Joint Research Centre
The European Commission’s in-house science service

Putting Science into Standards: Evidence-based quality assurance - An example for breast cancer

20-21 October, JRC Ispra, Italy

Ciarán NICHOLL

https://ec.europa.eu/jrc
The JRC in the European Commission

President
Jean-Claude Juncker

27 Commission Members

Commissioner
Tibor Navracsics
Education, Culture, Youth and Sport

Director-General
Vladimír Šucha
Joint Research Centre

DG Education & Culture (EAC)
Joint Research Centre

European Reference Laboratories, Centres & Bureaus

JRC Sites
- Headquarters
- IRMM Institute for Reference Materials and Measurements
- IET Institute for Energy and Transport
- ITU Institute for Transuranium Elements
- IPTS Institute for Prospective Technological Studies
- IHCP Institute for Health and Consumer Protection
- IPSC Institute for the Protection and Security of the Citizen
- ISM Ispra Site Management
- IES Institute for Environment and Sustainability

EUROPEAN COMMISSION

DIRECTORATES GENERAL

DIRECTORATES INSTITUTES

UNITS SCIENTIFIC UNITS
JRC: 7 Institutes in 5 EU Member States

- **IRMM** - Geel, Belgium
  Institute for Reference Materials and Measurements

- **ITU** - Karlsruhe, Germany
  Institute for Transuranium Elements

- **IET** - Petten, The Netherlands and Ispra, Italy
  Institute for Energy and Transport

- **IPSC** - Ispra, Italy
  Institute for the Protection and Security of the Citizen

- **IES** - Ispra, Italy
  Institute for Environment and Sustainability

- **IHCP** - Ispra, Italy
  Institute for Health and Consumer Protection

- **IPTS** - Seville, Spain
  Institute for Prospective Technological Studies
As the Commission's in-house science service, the Joint Research Centre's mission is to provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.

Working in close cooperation with policy Directorates-General, the JRC addresses key societal challenges while stimulating innovation through developing new methods, tools and standards, and sharing its know-how with the Member States, the scientific community and international partners.
Institute for Health and Consumer Protection

Science for a healthier life
Institute for Health and Consumer Protection

Director: K. Maruszewski

Chemical Assessment and Testing
M. P. Aguar Fernandez

Public Health Policy Support
C. Nicholl

Molecular Biology and Genomics
J. Kreysa

Nano-Biosciences
H. Stamm

Systems Toxicology
M. Whelan
IHCP Policy Support Areas

- Genetically Modified Organisms
- Nanotechnology
- Public Health
- Food and Consumer Products
- Chemical Assessment and Alternatives to Animal Testing

- Cancer Registries
- Rare Disease Registries
- Healthcare Quality
- Nutrition and Health
- Behavioural Sciences
Public Health Policy Support Unit

A Quick Overview
JRC engagement in Public Health – strategic elements

- Close proximity to the EU decision makers
- Proven track record in harmonisation and standardisation (science base) and consensus building of scientific networks, models and data systems
- Independence of all national/private/commercial interests
- A structure that provides continuity and sustainability
- Networking, engaging stakeholders/experts, organising events
- Flexibility to adapt/grow according to future (political) needs
- Facilitator, coordinator, and scientific-policy partner
Public Health Policy Support:

Nutrition Activities

Joint Research Centre
The European Commission’s in-house science service
Why nutrition?

Western Europe deaths 2010

- Dietary risks
- High blood pressure
- Smoking
- High body mass index
- Physical inactivity
- High total cholesterol
- High fasting plasma glucose
- Ambient PM pollution
- Alcohol use
- Lead

Percent of total deaths

NOTICES FROM EUROPEAN UNION INSTITUTIONS, BODIES, OFFICES AND AGENCIES

COUNCIL

Council conclusions on nutrition and physical activity
(2014/C 213/01)
What we do: nutrition for better health

nutrition and AHA

dietary prevention of cancer in the EU

Feasibility AHA dietary recommendations

active healthy ageing (EIP-AHA)

Shaping the future

EU school food policies

policy briefs: promote health at school

children’s health (COAP)

HLG on Nutrition and Physical activity

Targeted support: TFA

trans fats in the EU

Economic assessment TFA policy options

EC report to EP on TFA

Surveys MS and stakeholders

Nutrition Research Highlights

FP7: PATHWAY-27

2050 foresight research priorities foods and diets EU

2050 foresight food safety and nutrition EU
Towards a comprehensive and harmonised Cancer Information System: the role of the European Commission’s Joint Research Centre

The European Commission’s in-house science service
Background – A European Cancer Information System

1. **Cancer is the second most common cause of death in the EU**
   3.45 million new cases of cancer and 1.75 million deaths from cancer in Europe estimated in 2012.*

2. **European Institutions active in this area since 1987:**

   - **1987-2002**  three successive “Europe against Cancer”.
   - **since 2003**  cancer-related activities supported by EU Health Programmes.
     - **2014**  new joint action planned.

Aim and strategy

- To build a comprehensive European Cancer Information System (ECIS)

- Establishing the framework for interoperability of all national/regional registries

- Eventual interoperability with other registries (rare diseases in particular)
  Coordination with: Eurostat, Joint Actions, WHO

- Collaboration with the INSPIRE framework – integration of health data
JRC accomplishments since 2012 (1 of 2)

- Smooth handover of ENCR secretariat from the International Agency for Research on Cancer (IARC);
- Development of ENCR web-site;
- Regular newsflashes;
- Re-establishment of quarterly ENCR steering-committee meetings;
- Publication of series of ENCR fact sheets;
- Re-establishment of ENCR plenary conference
JRC accomplishments since 2012 (2 of 2)

☑ Start-up of ENCR working groups – with landmark publication on harmonised quality checks – "one common procedure for European cancer registries"

☑ Development of a unique ENCR data submission portal serving the needs of different data users;

☑ Development of open-source quality-check software for adherence to data protocol
Rare diseases

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on ‘Rare Diseases: Europe’s challenges’ (2008)

30 million people affected in the EU

- low prevalence: less than 5 per 10,000 persons (EU)
- 6,000 - 8,000 distinct rare diseases
- limited knowledge and expertise
- fragmentation of data sources

High European added value
Development and maintenance of the EU Platform on Rare Diseases Registration

Administrative Arrangement  JRC / DG SANTE

Why?
- to maximise access to and use of RD patient data (‘hub’)
- to reach the critical mass of data for
  - epidemiological, clinical, translational studies, research
  - comparisons across Member States and rare diseases
- to steer health policy

What?
- source of information on all sources of data collections
- promotion of interoperability between registries
- support for (new) registries
Knowledge generation centre for rare diseases

- European surveillance networks
  - EUROCAT, SCPE
- Registries
  - national
  - regional
  - local
  - hospital
  - patients’
  - ...

- Healthcare providers
- Patients
- Researchers
- Industry
- Policy makers
Behavioural Economics Team (BET)

Behavioural insights for healthy lifestyles

Joint Research Centre
The European Commission’s in-house science service
Background

People make predictable mistakes.

Influence information or situations to improve decision making.

Smart incentives.
### On-going projects

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td>• Peer-incentive schemes promoting physical activity</td>
</tr>
<tr>
<td>Tax compliance</td>
<td>• New tools for VAT tax compliance</td>
</tr>
<tr>
<td></td>
<td>• Enforcement of Norms</td>
</tr>
<tr>
<td>Alcohol overconsumption</td>
<td>• Support to Member States to apply new measures</td>
</tr>
<tr>
<td>Healthy aging</td>
<td>• Analysis of behavioural consequences of an aging Europe</td>
</tr>
<tr>
<td>Vaccination and screening</td>
<td>• Behavioural interventions aimed at increasing up-take</td>
</tr>
</tbody>
</table>
Thank you for your attention

ec.europa.eu/jrc/