



Future of diabetes research in the EUthe EC perspectives

Dr Karim Berkouk, Deputy Head of Unit DG for Research and Innovation Health Directorate European Commission

Research and Innovation



Challenges in diabetes



Research in diabetes at EU level: How does it work? What has been done?



Horizon 2020 & the Health challenge

The EU patients perspective



Challenges in diabetes research

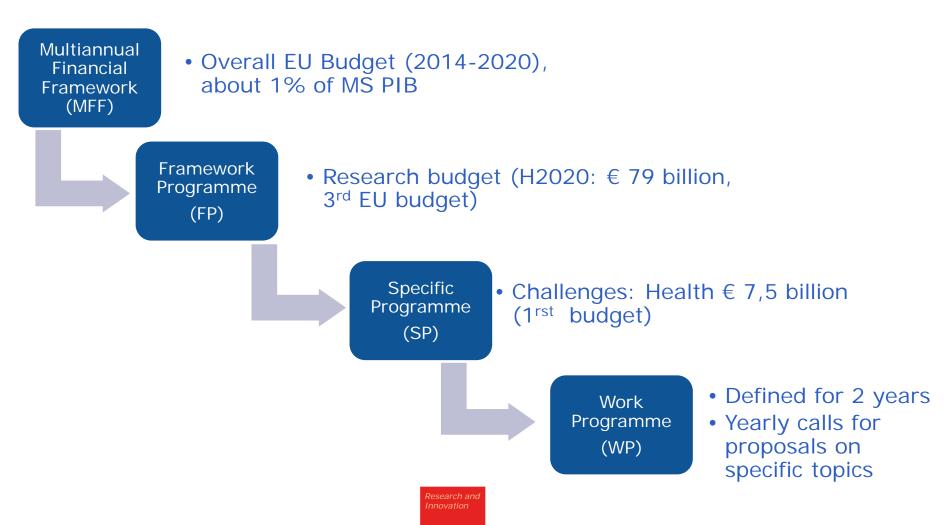


- 33 million people in EU had diabetes in 2010
- 10% of total health expenditure in most MS due to diabetes care
- Obesity and ageing on the rise

- Risk factors and early detection
- Identification of high-risk and vulnerable populations and reduction of co-morbidities
- Innovative technology and devices
- Tackling diabetes complications
- Personalised treatment
- Disease prevention
- Integrated care

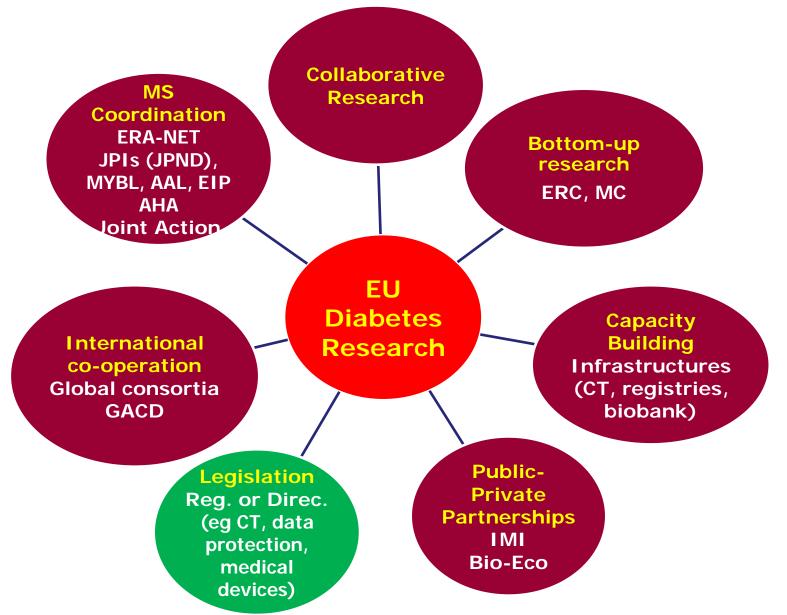


EU R&I Funding: How does it work?



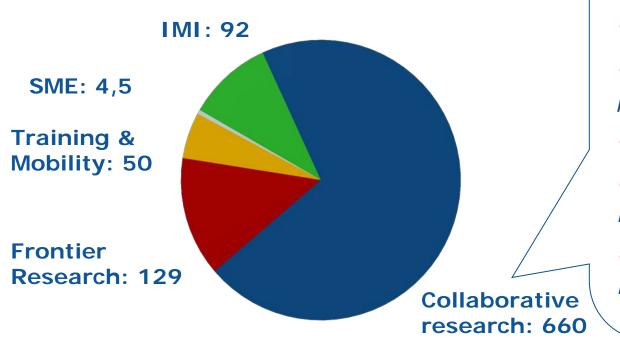


The EU means





Diabetes and obesity research schemes and funds (in € Million)



Translational research

- Genetics and epidemiology
- Function & metabolism

• Childhood & pregnancy diabetes

- Diabetes complications
- Physical activity, healthy diet
- Prevention & self management

Over € 935 Million on diabetes and obesity research (2007-2013)



FP 7 (2007-2013) - Diabetes

- Key figures
- 843 M€ invested to date
- 378 projects
- **1 946** participations
- **1 011** organisations
- 63 countries

First outcomes

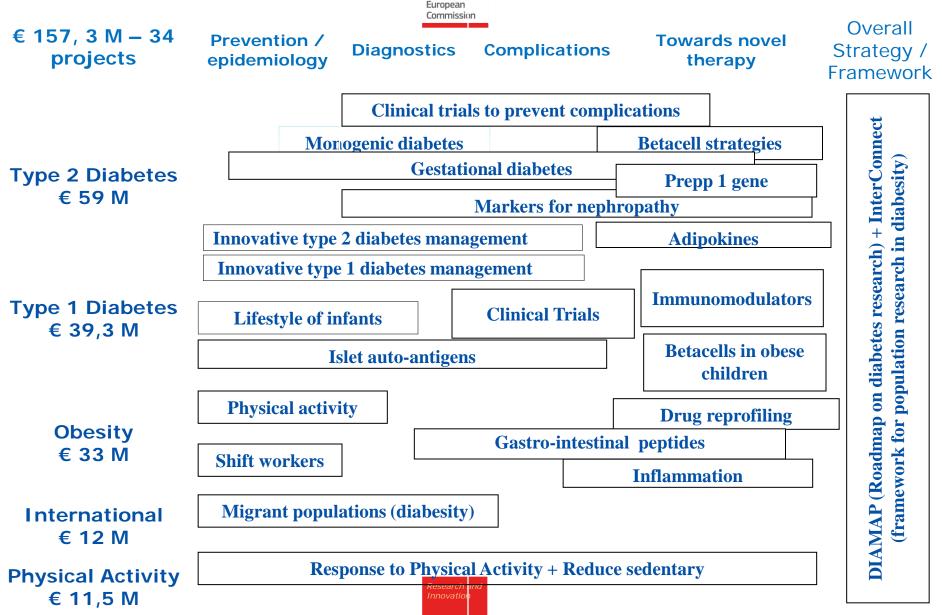
(on 22 closed projects from Health Programme)

- 1 060 publications
- 2,8 average SJR* publication (average IF of 8)
- **17** patent applications
- **6** spin-offs created

* SCI mago Journal Ranking



Overview FP7 Diabetes & Obesity Area







Perspectives

Research and Innovation

Three priorities

- European Research Council
- Future and Emerging Technologies
- Marie Skłodowska-Curie actions
- Research infrastructures

Excellent science

- Leadership in enabling and industrial technologies
- Access to risk
 finance
- Innovation in SMEs

Budget: about €79 Billion

•Industrial leadership

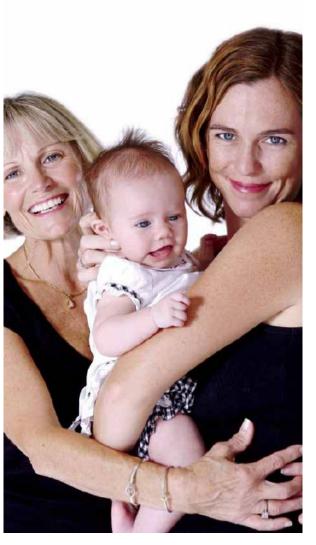
•Societal

challenges

- Health, demographic change and wellbeing
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy
- Secure, clean and efficient energy
- Smart, green and integrated transport
- Climate action, environment, resource efficiency and raw materials
- Inclusive, innovative and reflective societies
- Secure societies
- Science with and for society
- Spreading excellence and widening participation

Health, Demographic change and wellbeing - aim

Commission



about €7.5 Billion
 > Translate science to benefit citizens

- Test and demonstrate new healthcare models, approaches and tools
- Improve health outcomes, reduce inequalities
- Promote healthy and active ageing
- Support a competitive health sector



VP 2014/2015: € 1,2 billion

Commission

Understanding health, ageing & disease

Effective health promotion, disease prevention, preparedness and screening

Improving diagnosis

Innovative treatments and technologies

Advancing active and healthy ageing

Integrated, sustainable, citizen-centred care

Improving health information, data exploitation and providing an evidence base for health policies and regulation

Research and Innovation



Topic 2014 relevant for Diabetes

- Understanding health, ageing and disease: determinants, risk factors and pathways
- New therapies for chronic non-communicable diseases
- Comparing the effectiveness of existing healthcare interventions in the elderly
- Health promotion and disease prevention: translating 'omics' into stratified approaches
- Development of new diagnostic tools and technologies: in vitro devices, assays and platforms





- Understanding common mechanisms of diseases and their relevance in co-morbidities
- Health promotion and disease prevention (environment and health based interventions)
- Development of new diagnostic tools and technologies: in vivo medical imaging technologies
- Tools and technologies for advanced therapies
- Establishing effectiveness of health care interventions in the paediatric population
- Piloting personalised medicine in health and care systems





- Self-management of health and disease: citizen engagement and mHealth (2014)
- Self-management of health and disease and patient empowerment supported by ICT (2015)
- Self-management of health and disease and decision support systems based on predictive computer modelling used by the patient him or herself (2015)





Innovative Medicines Initiative

Innovative Medicines Initiative 2 www.imi.europa.eu



EU Innovation Partnership on

Active and Healthy Ageing

European Innovation Partnership on Active and Healthy Ageing https://webgate.ec.europa.eu/eipaha



Active and Assisted Living 2 www.aal-europe.eu



European & Developing Countries Clinical Trials Partnership (EDCTP2) www.edctp.org

nnovatior



International cooperation: how?



- Identify and define shared strategic goals
- Agree to approach jointly and share tasks (and costs)
- Let each agency use its own funding mechanisms/timing
- Agree to share data / standards



Alignment – Flexibility – Commitment

Example: Global Alliance for Chronic Diseases (GACD)





HCO 5 -2014) Global Alliance for Chronic Diseases: prevention and treatment of type 2 diabetes

<u>Scope</u>

Implementation and intervention research for the prevention and treatment of type 2 diabetes in low and middle income countries, and in vulnerable populations in high income countries. Emphasis is placed on validating/scaling up existing approaches rather than developing new ones.

Expected Impact

- Reduce health inequalities in both a local and global context and maximize public health benefits of research findings within different health contexts
- Provide evidence on the effective scaling up of the interventions. Leverage of existing programmes and platforms (e.g. research, data) and alignment with national/international commitments





he EC & patient involvement

- Wide consultations
- EP and many events triggered by patient organisations
- Role of the Programme Committee
- Advisory group: representative of the European Patients Forum
- Workshops: systematic patients' participation
- Topics: more patient centred

