



Best-ReMaP  
Healthy Food for a Healthy Future

*Policy Symposium on NCD Prevention:*

## Future directions for nutrition and physical activity policies to prevent NCDs across Europe

14th-16th June 2022  
Thon Hotel Brussels City Centre



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## Parallel Session 5

### The development and implementation of the Physical Activity Environment Policy Index (PA-EPI)

**PEN Presenting Authors:** Catherine Woods; Peter Gelius; Sven Messing; Liam Kelly; Joanna Zukowska; Nicole den Braver and Kevin Volf

**STOP Presenting Author:** Gregor Starc

**Chairs:** Enrique García Bengoechea & Aurelie Van Hoya

## Parallel Session 5 Overview



Day 2 · Wednesday 15<sup>th</sup> June

Time (CET)	Session details	
9:00 – 10:30	<b>Parallel session 5</b> <b>The development and implementation of the Physical Activity Environment Policy Index (PA-EPI)</b>	
When	What	Who
09:00-09:05	<b>Welcome/Introduction</b>	<b>Chairs</b> Enrique García Bengoechea & Aurelie Van Hoyer
09:05-10:00 (5 x 10mins)	<b>The development of the PA-EPI</b> 1. Using the HEPA PAT in four countries to inform the PA-EPI 2. Systematic Literature Reviews 3. PA-EPI Framework 4. PA-EPI Implementation Rating & Prioritization 5. PA-EPI Next Steps	<b>PEN</b> 1. Peter Gelius & Sven Messing 2. Liam Kelly, Joanna Zukowska & Nicole van Braver 3. Catherine Woods 4. Kevin Volf 5. Catherine Woods
10:00-10:20	<b>The Active Lifestyle school intervention: Lessons learned</b>	<b>STOP</b> - Gregor Starc
10:20-10:30	Q&A	ALL

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## Aim of PEN

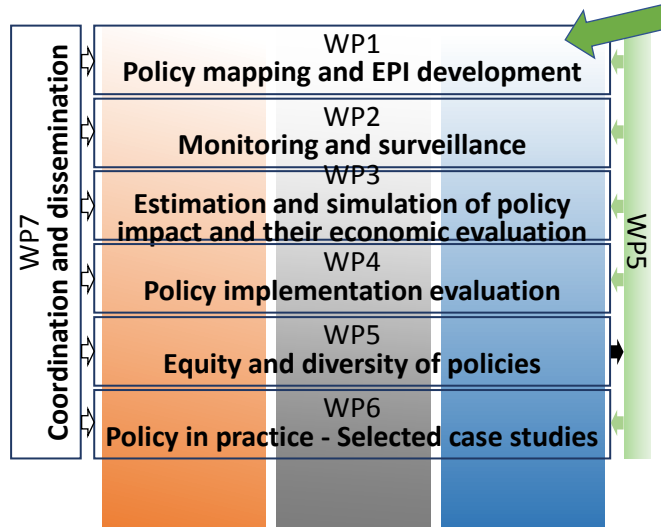


- Establish a **multi-disciplinary research network** for the **monitoring, benchmarking and evaluation of policies** that affect dietary and physical activity as well as sedentary behavior **with a standardized approach across Europe**

Country (N=8)	Number of partners (N=28)
France	2
Germany	9
Ireland	3
Italy	2
Netherlands	5
Norway	2
Poland	4
New Zealand	1

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7 Work packages



Non-communicable Diseases



**71%**

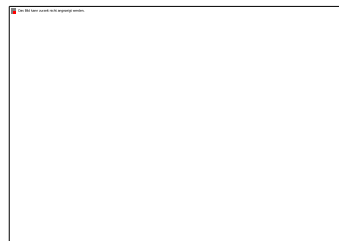
**of all deaths** are due to Noncommunicable diseases (NCD's)

**41 Million**

deaths each year are due to NCDs

**15 Million**

Are premature deaths each year (that is between ages of 30-70 years)



10% reduction in inactivity by 2025

REF: <https://www.who.int/nmh/publications/ncd-infographic-2014.pdf>

## Sustainable Development Goals



By 2030, reduce by one-third pre-mature mortality from non-communicable diseases (NCDs) through prevention and treatment, and promote mental health and wellbeing

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## Policy: Upstream solution



The role of policy is to change systems instead of individuals, and in doing so, create supportive contexts in which programmes and environments collectively can reduce non-communicable diseases, including obesity.



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## A NEW ROAD MAP FOR ALL COUNTRIES: 2018



Goal to reduce physical inactivity by  
**15% by 2030**

A systems-based approach



Website: [www.who.int/lets-be-active/en/](http://www.who.int/lets-be-active/en/)

Acknowledge: Dr. Fiona Bull, WHO.

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## Physical Activity (WP1)

Aim: To develop the PA Environment Policy Index (PA-EPI)



### Objectives

1. Completion of the WHO HEPA PAT for PA in 4 PEN countries
  - Analyse context and gather empirical data – WHO HEPA Policy Audit Tool.
  - Establish a national and EU PA expert panel
  - Final version of PAT
2. Identification of policies to be included in PA-EPI
  - Scientific rationale for policy inclusion in PA-EPI .
  - Systematic Literature Reviews
  - Grey literature search
  - Data synthesis
3. Development of the PA-EPI prototype and testing
  - Expert Consultation and PA EPI prototype development
  - Obtain consensus, test and publish the EU PA EPI prototype

Peter & Sven

Liam, Joanna & Nicole

Catherine & Kevin

<https://www.jpi-pen.eu/pa-epi.html>

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## Parallel Session #5

The development and implementation of  
the  
Physical Activity Environment Policy Index  
(PA-EPI)

### Using the HEPA PAT in four countries to inform the PA-EPI

Presenters: Peter Gelius, Sven Messing,

Co-authors: Sarah Forberger, Jeroen Lakerveld, Fiona Mansergh, Wanda Wendel-Vos, Joanna Zukowska & Catherine Woods



### Methodology for PA-EPI development



1. Build on existing work
2. Scientific literature reviews
3. Review of relevant policy documents from international or supranational organisations and agencies (e.g., WHO, ISPAH, UNESCO)
4. Expert & policy maker review



## Background



- **Increasing relevance** of public policies for promoting physical activity (PA) but **limited knowledge** about the status, implementation and effectiveness of policies promoting PA in different countries
- **Aims**
  1. Reporting results of auditing PA promoting policies in Germany, Ireland, the Netherlands and Poland
  2. Providing information on the practical aspects of applying WHO's Health Enhancing Physical Activity Policy Audit Tool (HEPA PAT) in different national contexts
  3. Informing the development of the Physical Activity Environment Policy Index (PA-EPI)

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## Methods



### Use of WHO's Health-Enhancing Physical Activity Policy Audit Tool (HEPA PAT), Version 2

- Standardized instrument to assess national policy approaches to PA promotion
- Questionnaire with 29 closed and open-ended questions
- To be completed collaboratively by a national team of "relevant stakeholders"



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## Methods

**Academia-driven data collection**, division of HEPA PAT questions into three categories

1. Use of data collected during the 2018 round of the EU PA Monitoring Framework survey
2. Desk research
3. Expert opinion

**Data collection** in 2019

**Data analysis** based on the stages model of the policy process (policy cycle)



**Table 1 Overview of PAT questions and categorization of data collection and analysis**

Question in policy cycle	PAT indicator	Type	No. Data source	Category I (2018 PA Framework survey)	Category II (desk research)	Category III (expert opinion)
Physical activity	Government strategy	Documentary data base	14			
	State government measures	Documentary data base	14			
	Other government measures	Documentary data base	14			
	Health professionals' social responsibility	Documentary data base	14			
	Influence of data on the formulation of the policy	Documentary data base	14			
	Influence on public development	Documentary data base	14			
	Influence of an evaluation/feedback on the implementation of PA	Documentary data base	14			
	PA	Documentary data base	14			
	PA	Documentary data base	14			
	PA	Documentary data base	14			

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## Key results

- **Policy-making structures** vary strongly across countries, influence should be further investigated
- National health monitoring and PA prevalence data play a similar role for **agenda setting** in all countries.
- Differences in leadership for **policy formulation** (single sector vs. shared leadership).



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## Key results

- **Decision-making** seems to occur mainly with a health and sport perspective in mind.
- **Policy implementation** covers all major population groups in the form of PA programs and intervention. Funding is split between different government sectors and levels.
- The need for **policy evaluation** is recognized in all four countries, but not all major policies have built-in evaluation mechanisms.



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## Conclusions

### Policy-making



Countries are already very active but that there is room for improvement in a number of areas.



Awareness for PA promotion needs to be increased in sectors beyond sport and health.



Mechanisms that ensure the evaluation of all future PA policies need to be created.

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## Conclusions



### Policy monitoring



A research-driven, systematic approach to completing the HEPA PAT is highly complementary with other tools and frameworks



EU countries could use the triennial survey on the HEPA Monitoring as a basis to conduct more in-depth monitoring



Political support at the national level and adequate, reliable resourcing would be needed to build a permanent monitoring system

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## Conclusions



### Informing the PA-EPI



Provision of detailed knowledge of government's policy-making structures



Understanding of governments' engagement in all stages of the policy cycle



Identification of key PA policymakers for the online consultation phase of the PA-EPI development

[www.who-cc.sport.fau.eu](http://www.who-cc.sport.fau.eu)

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## Parallel Session #5

The development and implementation of  
the  
Physical Activity Environment Policy Index  
(PA-EPI)

### Systematic Literature Reviews

**Presenters:** Liam Kelly <sup>1</sup>; Nicole den Braver<sup>4,5</sup>; Joanna Zukowska <sup>6</sup>

**Co-authors:** Catherine Woods <sup>1</sup>; Kevin Volf <sup>1</sup>; Peter Gelius <sup>2</sup>; Sven Messing <sup>2</sup>; Sarah Forberger <sup>3</sup>; Jeroen Lakerveld <sup>4,5</sup>; A Gobis <sup>6</sup> and Enrique García Bengoechea <sup>1</sup> on behalf of the PEN consortium

1. Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland.
2. Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, Germany.
3. Leibniz Institute for Prevention Research and Epidemiology – BIPS, Bremen, Germany.
4. Amsterdam Public Health Research Institute, The Netherlands
5. Upstream Team, Amsterdam UMC, VU University Amsterdam, The Netherlands
6. Faculty of Civil and Environmental Engineering, Gdansk University of Technology, Gdansk, Poland.



### Methodology

1. Build on existing work
2. Scientific literature reviews
3. Review of relevant policy documents from international or supranational organisations and agencies (e.g., WHO, ISPAH, UNESCO)
4. Expert & policy maker review



Woods CB, Volf K, Kelly L, Casey B, Gelius P, Messing S, Forberger S, Lakerveld J, Zukowska J, Bengoechea EG; PEN consortium. The evidence for the impact of policy on physical activity outcomes within the school setting: A systematic review. *J Sport Health Sci.* 2021 Jan 19:S2095-2546(21)00006-5. doi: 10.1016/j.jshs.2021.01.006. Epub ahead of print. PMID: 33482424.

Volf K, Kelly L, García Bengoechea E et al. Policy Evaluation Network (PEN): Protocol for systematic literature reviews examining the evidence for impact of policies on physical activity across seven different policy domains [version 4; peer review: 3 approved]. *HRB Open Res* 2022, 3:62 (<https://doi.org/10.12688/hrbopenres.13089.4>)NOTE: It is important to ensure the information in square brackets after

Results: 9 Policy Areas (22 policy actions) (3035 to 25 included studies)



1. School PA policy (1 policy action)
2. Physical Education (6)
3. Sport/Extracurricular PA (6)
4. Active breaks/Recess (2)
5. PA in the classroom (1)
6. Physical environment (2)
7. Shared use agreements (1)
8. Active transport (1)
9. Surveillance (2)

Acknowledge: Catherine Woods (Lead author)

## Summary

- Evidence supports the effectiveness of PA policy actions within the school setting but cautions against a “one-size fits all” approach.
- Greater clarity regarding terminology, measurement, and methods for evaluation of policy interventions is needed.
- Research recommends; Multi-component, Multi-level approaches are recommended, but these rarely included a robust evaluation of the policy component.
- Emphasizes the need to examine policy implementation to maximise translation into practice.



The evidence for the impact of policy on physical activity outcomes within the school setting: A systematic review. *Journal of Sport and Health Science*, Volume 10, Issue 3, 2021, Pages 263-276, ISSN 2095-2546, <https://doi.org/10.1016/j.jshs.2021.01.006>. <https://www.sciencedirect.com/science/article/pii/S2095254621000065>

Acknowledge: Catherine Woods (Lead author)

## Sport policy impact on physical activity: a systematic review

### What we already know...

#### Benefits and harms

Participation in sport can contribute substantially to health by promoting physical activity. Sport participation is also associated with other benefits such as enhanced wellbeing, quality of life and even academic performance.

#### Priority of the problem

Publications released by the European Commission reveal that nearly half (46%) of Europeans never exercise or participate in sport, in spite of the various benefits mentioned above. Studies of the determinants of sport participations show disparities between males and

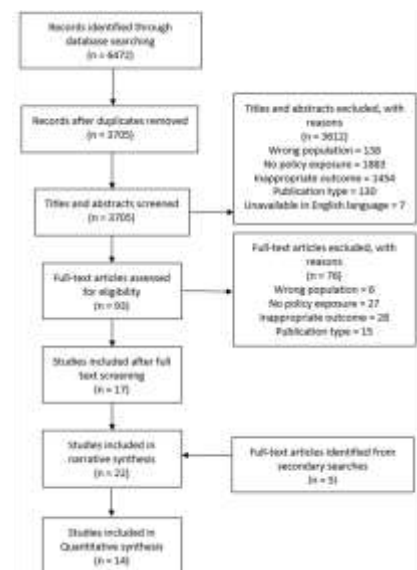
Acknowledge: Kevin Volf (Lead author)

## Results: Sport SLR (6472 to 14 included studies)

Drawing upon evidence from both qualitative and quantitative study designs, we generated the four categories of policy intervention identified in our review:

- 1. Facility Availability** (Build multi-purpose sport infrastructure and facilities).
- 2. Financial Incentives** (Provide free access for identified target groups [under 16s and over 60s or people on benefits]; Provide a voucher programme subsidising structured PA and sports).
- 3. Collaboration** (Fund programmes that collaborate with county sports partnerships to increase sport participation in hard-to-reach groups; Promote detailed SUAs).
- 4. Exhortation** (Combine free access with outreach measures; Leverage sporting mega-events to promote PA).

Acknowledge: Kevin Volf (Lead author)



## Sport policy impact on physical activity: Policy Recommendations



### 1. Ensure adequate access to sport facilities.

- Policies to build sports facilities have correlated with increased sport participation levels.

### 2. Beware the complicated effects of financial incentives.

- Some studies suggest that providing free entry to public swimming pools leads to displacement of existing users of those facilities.

### 3. Build the capacity of sports clubs.

- Expecting sports clubs to promote PA behaviours may conflict with their competitive priorities.

### 4. Understand that the least active are hard to reach via sport.

- Many public policy interventions are reported to work on people who are moderately motivated to participate in PA.

Acknowledge: Kevin Volf (Lead author))



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## Transport



Acknowledge: Joanna Zukowska (Lead author))



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Results: Transport SLR (3840 to 17 included studies)

3 POLICY AREAS / 60 policy actions

Convenient Transport Infrastructure

- (sign. positive: walking paths, new traffic-free cycling routes, new bus shelters, new bus lines, safer urban and streets design, traffic calming)

Active Travel Programming & Promotion

- (sign. positive: personal travel planning, individual active travel guidelines, promotional activities on active transport)

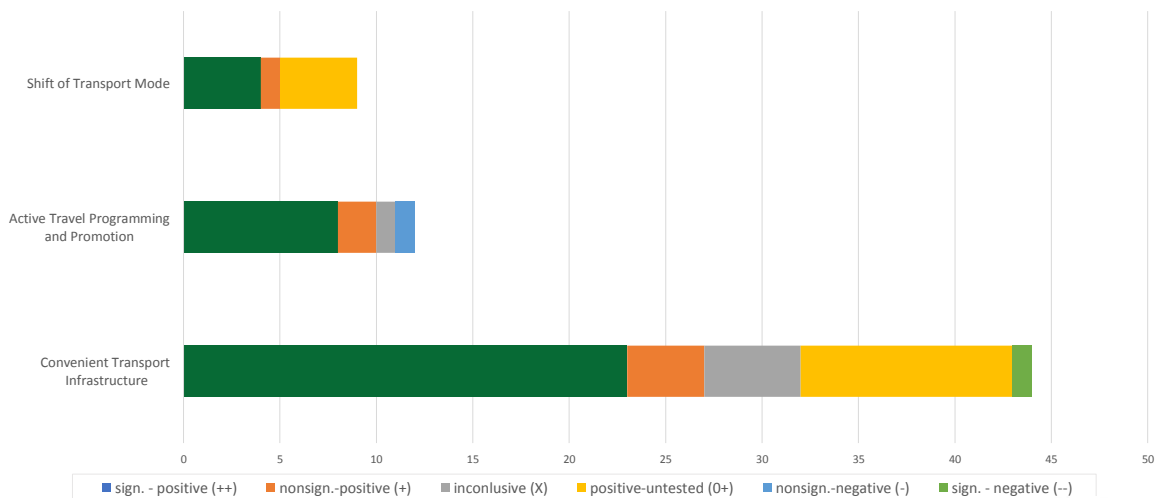
Shift of Transport Mode

- (sign. positive: ticketing improvements, discounted season tickets, free university bus service, increased parking charges, public transport frequency)

Acknowledge: Joanna Zukowska (Lead author)



Results: Transport SLR



Acknowledge: Joanna Zukowska (Lead author)



## Mass Media (1915 to 22 included studies)



- Meta-analyses (n = 2)
- SLR (n = 16)
- Narrative (n = 3)
- Umbrella (n = 2)



Acknowledge: Nicole Den Braver (Lead Author)

## Policy recommendations derived from mass-media SLR

- To achieve behaviour change, mass-media is an important component of larger, multilevel, and multicomponent strategies
- Mass-media strategies should be coordinated and aligned at local- and national-level, and be sustained, monitored and recourse at these levels
- Media should be tailored to reduce socioeconomic inequalities

Acknowledge: Nicole Den Braver (Lead Author)



## So, what does the scientific literature add...

Policy Recommendation	Mention in # of reviews	PA-EPI Implication
Plan and support long-term, sustained strategies	6	There are national and/or subnational public policies in place that ensure media and education campaigns that promote and support physical activity are sustained and monitored
Resource adequate evaluation and monitoring	10	
Combine media with complementary initiatives i.e. prevention strategies, health brands, community activities	14	There are clear, consistent policies to ensure that multiple media modes/channels (e.g., via posters, social media, radio as well as TV) combined with complementary community initiatives are used to promote the benefits of physical activity and disseminate guidelines which align with the WHO physical activity recommendations.
Intersectoral partnerships and local level	3	
Tailor to target groups / audience segmentation	7	There are public policies in place to ensure mass media contain evidence informed focused physical activity messages, appropriate for and tailored to the target audience.

Acknowledge: Nicole Den Braver (Lead Author)

## In summary, what does the scientific literature add...

- Evidence supports the effectiveness of PA policy actions across multiple policy and infrastructure support domains.
- Greater clarity regarding terminology is essential – PEN Glossary.
- Policy interventions can have unintended consequences.
- Intersectoral partnerships and actions are key across policy domains and infrastructure support domains.
- More robust measurement and methods for evaluation of policy interventions are required.
- There is a need to examine policy implementation and methods for benchmarking to maximise translation into practice



## Parallel Session #5

The development and implementation of the Physical Activity Environment Policy Index (PA-EPI)

# PA-EPI Framework

**Presenters:** Catherine Woods <sup>1</sup> & Kevin Volf <sup>1</sup>

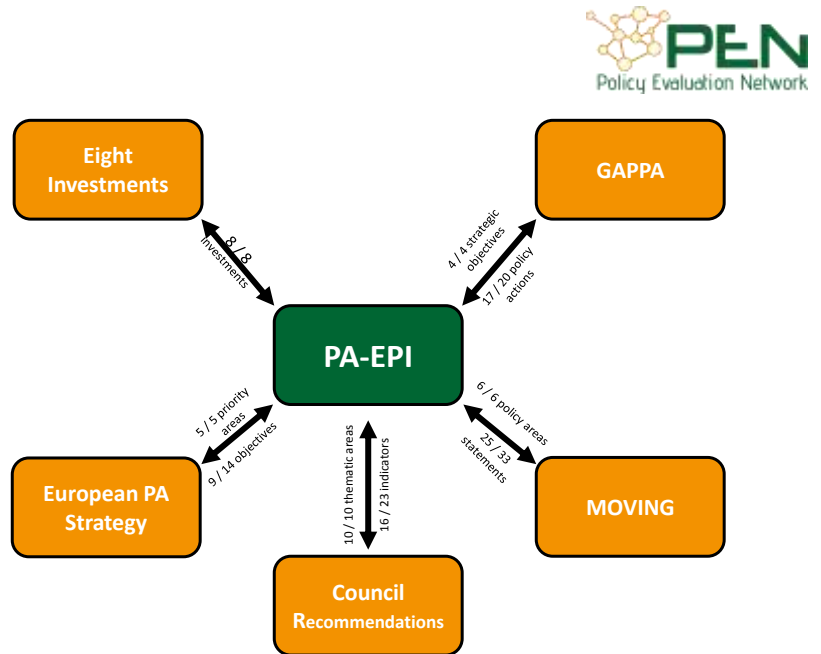
**Co-authors:** Liam Kelly <sup>1</sup>; Aurelie van Hoya <sup>1</sup>; Peter Gelius <sup>2</sup>; Sven Messing <sup>2</sup>; Sarah Forberger <sup>3</sup>; Jeroen Lakerveld <sup>4,5</sup>; Nicole den Braver<sup>4,5</sup>; Joanna Zukowska <sup>6</sup> and Enrique García Bengoechea <sup>1</sup> on behalf of the PEN consortium

- 1. Department of Physical Education and Sport Sciences, University of Limerick, Limerick, Ireland.
- 2. Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, Germany.
- 3. Leibniz Institute for Prevention Research and Epidemiology – BIPS, Bremen, Germany.
- 4. Amsterdam Public Health Research Institute, The Netherlands
- 5. Upstream Team, Amsterdam UMC, VU University Amsterdam, The Netherlands
- 6. Faculty of Civil and Environmental Engineering, Gdansk University of Technology, Gdansk, Poland.

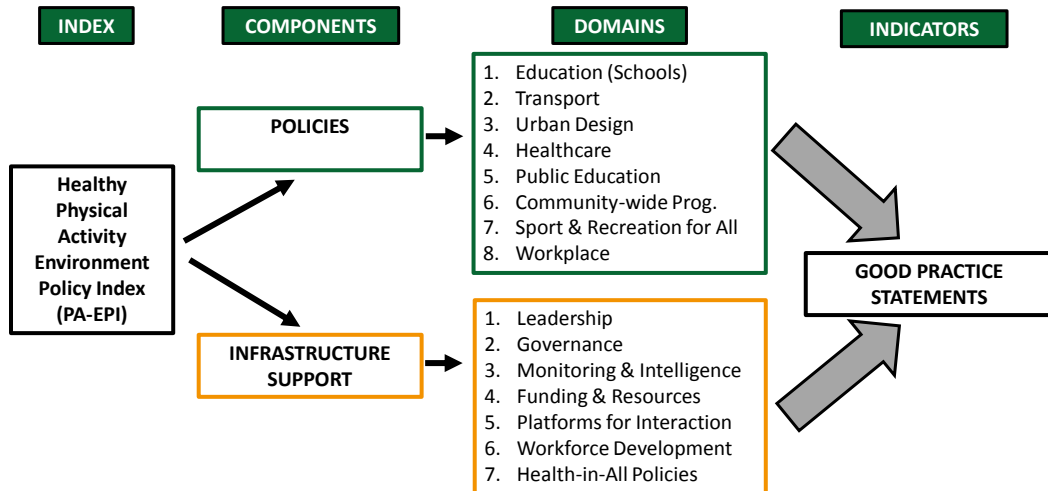


### Methodology

1. Build on existing work
2. Scientific literature reviews
3. Review of relevant policy documents from international or supranational organisations and agencies (e.g., WHO, ISPAH, UNESCO)
4. Expert & policy maker review



## PA-EPI Prototype



Reference: Adapted from INFORMAS Food-EPI ([www.informas.org](http://www.informas.org))

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## Methodology



1. Build on existing work
2. Scientific literature reviews
3. Review of relevant policy documents from international or supranational organisations and agencies (e.g., WHO, ISPAH, UNESCO)
4. Expert and policy maker review.

### Stage 1 (Academics) Development of Good Practice Statements (GPS)

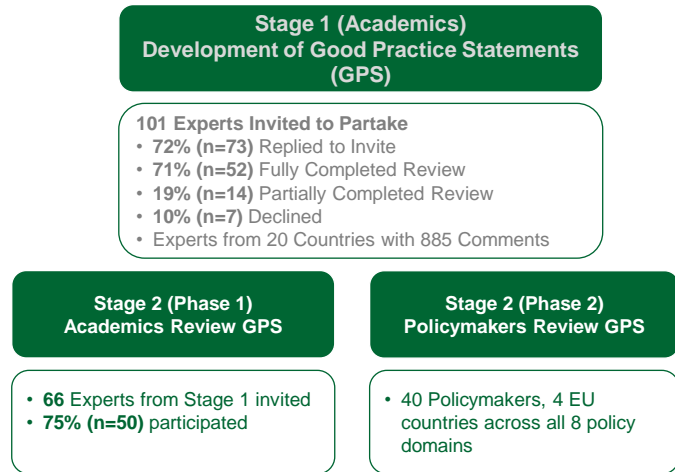
- 101 Experts Invited to Partake**
- 72% (n=73) Replied to Invite
  - 71% (n=52) Fully Completed Review
  - 19% (n=14) Partially Completed Review
  - 10% (n=7) Declined
  - Experts from 20 Countries with 885 Comments

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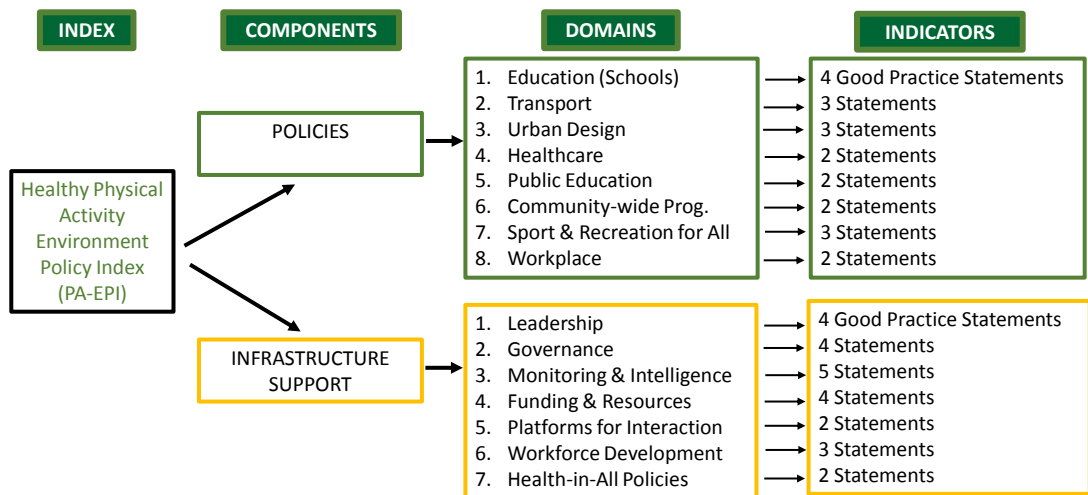


## Methodology

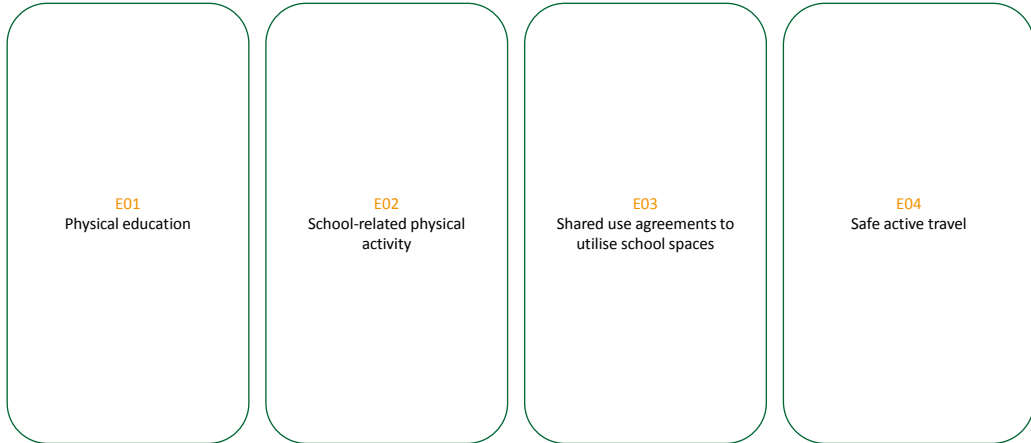
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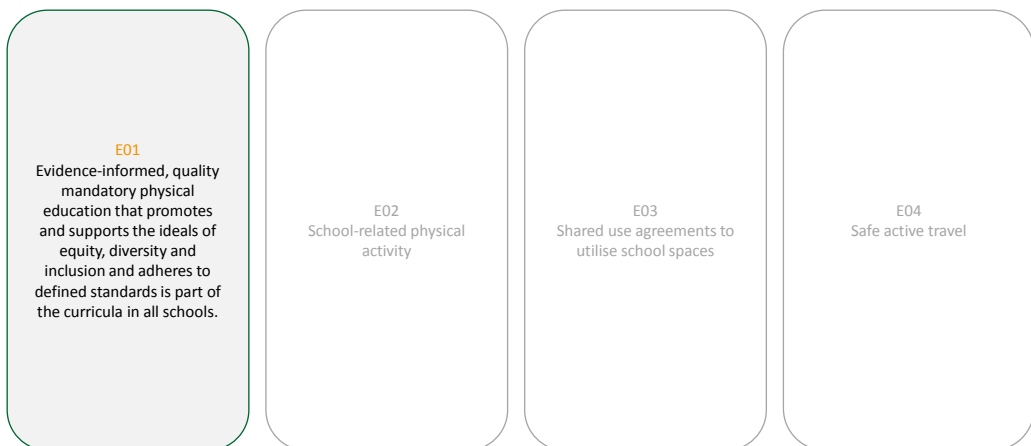
## PA-EPI Framework



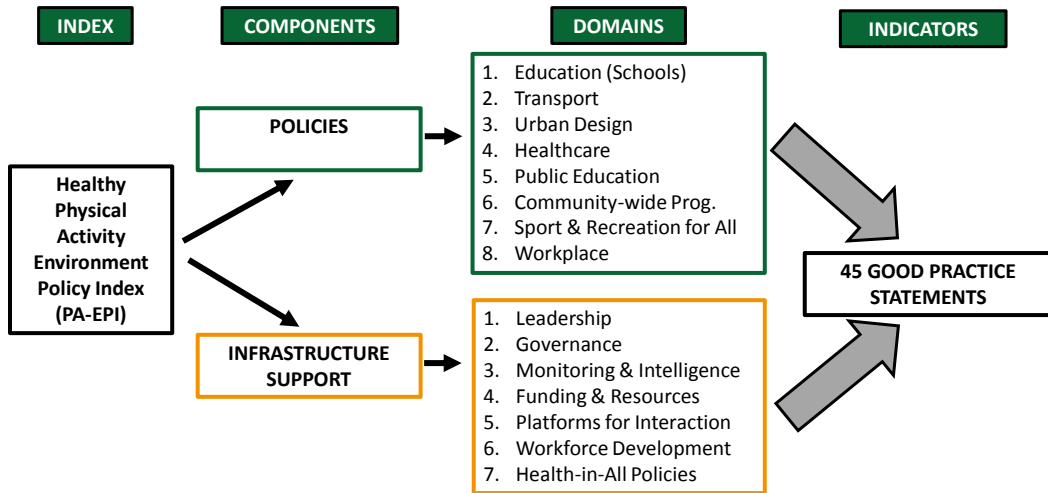
## PA-EPI: Education Domain (Example)



## PA-EPI: Indicator E01 (Example)

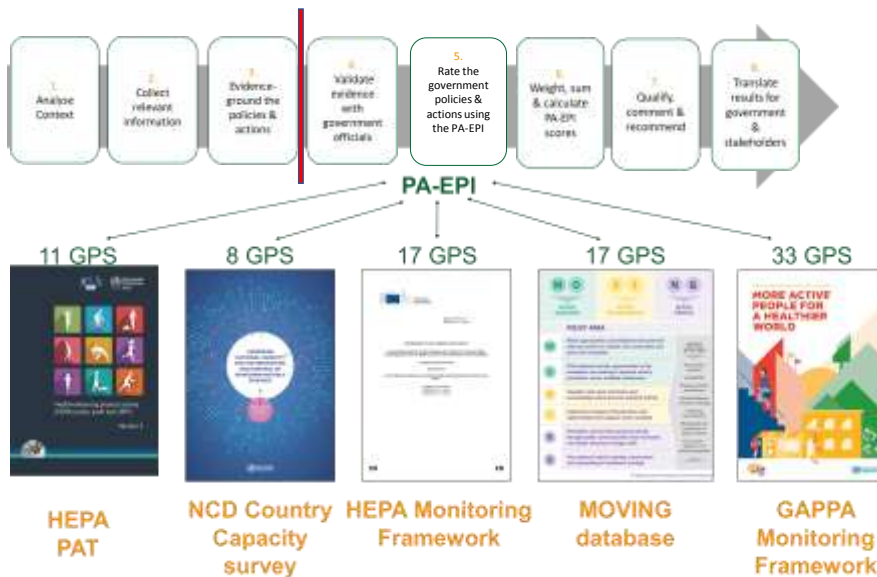


## PA-EPI Framework



<https://www.jpi-pen.eu/>

## PA-EPI: A multi-step process 'Implementation Evaluation lens'



## PA-EPI & Policy Monitoring Tools

**Overlap with indicators used in existing monitoring tools and systems:**

- MOVING database (CO-CREATE)
- HEPA Monitoring Framework survey (EU/WHO)
- NCD Country Capacity Survey (WHO)
- HEPA PAT (WHO)
- GAPP Monitoring Framework (WHO)

**39 out of 45 PA-EPI Good Practice Statements (87%)**

**Policy domains**

Education (Schools)	E01*	E02	E03	E04
Transport	T01*	T02	T03	
Urban design	UD01	UD02	UD03	
Healthcare	H01	H03		
Mass media	MM01	MM02		
Community	C02	C03		
Sport	SP01	SP02	SP03	
Workplace	W01	W02		

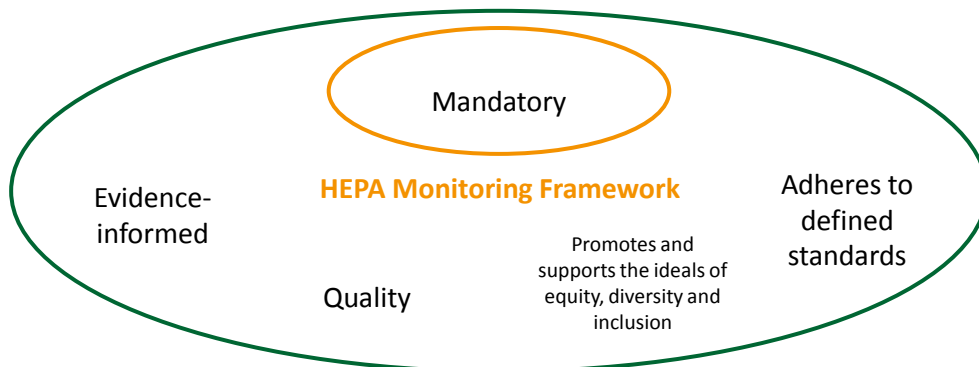
**Infrastructure domains**

Leadership	L01	L02	L03	L04*
Governance	G01	G02	G03	G04
Monitoring and intelligence	MI01	MI02	MI03	MI04
Funding and resources	FR01	FR02	FR03	FR04
Platforms for interaction	PI01	PI03		
Workforce development	WD01	WD02	WD03	
Health in all policies	HIAP01	HIAP02		

\* SIMPLE modules developed

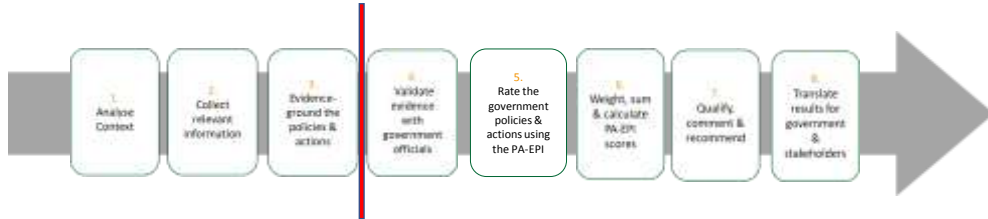
## PA-EPI & Policy Monitoring Tools: Example

**PA-EPI Good Practice Statement E01: Physical education in school curricula**

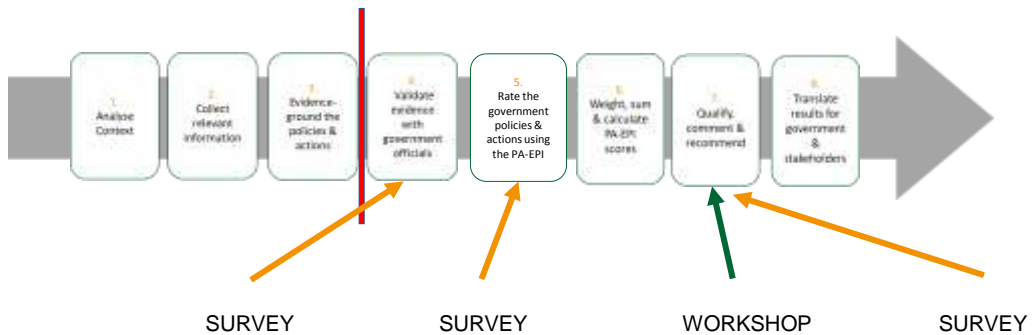


**PA-EPI Good Practice Statement**

# PA-EPI: A multi-step process



# Piloting the PA-EPI







N = 6

Public officials / Policymakers

N = 31



Independent Stakeholders

### Step 5

4. Rate the government policies & actions using the PA-EPI

qualtrics<sup>SM</sup>



Please indicate your satisfaction with the evidence presented for each of the Goal Practice Statements in the Education subdomain using one of the two options provided.

**Evidence R1 (E01):** Evidence informed, quality mandatory physical education that promotes and supports the ideals of equity, diversity and inclusion and adheres to defined standards is part of the curricula in all schools.

Get Ireland Active! National Physical Activity Plan for Ireland.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Maecenas porttitor congue massa. Fusce posuere, magna sed pulvinar ultricies, purus lectus malesuada libero, sit amet commodo magna eros quis urna.

#### References

1. The evidence provided for this statement is complete.

2. The evidence provided for this statement is incomplete.

Methods

5. Rate government policies and actions:



Physical Activity Community  
"A Mobilization of Bias"

Having read the evidence of implementation in Ireland and guided by the international good practice examples, use your own judgement and experience to rate the extent of implementation of this good practice statement in Ireland.



Note: implementation is defined as the extent to which policy is translated into practice. qualtrics.XM

Methods

6. Weight, aggregate and calculate the PA-EPI score:



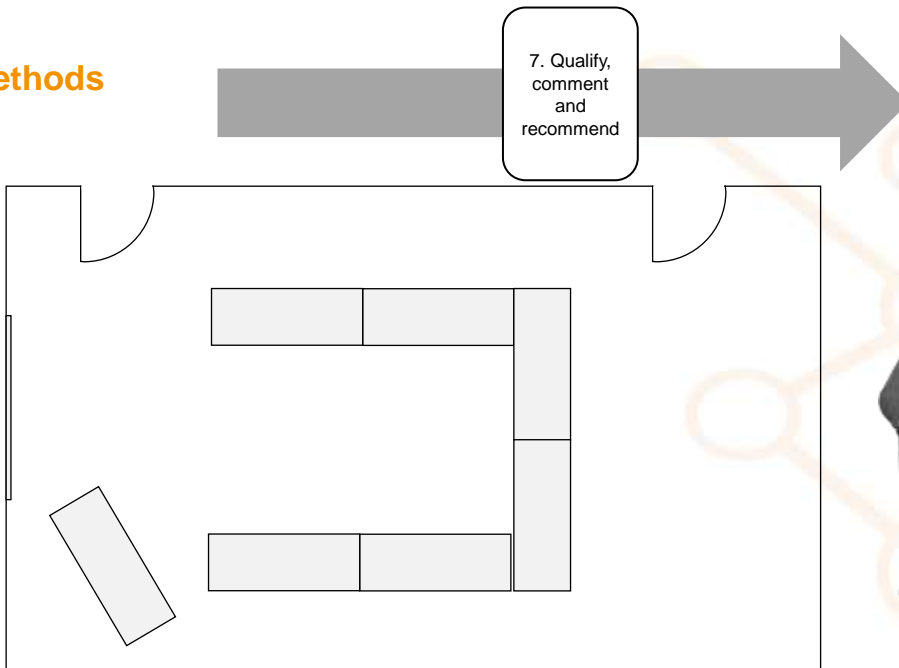
Having read the evidence of implementation in Ireland and guided by the international good practice examples, use your own judgement and experience to rate the extent of implementation of this good practice statement in Ireland.



Note: implementation is defined as the extent to which policy is translated into practice. qualtrics.XM

Statement	Statement	None	Low	Medium	High
Education	...				
Healthcare	...				
Urban Design	...				
Transport	...				
Multi-Use	...				
Community	...				
Sport & Recreation	...				
Workplaces	...				
Environment	...				
Government	...				
Marketing & Promotion	...				
Planning & Zoning	...				
Provision for Infrastructure	...				
Workplaces	...				
Healthcare	...				
Health in all Policies	...				

## Methods



## Methods



Please read the implementation recommendations and decide which recommendations should be prioritised based on **importance**. Drag and drop your 5 highest priority recommendations into the boxes on the right. You should order your 5 recommendations so that the highest priority recommendation is placed in the box at the top and your 1st highest priority recommendation is placed in the box at the bottom.

Items

- Build capacity of staff across health and social care settings to promote awareness of physical activity benefits and opportunities.
- Introduce meaningful stakeholder engagement and co-design in urban design.
- Maximise a programme of ongoing, quality CPD in physical education at

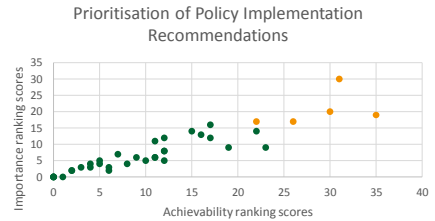
Highest priority based on importance

Second highest priority based on importance

# Results



Subdomain	Statements	Implementation Status
Education	Physical education	Low
	School-related physical activity	Medium
	Shared use agreements to utilise school spaces	Medium
	Safe active travel	Medium
Transport	Lorem ipsum dolor sit amet, consectetur adipiscing elit*	None
	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None
Urban Design	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None
	Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.	None
Healthcare	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None
	Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.	None
Mass Media	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	Medium
	Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.	Medium
Community	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	High
	Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.	High
Sport & Recreation	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	High
	Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.	High
Workplace	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	High
	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	High



# Results



Subdomain	Statements	Implementation Status			
		Little None	Low	Medium	High
Education	Physical education	None	Low	Medium	High
	School-related physical activity	None	Low	Medium	High
	Shared use agreements to utilise school spaces	None	Low	Medium	High
	Safe active travel	None	Low	Medium	High
Transport	Lorem ipsum dolor sit amet, consectetur adipiscing elit*	None	Low	Medium	High
	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None	Low	Medium	High
Urban Design	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None	Low	Medium	High
	Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.	None	Low	Medium	High
Healthcare	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None	Low	Medium	High
	Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.	None	Low	Medium	High
Mass Media	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None	Low	Medium	High
	Nunc viverra imperdiet enim. Fusce est. Vivamus a tellus.	None	Low	Medium	High
Community	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None	Low	Medium	High
	Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.	None	Low	Medium	High
Sport & Recreation	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None	Low	Medium	High
	Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.	None	Low	Medium	High
Workplace	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None	Low	Medium	High
	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	None	Low	Medium	High

\*The Good Practice Statements are in Press in the European Journal of Public Health

## Results



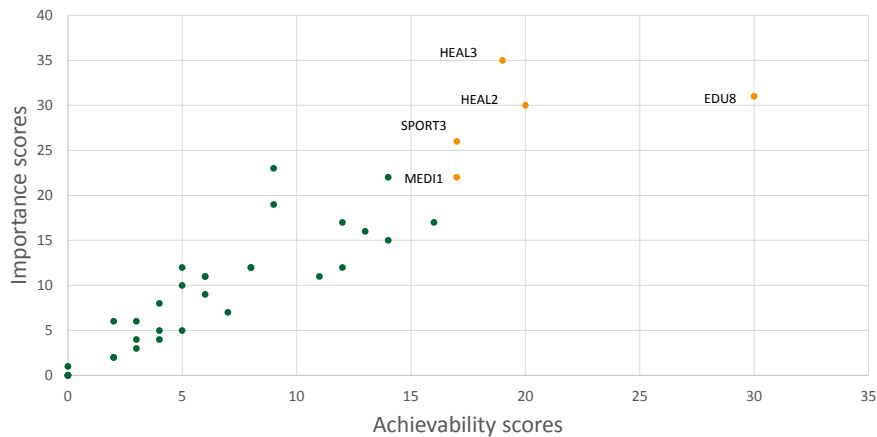
Subdomain	Statements	Implementation Status			
		Little None	Low	Medium	High
Leadership	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	[Progress bar: 100% High]			
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	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	[Progress bar: 100% High]			
Governance	Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.	[Progress bar: 100% High]			
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Monitoring & Intelligence	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	[Progress bar: 100% High]			
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Funding & Resources	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	[Progress bar: 100% High]			
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Platforms for interaction	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	[Progress bar: 100% High]			
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Workforce Development	Aenean nec lorem. In porttitor. Donec laoreet nonummy augue.	[Progress bar: 100% High]			
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Health in all Policies	Lorem ipsum dolor sit amet, consectetur adipiscing elit.	[Progress bar: 100% High]			
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\*The Good Practice Statements are in Press in the European Journal of Public Health

## (Preliminary) results



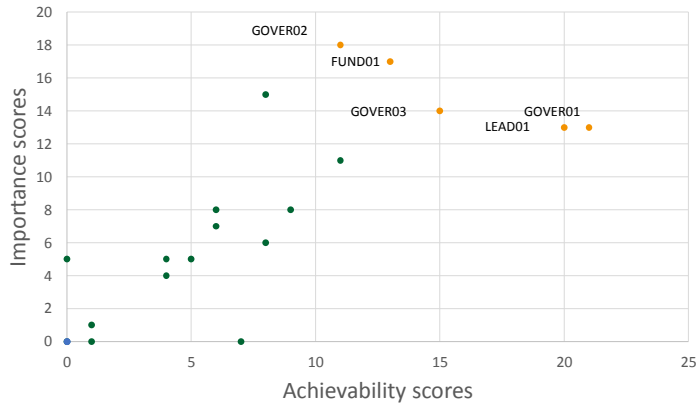
Prioritisation of Policy Implementation Recommendations



**(Preliminary) results**



Prioritisation Scores of Infrastructure Support Implementation Recommendations



**Benchmarking**



8. Translate results for government and others

“Too many studies focus on supplying scientific evidence to reduce uncertainty; focus instead on increasing demand for evidence”

(Cairney and Oliver, 2017)



Policy Cycle, adopted from Howlett et al., 2009

Cairney, P., Oliver, K. (2017) 'Evidence-based policymaking is not like evidence-based medicine, so how far should you go to bridge the divide between evidence and policy?', Health Research Policy and Systems, 15(1), 1–11.  
 Howlett, M., Ramesh, M., Perl, A. (2009) Studying Public Policy Policy Cycles & Policy Subsystems, 3rd ed, Oxford University Press: Toronto, Canada.



## Parallel Session #5

The development and implementation of  
the  
Physical Activity Environment Policy Index  
(PA-EPI)

### PA-EPI Next Steps

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**Co-authors:** Liam Kelly <sup>1</sup>; Kevin Volf <sup>1</sup>; Peter Gelius <sup>2</sup>; Sven Messing <sup>2</sup>; Sarah Forberger <sup>3</sup>; Jeroen Lakerveld <sup>4,5</sup>; Nicole den Braver<sup>4,5</sup>; Joanna Zukowska <sup>6</sup> and Enrique García Bengoechea <sup>1</sup> on behalf of the PEN consortium

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4. Amsterdam Public Health Research institute, The Netherlands
5. Upstream Team, Amsterdam UMC, VU University Amsterdam, The Netherlands
6. Faculty of Civil and Environmental Engineering, Gdansk University of Technology, Gdansk, Poland.



### To summarise: Key characteristics of the PA-EPI



Assess the extent  
of  
**implementation**  
of government  
policies and  
actions



Create a policy  
index to assess  
the healthiness  
of the physical  
activity policy  
environment



Provide  
countries with  
concrete  
examples of  
international  
best practice



Potential for  
country  
comparison  
and  
benchmarking  
of government  
policies

## PA-EPI: Next Steps



- The PA-EPI is a tool that can be used to independently monitor and benchmark the extent of implementation of public sector PA policies and actions.
- Conduct the PA-EPI in multiple countries to identify and prioritise actions needed to address critical gaps in government policies and infrastructure support for implementation.
- PA-EPI completion will help governments determine:
  - Where they are now?
  - What is possible to change?
  - Provide pathways to reach your goals
  - A mechanism for documenting progress



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## PA-EPI Next Steps



In time, the PA-EPI will evolve into benchmarks established by **governments at the forefront of creating and implementing policies to address physical inactivity.**

However, country-specific adaptations might be necessary to account for differences in political culture, to achieve a maximum of stakeholder involvement to build policy capacity, and to ensure high-level political support for an adequate policy response.

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## PA-EPI Website / Expression of Interest



The Physical Activity Environment Policy Index (PA-EPI)

1. What is the PA-EPI? / Why is it important?
2. How PA-EPI was developed
3. The resulting PA-EPI framework / Good Practice Statements
4. Applying the PA-EPI framework
5. Expression of Interest Form
6. Resources
7. Acknowledgment

<https://www.jpi-pen.eu/pa-epi.html>

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The PEN project is funded by the Joint Programming Initiative (JPI) "A Healthy Diet for a Healthy Life", a research and innovation initiative of EU member states and associated countries. The funding agencies supporting this work are (in alphabetical order) Germany: Federal Ministry of Education and Research (BMBF); Ireland: Health Research Board (HRB); Italy: Ministry of Education, University and Research (MIUR); The Netherlands: The Netherlands Organisation for Health Research and Development (ZonMw); New Zealand: University of Auckland, School of Population Health; Norway: Research Council of Norway (RCN); and Poland: National Centre for Research and Development (NCBR). Additionally, the French partners acknowledge support through the Institute National de la Recherche Agronomique (INRA).



<https://www.jpi-pen.eu/pa-epi.html>

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## Parallel Session 5

The development and implementation of the PA-EPI

# The Active Lifestyle school intervention: Lessons learned

**Presenting Author**  
STOP - Gregor Starc, University of Ljubljana.

# Healthy Lifestyle Intervention



## Case study of school-based & fitness-oriented intervention



Gregor Starc  
University of Ljubljana



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774548. This presentation reflects only the author's view and the European Commission is not responsible for any use that may be made of the information it contains.

## How Healthy Lifestyle came to life?



Ministry of Education, Science and Sport was granted 10 million EUR and was looking how to invest them best.

Faculty of Sport proposed a plan to increase first employment opportunities of recently graduated PE teachers who can provide 2 to 3 hours of additional PE lessons per week.

## Who could participate?



School year	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Newly included schools (N)	78	32	19	17	16	33	8	13
Included children (N)	18,993	24,202	26,000	27,600	30,261	29,549	35,640	32,245
Lessons (N)	33,190	60,505	68,306	70,866	72,054	53,527	69,613	51,893
Annual costs of teachers' salaries (EUR)	1,156,32	1,754,08	2,007,29	2,026,94	2,070,68	1,752,96	2,618,38	2,341,55
Annual costs per child (EUR)	60.88	72.48	77.20	73.44	68.43	59.32	73.47	72.62

Any school could be a candidate but the schools from the regions with greatest problems in low fitness of children were especially encouraged. Over 200 schools out of 450 were involved.

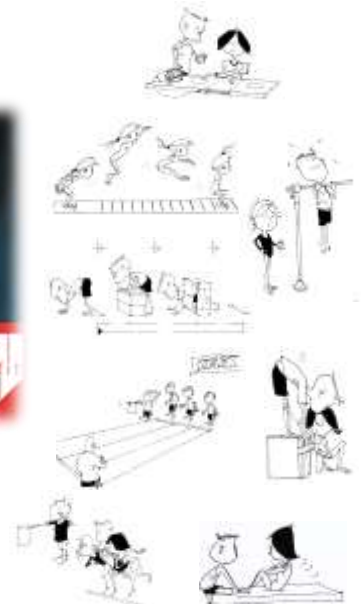
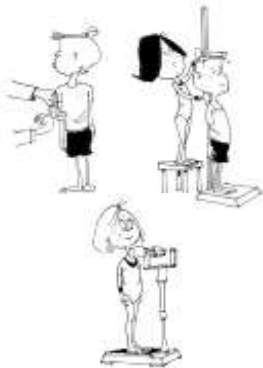
## Who selected the contents?



PE teachers and schools had the autonomy to select the contents of the intervention in the local settings.

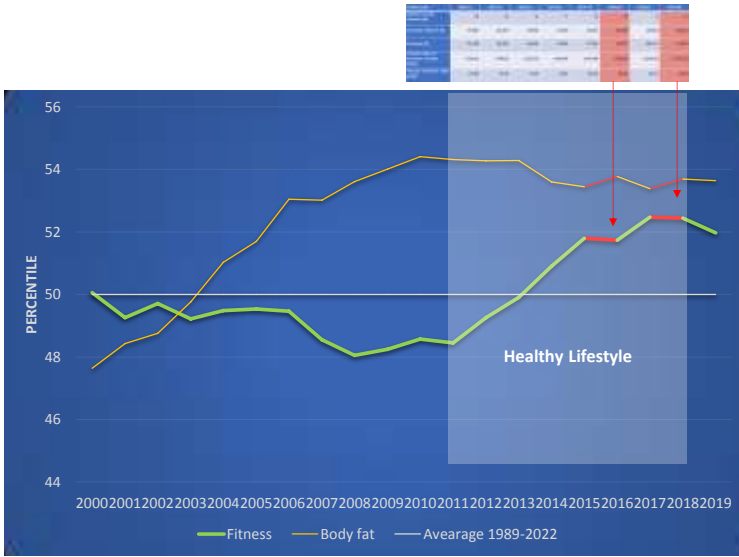


## How was it monitored?



Every April, children in all Slovenian schools participate in SLOfit fitness testing and feedback is provided to schools, parents and the Ministry of Education, Science and Sport.

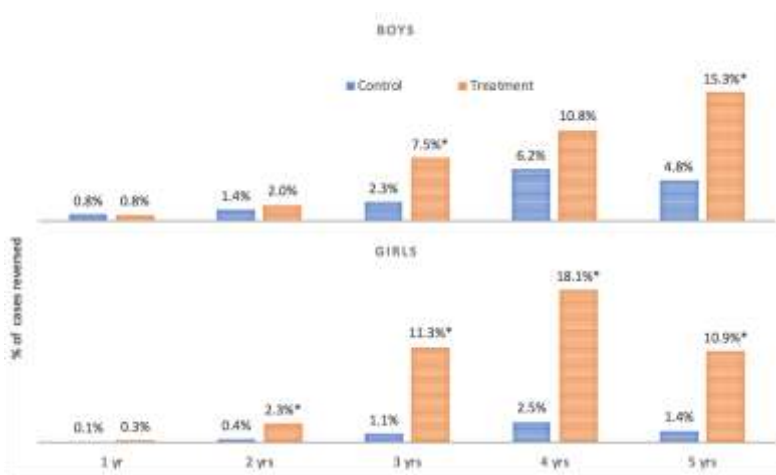
## What were the effects?



In 8 years of the intervention, physical fitness of the entire Slovenian population of children increased for



## What were the (side)effects?



After 3 years the cases of reversed obesity in participating children considerably exceeded the reversed obesity cases in non-participating children.



# What went wrong?

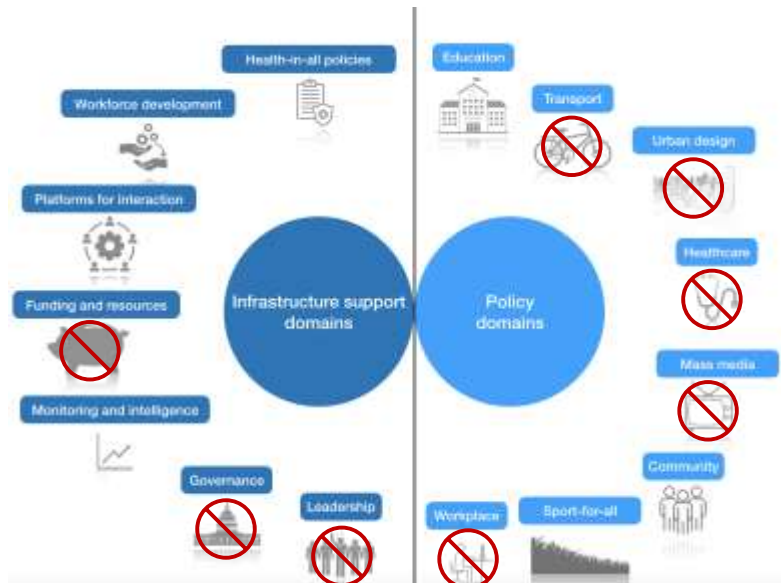


The Ministry of Education, Science and Sport was unable to provide national funding for the continuation of the intervention or for the previously agreed implementation of additional hours of PE in the regular curriculum.



# Lessons learned

In the context of PEN's PA Environment Policy Index



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Science and Technology in  
childhood Obesity Policy