

Non-communicable diseases

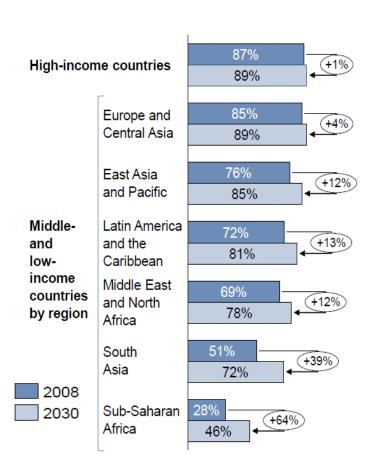
Information Day, Brussels 8 July 2016



K. Berkouk, PhD
Deputy Head of Unit,
Non-Communicable Diseases
and the challenge of Healthy
Ageing, European Commission

HORIZON 2020

NCD A Global challenge



- Deaths due to NCDs are now higher in LMIC than HIC
- Ageing population also in LMIC
- High management costs of NCDs

Percentage of deaths due to NCDs

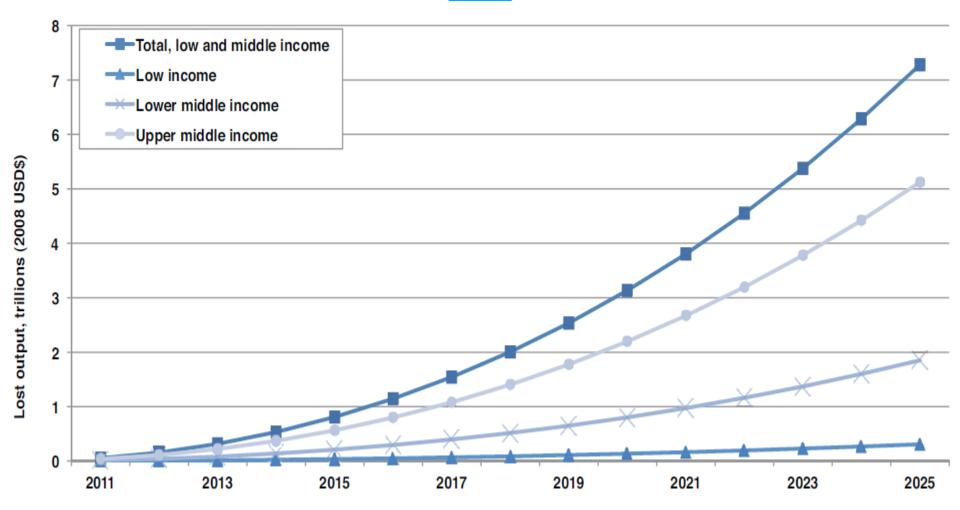


Commission

NCD An economic burden



Cumulative NCD Loss



World Economic Forum and Harvard School of Public Health (2011)

NCD challenges



Specificity

- Chronicity: life long lasting diseases
- Ageing population
- Behavioural changes



Pressure

- Health care system
- Access to care, including within country

Research and Innovation

Complexity

- Pathophysiology
- Environment
- Socio-economic
- Co-morbidity

Expanding

- A global health issue
- Forcing global poverty

EU Efforts in NCDs



Care today Cure tomorrow



Establish & Translate Personalised Medicine



Anticipate the demographic changes and the increase of NCDs



Build the European dimension in MS research activities



Collaborate with global funders

FP7 NCDs research



FINDINGS

RESULTS

OUTCOMES

ANSWERS

CONCLUSIONS

SOLUTIONS

Health Cooperation Programme

Key figures

3171 M€ invested

562 projects

7045 participations

2353 organisations

80 countries



(on 334 closed projects)

10673 publications

2,6 average SJR* (average IF of 7.3)

220 patent applications

32 spin-offs created



EU NCD research



Comprehensive approach via personalised medicine Example of Cancer

Prevention

Aetiology

Diagnosis / Prognosis

Model Systems

Therapy

Survivorship / QoL

Screening

Stratification

high-risk groups

Molecular understanding of disease

Molecular classification of cancer sub-types

Risk factors

Biomarker identification for:

- Diagnosis
- Prognosis
- Prediction
- Monitoring

Eg: blood, urine, saliva, tissue, tumour, imaging

Wide range of animal models

In silico models

In vitro & ex-vivo models ('xenopatients')

Targeted drugs via biology-driven hypothesis

bio-informatics to guide treatments

Novel clinical trial design

Solutions for side effects

Quality-of-life:

- Debilitation
- Infertility
- Fatigue
- Early death
- Second cancers



FP7: NCD main trends



- Closer to patients
- € 1,1 billion on CTs on NCDs

286 CTs involving ~ 340,000 Patients

- More Cohorts
- € 565 Million

- stratifications

- Earlybiomarkers- 85 projects
- with cohorts

SME targeted calls

- More innovative
- €246 Million to SMEs

Special calls with Africa

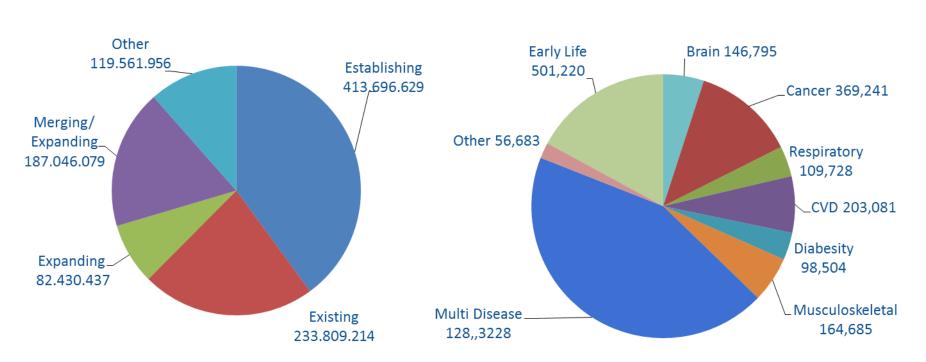
- GACD
- InTBIR
- Cancer Genome
- More global
- Diabetes, Lung, Cancer, Brain

Research and Innovation

NCD Cohorts



266 projects, > € 1 billion 55 collaborative projects ~ 3 million subjects



All FP7

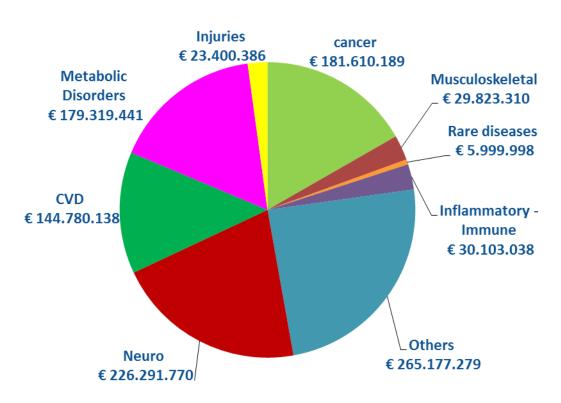
FP7: Health Programme Number of subjects in 55 projects



NCD Clinical Trials



> 340,000 patients recruited 165 Projects, 286 CTs, € 1.1 billion





Phase I: 16%
Phase I/II: 23 %
Phase II: 21%
Phase II/III: 5 %
Phase III: 6 %
Phase IV: 1 %

Interventional Study: 17 %

CTs per Medical Areas



More opportunities for collaboration ahead

Examples of topics:



- > Understanding Health, Well-being and Disease
 - SC1-PM-02-2017: New concepts in patient stratification
- > Treating and Managing Diseases
 - SC1-PM-10-2017: Comparing the effectiveness of existing healthcare interventions in the adult population
- Methods and Data
 - SC1-PM-17-2017: Personalised computer models and in-silico systems for well-being





Bridging the know-do gap





Global Alliance for Chronic Diseases



- ➤ Implement evidence-based knowledge of best healthcare interventions targeted to the different populations, geographical settings and socioeconomic contexts
- Fill the gap between providing the evidence base for policy and the actual implementation of the policy in real settings
- Focus on low and middle income countries or in vulnerable populations in high income countries



GACD Members





National Health and Medical Research Council



Canadian Institutes of Health Research



Chinese Academy of Medical Sciences & Chinese Academy of Sciences



Indian Council of Medical Research



South African Medical Research Council



Medical Research Council



National Institutes of Health



European Commission, Health Directorate at Research & Innovation DG



National Institute of Medical Sciences and Nutrition Salvador Zubirán

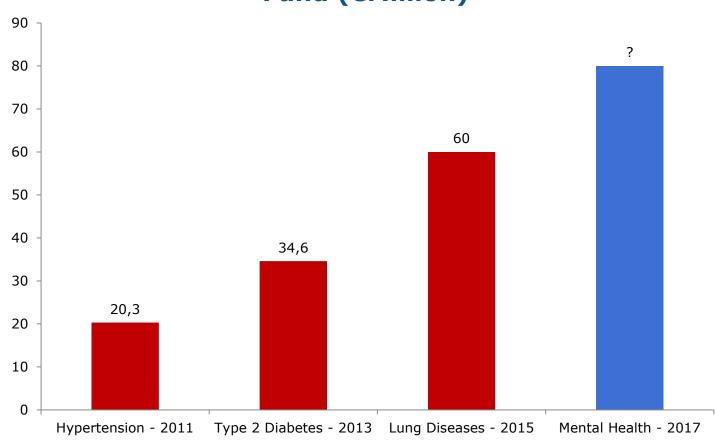


Ministry of Science (MINCYT)

GACD Funding so far



Fund (€Million)





Thank you for your attention!