
World Health Organization (WHO); 2017. ISBN 978-92-4-151194-0
COMMON BARRIERS TO EARLY DIAGNOSIS

Step 1: Awareness and accessing care
- Awareness of symptoms, seeking and accessing care

Barriers:
- Poor health literacy
- Cancer stigma
- Limited access to primary care

Step 2: Clinical evaluation, diagnosis and staging
- Accurate clinical diagnosis
- Diagnostic testing and staging
- Referral for treatment

Barriers:
- Inaccurate clinical assessment and delays in clinical diagnosis
- Inaccessible diagnostic testing, pathology and staging
- Poor coordination of services and loss to follow-up

Step 3: Access to treatment
- Accessible, high-quality treatment

Guide to cancer early diagnosis.
World Health Organization (WHO); 2017. ISBN 978-92-4-151194-0
Breast cancer awareness and barriers to symptomatic presentation among women from different ethnic groups in East London.


### Table 3 Barriers to seeking medical help by ethnic group

<table>
<thead>
<tr>
<th></th>
<th>All (n = 1515) (%)</th>
<th>White (n = 806) (%) OR (reference group)</th>
<th>South Asian (n = 333) (%) OR (95% CI)</th>
<th>Black (n = 265) (%) OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional barriers</strong></td>
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<tr>
<td>Worried about what the doctor might find</td>
<td>665/1462 (47.1)</td>
<td>313/784 (44.3) 1.00</td>
<td>188/313 (58.2) 2.04 (1.46 to 2.87)</td>
<td>120/257 (45.5) 1.22 (0.87 to 1.72)</td>
</tr>
<tr>
<td>Too embarrassed to go and see the doctor</td>
<td>543/1449 (37.7)</td>
<td>222/784 (31.3) 1.00</td>
<td>190/305 (61.2) 1.69 (1.33 to 2.15)</td>
<td>89/254 (34.9) 1.07 (0.74 to 1.54)</td>
</tr>
<tr>
<td>Lacks confidence talking about symptoms</td>
<td>432/1450 (29.0)</td>
<td>138/777 (18.8) 1.00</td>
<td>140/317 (44.5) 4.24 (3.00 to 6.00)</td>
<td>69/253 (23.9) 1.40 (0.94 to 2.08)</td>
</tr>
<tr>
<td>Too scared to go and see the doctor</td>
<td>406/1456 (26.9)</td>
<td>205/780 (26.5) 1.00</td>
<td>5.40 (3.77 to 7.74)</td>
<td>57/259 (22.0) 0.75 (0.50 to 1.13)</td>
</tr>
<tr>
<td><strong>Practical barriers</strong></td>
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<tr>
<td>Too many other things to worry about</td>
<td>470/1468 (33.3)</td>
<td>257/788 (36.5) 1.00</td>
<td>101/315 (29.6) 0.80 (0.55 to 1.16)</td>
<td>80/255 (31.5) 0.87 (0.61 to 1.24)</td>
</tr>
<tr>
<td>Too busy to make time to go to the doctor</td>
<td>512/1482 (33.0)</td>
<td>275/794 (34.8) 1.00</td>
<td>109/316 (27.9) 0.69 (0.48 to 0.98)</td>
<td>88/261 (34.0) 0.98 (0.69 to 1.39)</td>
</tr>
<tr>
<td>Finds it difficult to arrange transport</td>
<td>211/1461 (14.7)</td>
<td>97/789 (15.6) 1.00</td>
<td>60/311 (19.1) 1.40 (0.86 to 2.28)</td>
<td>41/253 (129) 1.32 (0.80 to 2.15)</td>
</tr>
<tr>
<td><strong>Service barriers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finds the doctor difficult to talk to</td>
<td>347/1455 (22.2)</td>
<td>180/780 (23.1) 1.00</td>
<td>84/315 (21.1) 0.97 (0.65 to 1.43)</td>
<td>61/253 (22.7) 1.08 (0.72 to 1.63)</td>
</tr>
<tr>
<td>Worried about wasting the doctor’s time</td>
<td>519/1466 (36.5)</td>
<td>368/786 (45.2) 1.00</td>
<td>68/313 (16.7) 0.20 (0.13 to 0.32)</td>
<td>60/257 (20.9) 0.27 (0.18 to 0.40)</td>
</tr>
<tr>
<td>Finds it difficult to make an appointment</td>
<td>523/1457 (35.3)</td>
<td>276/782 (34.0) 1.00</td>
<td>133/316 (41.0) 1.21 (0.87 to 1.70)</td>
<td>82/254 (26.6) 0.74 (0.52 to 1.05)</td>
</tr>
</tbody>
</table>

**Abbreviations:** OR = odds ratio; CI = confidence interval. All percentages are weighted for the inverse of the probability of being selected. *111 participants were of other ethnic groups or unknown ethnic group. **Odds ratio adjusted for age group and quintile of index of multiple deprivation.
Socio-demographic inequalities in stage of cancer diagnosis: evidence from patients with female breast, lung, colon, rectal, prostate, renal, bladder, melanoma, ovarian and endometrial cancer.

Figure 5: Mean travel time to nearest treatment center for each socioeconomic deprivation quintile by 5-year
WHAT CAN WE DO TO REDUCE INEQUALITIES?

Population

Whole population

Targeted

Socially vulnerable people

Proportional Universalism

Proportionate efforts to the level of disadvantage

Fair Society, Healthy Lives: The Marmot Review.
Skinmama was a successful skin cancer prevention campaign active between 7 June and 31 October 2016. The prize draws ended but the QUIZ, GAME and INFORMATION on skin cancer are still here for you to make sure you stay healthy! Check it out and have FUN!
Population
Targeted feasibility and acceptability of a cancer symptom awareness intervention for adults living in socioeconomically deprived communities.

CONCLUSIONS

• Social inequalities in early diagnosis of cancer exist between countries and within countries by social groups.

• It’s important to identify not only the barriers to early diagnosis of cancer, but also the impact of such barriers on inequalities.

• It is recommended to include an equity perspective in the early diagnosis strategies, based on a proportional universalism approach in order to reduce social inequalities in cancer.
Thank you very much for your attention

Ana Molina-Barceló
molina_anabar@gva.es
Barriers in early diagnosis

Survey results
Introduction

• A main objective of the whole WP5 is to identify barriers to early detection and its management
• Specifically, task 5.1 addresses early detection
• In order to examine early detection strategies from several perspectives, WP5 produced a Survey on perceptions of attitudes of barriers to early detection (Milestone 5.1)
  • The survey schedule was postponed from M5 to M11, February 2019 for accurate and well devised content
• Initially, the survey was planned to include 4-6 countries but was enlarged to the whole European level

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Background

• As background material, we used the **WHO Guide to cancer early diagnosis**

• The WHO guide uses the definition for early diagnosis related to the **recognition of symptomatic cancer** in patients
  • Thus the second dimension of early detection, covering cancer screening, was not in a focus in the survey

• According to WHO, the focus of cancer early diagnosis is in people who have symptoms and signs consistent with cancer. The objective is to identify the disease at the earliest possible opportunity and the link to diagnosis and treatment without delay. When done promptly, cancer may be detected at a potentially curable stage, improving survival and quality of life.

• Also, scientific literature on barriers, benefits and harms of early diagnosis was searched and benefited as background material (see References)
Cancer types

• Based on the above-mentioned background materials CSF compiled a working paper on early diagnosis of cancer in cancer control strategies

• It included examples of programmatic services of interest which were discussed in an online-meeting of WP5 task 5.1 (early diagnosis) working group

• As a result, the cancer types chosen for the survey were:
  1. Oral cancers and precancers by dentists looking for early signs
  2. Identifying skin cancers by checking and surveillance for moles
  3. Possible early prostate cancer: symptoms as a sign for action to improve early diagnosis
  4. Diverse breast cancer symptoms: better awareness and recognition to improve early diagnosis
  5. Other, freely chosen according to interest

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Barriers

- Initially, 11 barriers were drafted but after expert discussions, these were decreased to six (6):
  1. **Lack of evidence base on benefits and harms**; evidence-based guidelines can’t be formed due to lack of knowledge. This barrier relates also to health policy planning: is there enough research resource for necessary knowledge production.
  2. **Limited access to primary care** due to long distances, lack of transportation, i.e., non-availability of services in the local setting.
  3. **Lack of awareness**: Poor health literacy leading to shortcomings in the knowledge of cancer symptoms and on diagnosis and treatment pathways, thus delaying seeking for care.

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[Signature]

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4. **Cancer stigma** as sense of devaluation by individuals or communities related to cancer patients. Beliefs and values associated e.g. to gender, social class or religion, leading to reluctant attitude or fear to seek or comply to care.

5. **Patient-level financial constraints** in certain population groups (ethnic, social class) to access primary health services and treatment.

6. **Poor organization of patient pathway**: Poor coordination of services and loss to follow-up, lack of referral pathways, too many facilities for patients leading possibly to duplicate services or overuse of services, poor communication between providers, absence of patient identifiers and reliable health information system.
Compiling survey

• When a draft version of the survey was compiled, an advisory group tested and commented it
  • The advisory group members were: Patricia Fitzpatrick (UCD), Marta Hernandez Garcia (Fisabio), Ana Molina Barcelo (Fisabio), Jennifer Priaulx (EU-topia), David Ritchie (ECL), Wendy Yared (ECL)
• The survey was executed by the Finnish company ZEF and its survey tool
• Answers were collected and handled anonymously and according to GDPR
Survey methodology

• Respondents chose first the cancer type wanted to be evaluated

• Next, they placed each barrier in a four-fold table with the response dimensions:
  1. Not relevant to equity – Produces inequity (X-axis)
  2. Important – Less important (Y-axis)
Materials
Invitations

• The survey was sent by CSF and ECL to approx. 175 respondents including both persons and organisations
• The invited actors consisted of among others the iPAAC consortium, cancer patient and advocacy groups, WHO and its suborganisations, cancer societies, ECL members and collaborative partners, cancer industry, cancer prevention organisations, health care professional organisations
• The survey was also requested to be shared and disseminated by invited contacts
• The first invitations were send 31 January and 1-2 reminders in Mid and/or late February
• The survey was open from answers from 31 January to 10 March
  • The initial closing date was 28 February but was extended in order to achieve a higher response rate
## Respondents

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited survey</td>
<td>981</td>
<td>100</td>
</tr>
<tr>
<td>Did not participate</td>
<td>641</td>
<td>65.3</td>
</tr>
<tr>
<td>Started answering</td>
<td>340</td>
<td>34.7</td>
</tr>
<tr>
<td>Interrupted</td>
<td>187</td>
<td>19.1</td>
</tr>
<tr>
<td><strong>Completed answering</strong></td>
<td>153</td>
<td>15.6</td>
</tr>
</tbody>
</table>
## Connection of respondent to survey (N=147)

Other respondents:
- Cancer societies and leagues
- WHO
- Other patient organisations and networks
- Industry
- Universities and academia
- Health care system

<table>
<thead>
<tr>
<th>Organization</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPAAAC</td>
<td>77</td>
</tr>
<tr>
<td>Other</td>
<td>37</td>
</tr>
<tr>
<td>ECPC and Europa Donna</td>
<td>17</td>
</tr>
<tr>
<td>EU Institution</td>
<td>7</td>
</tr>
<tr>
<td>ECL</td>
<td>6</td>
</tr>
</tbody>
</table>
Professional affiliations

Other affiliations:
- Research
- Cancer registries
- Private health care professionals
Expert knowledge

- Oral Cancers
- Breast Cancer
- Skin Cancer
- Colorectal Cancer
- Prostate Cancer
- Cervical Cancer
- None or only general knowledge
- All
- Other, please specify

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Professional background

- Medical doctor (53, 35.3%)
- Nurse (4, 2.7%)
- Other health care specialist (11, 7.3%)
- Health care planner (6, 4%)
- Researcher (38, 25.3%)
- Patient (12, 8%)
- Civil servant (6, 4%)
- Specialist, please specify (skin cancer, oral, cervical, etc.) (7, 4.7%)
- Other, please specify (13, 8.7%)

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Respondents by country (N=140)

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>15</td>
</tr>
<tr>
<td>Spain</td>
<td>15</td>
</tr>
<tr>
<td>Norway</td>
<td>12</td>
</tr>
<tr>
<td>Belgium</td>
<td>10</td>
</tr>
<tr>
<td>Germany</td>
<td>8</td>
</tr>
<tr>
<td>Netherlands</td>
<td>7</td>
</tr>
<tr>
<td>Serbia</td>
<td>7</td>
</tr>
<tr>
<td>Denmark, Greece, Lithuania, Malta, Great Britain</td>
<td>5</td>
</tr>
<tr>
<td>Albania, Armenia, Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Finland</td>
<td>&lt;5</td>
</tr>
<tr>
<td>France, Latvia, Luxemburg, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Sweden, Switzerland, Turkey</td>
<td>&lt;5</td>
</tr>
</tbody>
</table>
Presentation of results

- Results of the survey were presented as such (original results)
- ZEF also uses a method called Z-scored Electronic Feedback referring to relative, i.e. normalized results
  - This method is utilized with the aim of removing attitude distortion
  - In this method, relative answers are calculated by moving the average to the centre of the response area and distributing all answers to the whole response area giving thus normalized answers
Cancer type (n=329)

2. Choose the cancer type you want to evaluate.

- Oral cancers and precancers by dentists looking for early signs: 9.1%
- Identifying skin cancers by checking and surveillance for moles: 20.1%
- Possible early prostate cancer: symptoms as a sign for action to improve early: 14%
- Diverse breast cancer symptoms: better awareness and recognition to improve: 38.9%
- Other cancer, please specify: 17.9%
Other cancers:

- Appendix cancer (postmenopausal)
- Bladder cancer
- Blood/hematologic cancer
- Cervical cancer
- Chronic myelogenous leukemia
- Colorectal cancer (also from age 40)
- Gastric cancer
- Digestive/GI cancers
- Gastrointestinal Stromal Tumor (GIST)
- Gynaecological cancer
- Head and neck cancer
- Laryngeal cancer (early signs)
- Lung cancer
- Lymphoma
- Multiple myeloma
- Oesophagus cancer
- Ovarian cancer
- Pediatric cancers
- Rare cancers
- Sarcoma
- Uveal Melanoma
Oral cancers

- 1. Barrier: Lack of evidence (N=21) (X: 45,13 Y: 64,98)
- 2. Barrier: Limited access to primary care (N=15) (X: 71,69 Y: 68,36)
- 4. Barrier: Cancer stigma (N=14) (X: 61,87 Y: 63,16)
- 5. Barrier: Patient-level financial constraints (N=12) (X: 69,58 Y: 74,20)

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Skin cancers

• 1. Barrier: Lack of evidence (N=32) (X: 47,40 Y: 69,82)
• 2. Barrier: Limited access to primary care (N=31) (X: 52,12 Y: 53,93)
• 3. Barrier: Lack of awareness (N=27) (X: 76,60 Y: 72,82)
• 4. Barrier: Cancer stigma (N=27) (X: 52,71 Y: 48,75)
• 5. Barrier: Patient-level financial constraints (N=26) (X: 53,02 Y: 47,56)

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Prostate cancer

• 2. Barrier: Limited access to primary care (N=29) (X: 58,45 Y: 46,82)
• 3. Barrier: Lack of awareness (N=26) (X: 64,97 Y: 65,33)
• 4. Barrier: Cancer stigma (N=26) (X: 60,93 Y: 57,68)
• 5. Barrier: Patient-level financial constraints (N=25) (X: 65,43 Y: 52,45)

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Breast cancer

• 1. Barrier: Lack of evidence (N=82) (X: 52,31 Y: 66,55)
• 2. Barrier: Limited access to primary care (N=75) (X: 64,71 Y: 62,30)
• 3. Barrier: Lack of awareness (N=72) (X: 64,44 Y: 68,68)
• 4. Barrier: Cancer stigma (N=71) (X: 50,19 Y: 54,02)
• 5. Barrier: Patient-level financial constraints (N=67) (X: 60,32 Y: 59,39)
• 6. Barrier: Poor organization of patient pathway (N=65) (X: 64,81 Y: 68,22)

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Other cancers

• 1. Barrier: Lack of evidence (N= 40) (X: 53,68 Y: 74,38)
• 2. Barrier: Limited access to primary care (N= 37) (X: 54,00 Y: 54,29)
• 3. Barrier: Lack of awareness (N=38) (X: 56,65 Y: 68,76)
• 4. Barrier: Cancer stigma (N=34) (X: 46,96 Y: 54,56)
• 5. Barrier: Patient-level financial constraints (N=32) (X: 56,60 Y: 61,48)

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## Barriers according to importance

<table>
<thead>
<tr>
<th>Importance</th>
<th>Oral cancers</th>
<th>Skin cancers</th>
<th>Prostate cancer</th>
<th>Breast cancer</th>
<th>Other cancers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most important</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2. important</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>3. important</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>4. important</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>5. important</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Least important</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

### Barriers according to (in)equity

<table>
<thead>
<tr>
<th>Equity</th>
<th>Oral cancers</th>
<th>Skin cancers</th>
<th>Prostate cancer</th>
<th>Breast cancer</th>
<th>Other cancers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produces most inequity</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>2. most inequity</td>
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<td>6</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3. most inequity</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4. most inequity</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>5. most inequity</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Not relevant to inequity</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Discussion

• In general, the three most important barriers of early detection were 1. Lack of evidence, 3. Lack of awareness and 6. Poor organization on patient pathway
  • The least important was 4. Cancer stigma

• Respectively, 2. Limited access to primary care, 3. Lack of awareness, 5. Patient-level financial constraint and 6. Poor organization of patient pathway way perceived to produce inequity
  • 1. Lack of evidence and 4. Cancer stigma were not as relevant to equity

• Variation between cancer type was found
Discussion

• The number of respondents decreased significantly between those who addressed the survey, started answering and completed answering.

• Explanations for this include the new and unfamiliar survey method, possible irrelevance of the scope of the survey in relation to respondents’ expertise, lack of knowledge of the specific questions; and unfamiliarity of the iPAAC.
  • Most responses (77) finalised among those with a connection to iPAAC.
  • We think that the results represent rather well the perceptions within the iPAAC partners.

• In summary, this survey reveals a large amount of information of barriers of early detection of cancer in Europe.

• The results are to be examined further in order to achieve more detailed information according to cancer types, barriers and background factors (countries, professions etc.) Also scoring needs further attention.
References


Early Detection: Recommendation
Early Detection: Recommendation

1. Analyse the cancer epidemiology in the country or region, including cancer morbidity and mortality.
2. Identify and list the main cancer types in the country or region, reporting incidence, stage at presentation and number of deaths.
3. Are there curable cancers among the most common cancer types? If yes, proceed. If no, ensure palliative care and see if the most common cancer types are amenable to primary prevention.
4. Are the majority of curable, common cancers advanced (stage III or IV) at presentation? If yes, monitor ongoing early detection activities. If no, proceed.
5. Are there early diagnosis or screening activities for those cancer types? If yes, proceed. If no, is the country or region a low-resource setting? If yes, develop a plan for early diagnosis of cancer. If no, develop a plan for early diagnosis and evaluate the feasibility of screening (cervix, breast, colon).
Burden of Cancer in Europe
Cancer incidence: European Regions

Source: GLOBOCAN 2018
Cancer mortality: European Regions

Northern Europe
- Lung: 20.4%
- Colorectum: 11.9%
- Other cancers: 30.2%
- Leukaemia: 3%
- Non-Hodgkin lymphoma: 3%
- Bladder: 3.3%
- Liver: 3.7%
- Oesophagus: 4%
- Breast: 6.6%
- Pancreas: 8.3%
- 274,000 new cases

Western Europe
- Lung: 20.8%
- Colorectum: 11.2%
- Other cancers: 29.2%
- Kidney: 3.1%
- Stomach: 3.4%
- Leukaemia: 3.6%
- Bladder: 3.7%
- Liver: 4.1%
- Prostate: 5.8%
- Breast: 7.6%
- Pancreas: 7.4%
- 548,000 new cases

Eastern Europe
- Lung: 18.8%
- Other cancers: 30.4%
- Leukaemia: 2.7%
- Brain, nervous system: 2.7%
- Kidney: 3%
- Liver: 3.3%
- Prostate: 4.8%
- Pancreas: 6.1%
- Breast: 7.1%
- Stomach: 7.6%
- 699,000 new cases

Southern Europe
- Lung: 20.5%
- Colorectum: 13.5%
- Other cancers: 27.6%
- Brain, nervous system: 3%
- Leukaemia: 3.5%
- Bladder: 4.1%
- Prostate: 4.9%
- Liver: 5.2%
- Pancreas: 6.5%
- Breast: 6.6%
- Stomach: 5.3%
- 422,000 new cases

Source: GLOBOCAN 2018
Melanoma of the Skin
Incidence & Mortality Melanoma

Source: GLOBOCAN 2018
Melanoma of skin

Source: ECIS
Incidence of Melanoma

Incidence ASR (World) per 100,000

- > 16.9
- 11.1 - 16.9
- 8 - 11.1
- 5.1 - 8
- < 5.1

Source: GLOBOCAN 2018
Mortality of Melanoma

Source: GLOBOCAN 2018
Trend incidence of Melanoma

Northern & Western Europe

- Denmark
- Norway
- Netherlands
- Switzerland
- Ireland
- UK
- France
- Austria
- Germany
- Estonia
- Lithuania
- Iceland

Southern & Eastern Europe

- Slovenia
- Italy
- Czech Republic
- Israel
- Slovakia
- Malta
- Croatia
- Spain
- Cyprus
- Poland
- Bulgaria
- Belarus

* regional registries

Source: CI5plus
Trend mortality of Melanoma

Source: WHO mortality
Incidence & Mortality – by age

Source: CI5plus, WHO mortality
Success in Prevention of Melanoma

- SunSmart since 1980
- Secular changes
- ‘Population dilution’
- Mortality reduction
- Better treatment and follow-up
- Early detection
Oral Cavity Cancer
Incidence & Mortality from oral cavity cancer, world

Source: GLOBOCAN 2018
Incidence of Oral Cavity cancer

Source: GLOBOCAN 2018, incl. lip
Mortality of Oral Cavity cancer

Mortality ASR (World) per 100,000

- > 2.3
- 1.4 - 2.3
- 1.1 - 1.4
- 0.8 - 1.1
- < 0.8

Source: GLOBOCAN 2018, incl. lip
Incidence & Mortality from oral cavity cancer

Source: GLOBOCAN 2018, incl lip
Survival from Oral cavity Cancer

**Men**
- Malta: 57.6%
- Norway: 54.9%
- Netherlands: 52.7%
- UK, England: 47.6%
- Italy: 45.1%
- Croatia: 41.8%
- Spain: 40%
- Poland: 38.7%
- France: 35.9%
- Bulgaria: 17.9%

**Women**
- Malta: 64.4%
- Croatia: 61.4%
- Norway: 61.1%
- Netherlands: 57.6%
- Italy: 57.2%
- UK, England: 55%
- Spain: 52.2%
- France: 43.5%
- Poland: 28.7%
- Bulgaria: 20.7%

*Source: ECIS*
Lip, oral cavity and pharynx

Northern & Western Europe

Southern & Eastern Europe

Age standardized incidence rate per 100,000

Year

* regional registries

Source: CI5plus
Lip, oral cavity

Source: WHO mortality
Prevention - Oral Cavity

- Separate w Lip Cancer!
- Primary prevention
- Screening – visual & physical examination for Oral Potential Malignant disorders
- Early detection – GP and dentists
  - Smokers & alcohol drinkers
Breast Cancer
Breast cancer screening: status
Incidence, Mortality of Breast cancer

Source: GLOBOCAN 2018
Survival from Breast cancer

Source: ECIS
Incidence of Breast cancer

Incidence ASR (World) per 100,000

- > 89.6
- 85.3 - 89.6
- 69 - 85.3
- 59.1 - 69
- < 59.1

Source: GLOBOCAN 2018

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.
Mortality of Breast cancer

Mortality ASR (World) per 100,000

- > 17.2
- 15.9 - 17.2
- 14.5 - 15.9
- 12.6 - 14.5
- < 12.6

Source: GLOBOCAN 2018
Incidence, mortality of Breast cancer

Source: GLOBOCAN 2018
Trend incidence of Breast cancer

Source: CI5plus

* regional registries

Source: CI5plus
Trend mortality of Breast cancer

Source: WHO mortality
Trend incidence – by age

Source: CI5plus, WHO mortality
Breast Cancer Prevention

- Primary prevention
- Screening
- Early detection
  - Clinical Breast Examination – sufficient evidence for stage shift but not mortality reduction
  - Self Breast Examination – inadequate evidence to reduce mortality even if done correctly
Colorectal cancer
Incidence, mortality of CRC

Source: GLOBOCAN 2018
Incidence of Colorectum cancer

Incidence ASR (World) per 100,000

- > 35.6
- 31.9 - 35.6
- 28.3 - 31.9
- 26.2 - 28.3
- < 26.2

Source: GLOBOCAN 2018
Mortality of Colorectum cancer

Mortality ASR (World) per 100,000

- > 14.9
- 12.8 - 14.9
- 11.6 - 12.8
- 10.1 - 11.6
- < 10.1

Source: GLOBOCAN 2018

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.
I & M of Colorectum cancer

Source: GLOBOCAN 2018
Survival from Colorectum Cancer

**Men**

- Italy: 59.5%
- Malta: 58.9%
- Norway: 58.7%
- Netherlands: 58.2%
- France: 57.8%
- Spain: 56.4%
- UK, England: 51.3%
- Croatia: 48.0%
- Poland: 44.9%
- Bulgaria: 41.5%

**Women**

- Norway: 62.5%
- France: 60.7%
- Italy: 60.5%
- Netherlands: 59.3%
- Spain: 57.6%
- Malta: 54.2%
- UK, England: 53.1%
- Croatia: 50.5%
- Poland: 46.5%
- Bulgaria: 43.1%

Age-standardised relative survival at 5-year (%)

Source: ECIS
Trend incidence of Colorectum cancer

Northern & Western Europe

- Norway
- Netherlands
- Denmark
- Ireland
- Germany*
- UK*
- France*
- Switzerland*
- Iceland
- Austria
- Estonia
- Lithuania

Southern & Eastern Europe

- Slovakia
- Spain*
- Slovenia
- Czech Republic
- Croatia
- Italy*
- Israel
- Bulgaria
- Malta
- Poland*
- Cyprus
- Belarus

* regional registries

Source: CI5plus
Trend mortality of Colorectum cancer

Source: WHO mortality
Increasing rates in young adults

Colon Cancer

Rectal Cancer

Araghi et al 2019
Colorectal cancer screening: status
Colorectal Cancer Prevention

- Primary prevention
- Better screening (implementation & quality control)
- Early detection?
Conclusion

- Great variation in Europe
- Examples based on best practice
- Early detection
  - Determine burden
  - Scope for early detection
  - Implementation
  - Quality assurance
Acknowledgement

- Cancer registries – Cancer incidence
- Jerome Vignat
- Organisers
Prostate cancer
Prostate Cancer Incidence

Incidence ASR (World) per 100,000

- > 79.5
- 69.4 - 79.5
- 57.9 - 69.4
- 39.4 - 57.9
- < 39.4

Source: GLOBOCAN 2018
Prostate cancer mortality

Mortality ASR (World) per 100,000

- > 15
- 13.6 - 15
- 11.6 - 13.6
- 9.6 - 11.6
- < 9.6

Source: GLOBOCAN 2018
Incidence, mortality - global

Source: GLOBOCAN 2018
Incidence, mortality – Europe

Source: GLOBOCAN 2018
Trend incidence: Prostate cancer

* regional registries

Source: CI5plus
Trend Mortality: Prostate cancer

Source: WHO mortality
Prostate cancer trend – by age

Source: CI5plus, WHO mortality
Survival from Prostate cancer

Source: ECIS

<table>
<thead>
<tr>
<th>Country</th>
<th>5-Year Survival (%)</th>
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<tr>
<td>France</td>
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<tr>
<td>Italy</td>
<td>88.4</td>
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<tr>
<td>Malta</td>
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<td>Spain</td>
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