



#InvestEUresearch



Horizon 2020 Work Programme for Research & Innovation 2018-2020

On the Value of Implementation Research

Dr Karim Berkouk

The Unit for Non Communicable Diseases &
the Challenge of Healthy Ageing

Health Directorate

Directorate General Research and Innovation

European Commission



Content

- 1. On implementation research**
- 2. Current EU activities in implementation research**
- 3. On selecting best practise interventions for implementation**



Implementing Research: Bridging the 'Know-Do' Gap

KNOW

Interventions are effective in clinical & controlled - research settings



DO

Proven interventions are not implemented in the real world

What are the gaps for implementation?

Health policy makers aim at:

- Selecting the right interventions for the context
- Ensuring the implementation of an intervention
- Knowing the programme outcomes
- Guaranteeing cost effectiveness and cost containment

Research support for:

- Expertise in identifying evidence based intervention
- Selecting the most appropriate implementation strategy for the context
- Refining & adapting the process during implementation
- Measuring outcomes
- Providing evidence on effectiveness & cost effectiveness
- Learning lessons for other countries

The new role of research: From generating knowledge to ensuring practise

**Clinical Research
(Clinical, behavioral, epi,
services)**

**Efficacy
Studies**

**Effectiveness
Studies**

**Implementation
Research**

**Implementation
in real settings**

**Guidelines,
Evidence
Syntheses**

Differentiating clinical research from implementation research

Study type	<u>Clinical research</u>	<u>Implementation research</u>
Study feature		
Aim: evaluate a / an ...	clinical intervention	implementation strategy
Typical intervention	drug, procedure, therapy	clinician, organizational practice change
Typical outcomes	symptoms, health outcomes, patient behavior	adoption, adherence, fidelity

Key Factors for Success in implementation

The intervention to be implemented

- Rigorously tested & as simple as possible

The delivery strategy

- Based on sound implementation theories

The implementers

- Strong leadership and governance & involving local support

The socio-political context

- Political will and national policies, including legal framework

EC topics (2010-2020)

EC call on implementation research & scale up	Type of call	Year	Funding (Million Euro)
Understanding of dissemination and implementation	Implementation Research	2010	18
GACD: Diabetes	Implementation Research	2013	10
GACD: Lung diseases	Implementation Research	2015	15
Evidence based innovations and good practice	Scale up	2016	40
GACD: Mental disorders	Implementation Research	2017	24
GACD: Hypertension and Diabetes	Scale up	2018	20
Maternal and child health	Implementation Research	2019	25
GACD	TBD	2020	TBD
Total			152

A flavour of implementation research topic

Proposals should cover:

- **Identification** of the best evidence-based interventions;
- Definition and implementation of **optimum scale-up methods** (e.g. pilots in multiple settings, defining a scalable unit);
- **Embed real time monitoring/evaluation** to refine protocols and ensure adaptability and effective uptake;
- **Evaluation of health outcomes;**
- Include **health economic assessments** as an integral part of the proposed research
- Where appropriate, **make recommendations for the replication of the applied scale-up interventions** to other countries or very large regions.

The example of Feel4Diabetes

AIM

Develop, implement and evaluate a community-based intervention to prevent type 2 diabetes among families from LMIC or from vulnerable populations in HIC in Europe.

The intervention is low-cost, applicable in low resource settings using any available infrastructure and human resources

Under Economic Crisis

- Greece (Harokopio University Athens)
- Spain (University of Zaragoza)

Low/Medium Income Countries

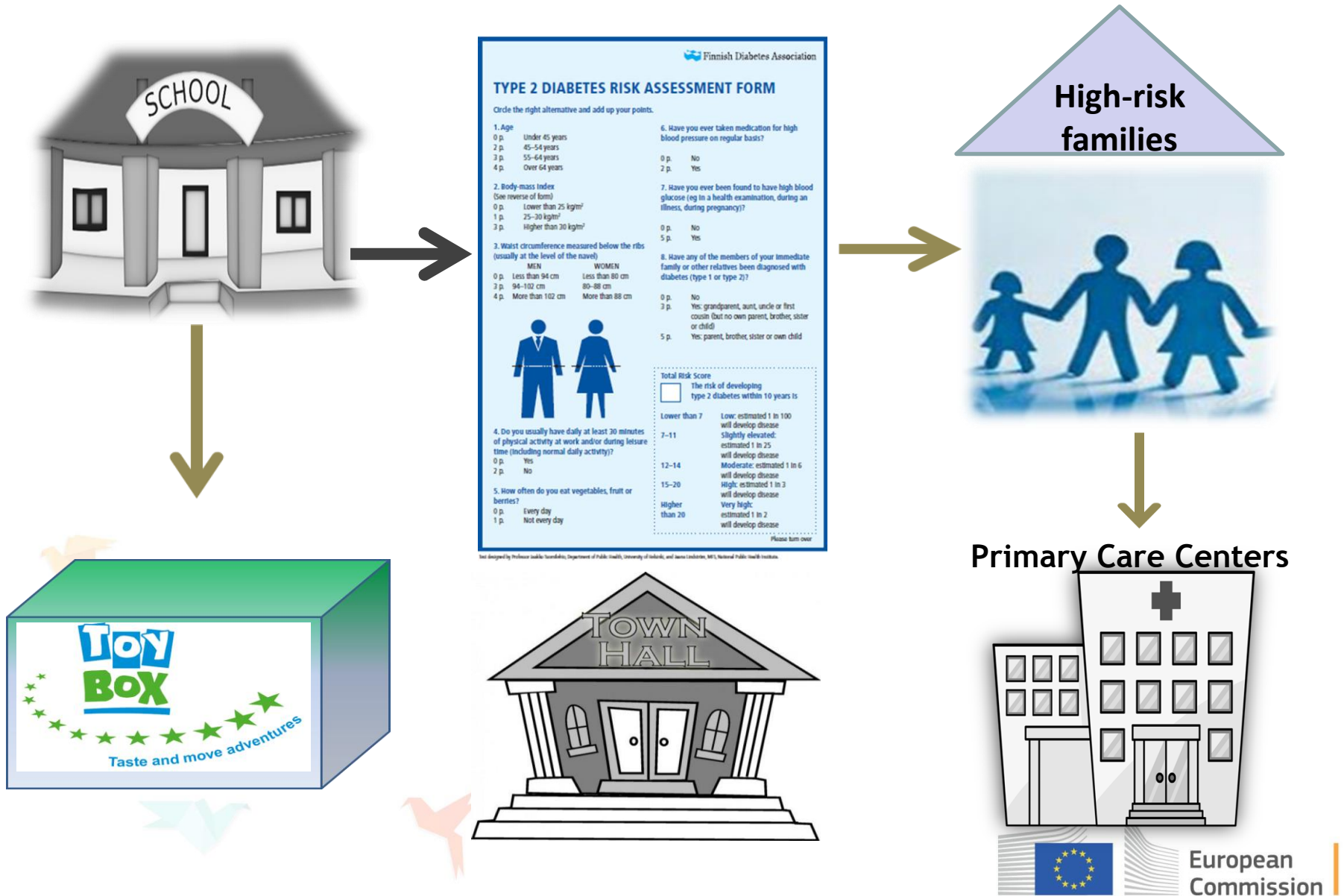
- Bulgaria (Medical University of Varna)
- Hungary (University of Debrecen)

High Income Countries

- Finland (National Institute for Health and Welfare)
- Belgium (Ghent University)



Recruitment & screening via the schools to identify families at high-risk for developing T2D diabetes

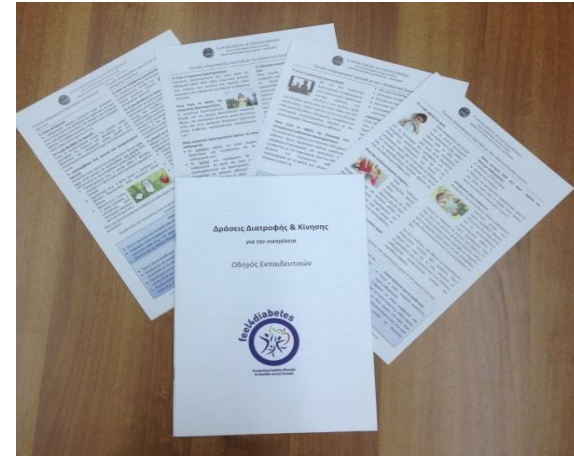


School-based component:

Training of teachers



Ready-to-use material



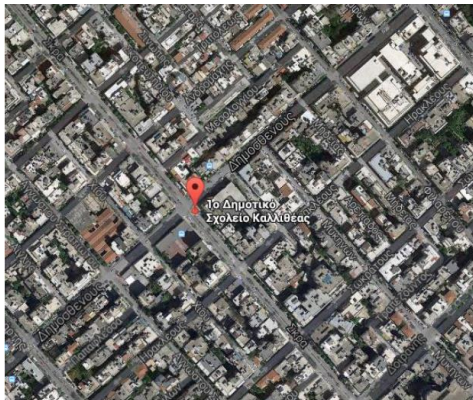
Environmental changes to promote targeted behaviours



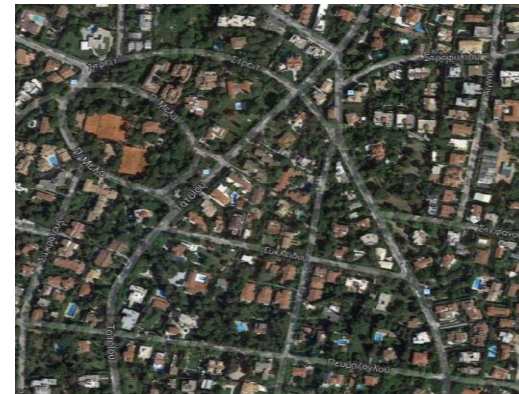
Community-based component: Collaboration with Stakeholders in the Municipalities

Physical environment

Low Income
Socio-Economic Status



High Income
Socio-Economic Status



'High-risk families' component of the intervention

'High-risk families' component: Counselling sessions (1st year)



'High-risk families' component: SMS-intervention (2nd year)



Information obtained for evaluation purposes

All Families

Children

- BMI
- Eating Habits
- Physical activity

Parents

- FINDRISC
- Eating Habits
- Physical Activity

High-risk Families

Children

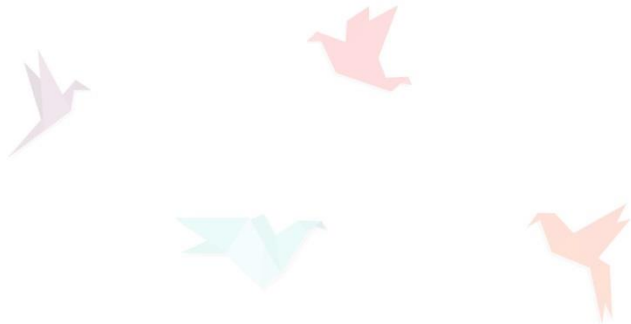
- +
Accelerometers/
pedometers

Parents

- + BMI & WC
- + Blood pressure
- + Blood samples
- +
Accelerometers/
pedometers

Total number of families and children reached/participated number of families

	Greece	Belgium	Bulgaria	Finland	Hungary	Spain	Total
Participating municipalities	5	11	11	4	8	4	43
Overall population in those municipalities	535768	303848	611591	281518	207731	349385	2,289,841
Participating Schools	59	58	19	29	12	41	218
Participating Classes	294	265	263	181	93	243	1,339
Total number of children and families reached	5954	5367	6541	3247	3506	5694	30,309



Total number of families and children reached/participated number of families

	Greece	Belgium	Bulgaria	Finland	Hungary	Spain	Total
Number of children with anthropometric indices and brief questionnaire data	2282	1789	2973	1503	1866	1670	12,083
Number of parents screened based in the FINDRISC questionnaire	3739	2990	5205	2482	3028	2998	20,442
Number of parents identified with FINDRISC score>10	988	433	1028	622	715	715	4,501
Number of high-risk adults (parents) with completed anthropometric, blood data and clinical indices	696	497	543	426	293	659	3,114
Number of children from high-risk families with complete data	509	430	465	418	360	529	2,711

Screening research results for possible implementation

Objective

To screen research projects in order to identify research results which have a potential to be implemented in the interested Member States with a high likelihood of having a positive impact on health.

Process

Results of the research projects funded will be screened and assessed against the criteria set



Those projects which have produced results and comply with the criteria will be identified and submitted to the SGPP as a list of implementable research results for prioritisation and selection to be implemented in the interested Member States

Preliminary criteria

1: Description of the approach

- Innovation to be applied in practice is described in sufficient level of detail allowing its implementation by a Member State

2: Impact of the approach

- The approach presented as a result has demonstrated positive effects above average

3: Geographical relevance

- Research results are relevant in the EU context and the results have been tested in more than one country



On defining further the criteria

Readiness for implementation

- **Strength of evidence**
- **Generalizability, transferability**
- **Representativeness, sample/setting diversity**

Likelihood for implementation

- **Policy/practice relevance**
- **Importance, relevance, credibility, implementability**

Next Steps

1. What are your comments on the criteria?
2. In which areas should focus the first screening of research results?

