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# DELIVER and PRUDENT

Dr Paula Vassallo

Director Health Promotion and Disease  
Prevention

Ministry for Health and Active Ageing



# This presentation:



Oral Healthcare - Challenges



DELIVER – Deliberative Improvement in Oral Care Quality



PRUDENT Project- Prioritization, incentives and Resource use for sUstainable DENTistry

# Background

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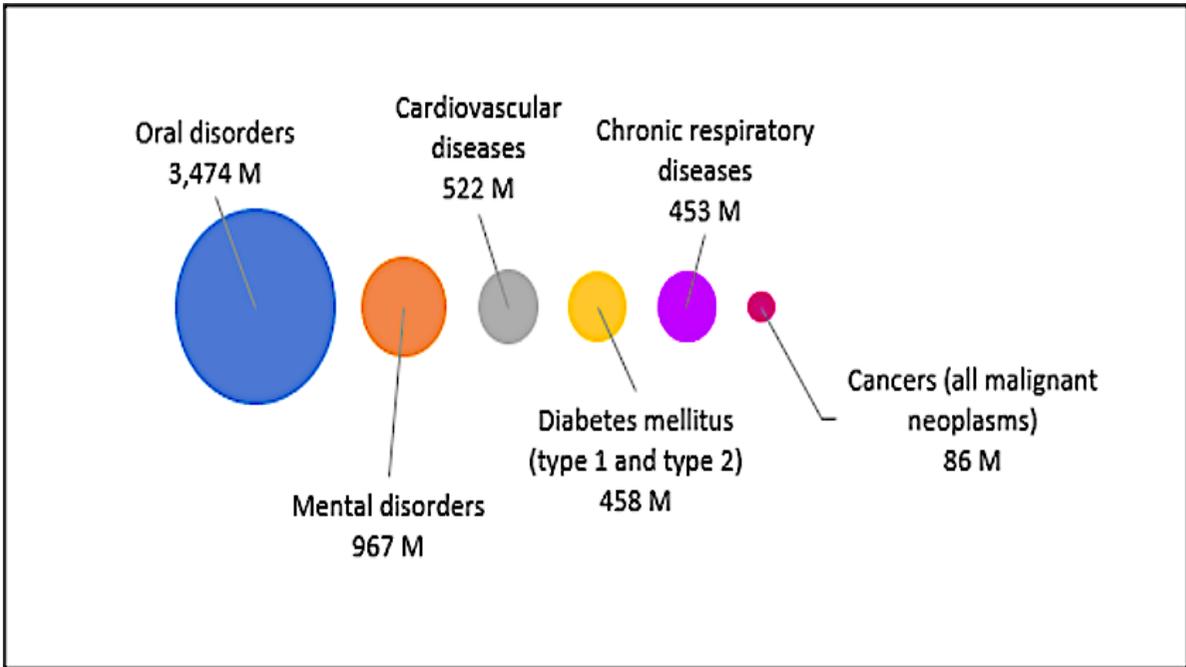
**1 billion additional cases of untreated oral disease  
1990-2019**

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Oral diseases are the **3rd most expensive diseases** to treat in the EU and are the main drivers of health expenditures in the EU

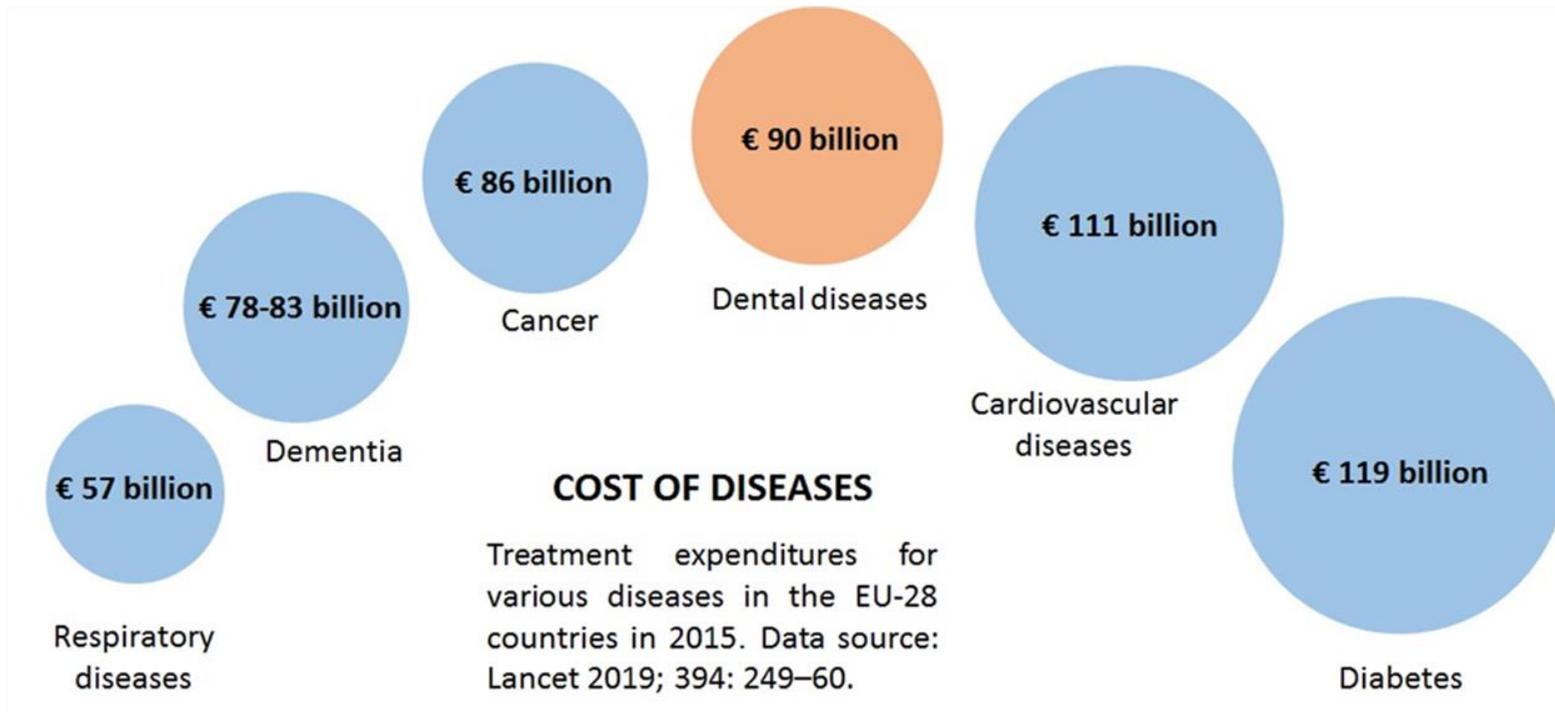
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**Coverage of dental care for adults is very limited** in some countries, including high-income countries. Lack of dental care coverage leads to **financial hardship** for richer households, who can afford to pay out of pocket, and **unmet need for poorer households**.

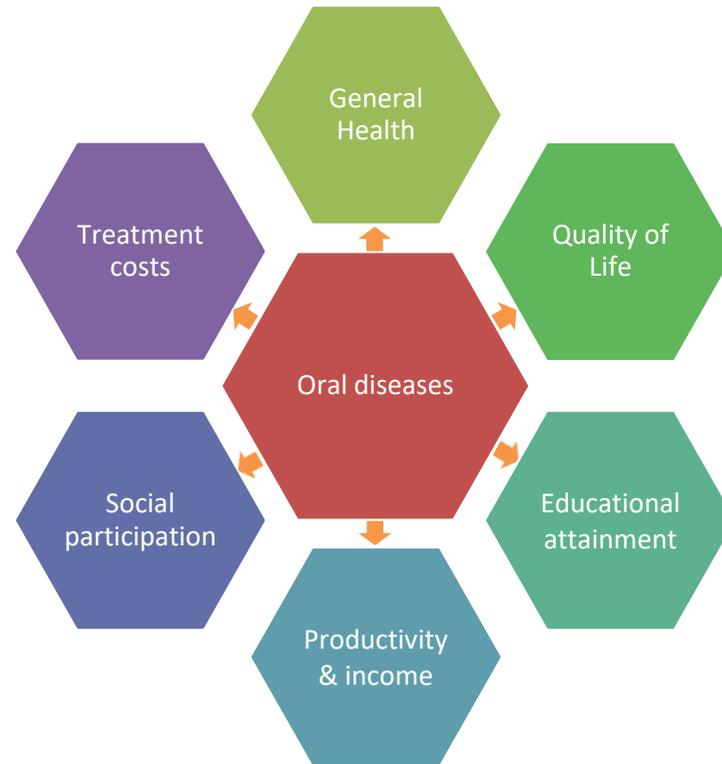


**Oral diseases  
3474 million**

**Other NCDS  
2468 million**



# Impact of oral diseases



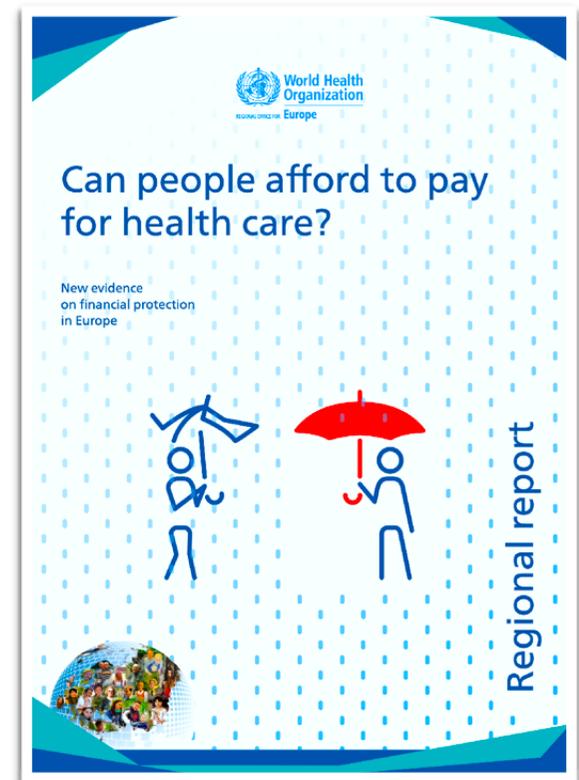
# Why is Oral Health Important ?



# UHC for oral health in Europe

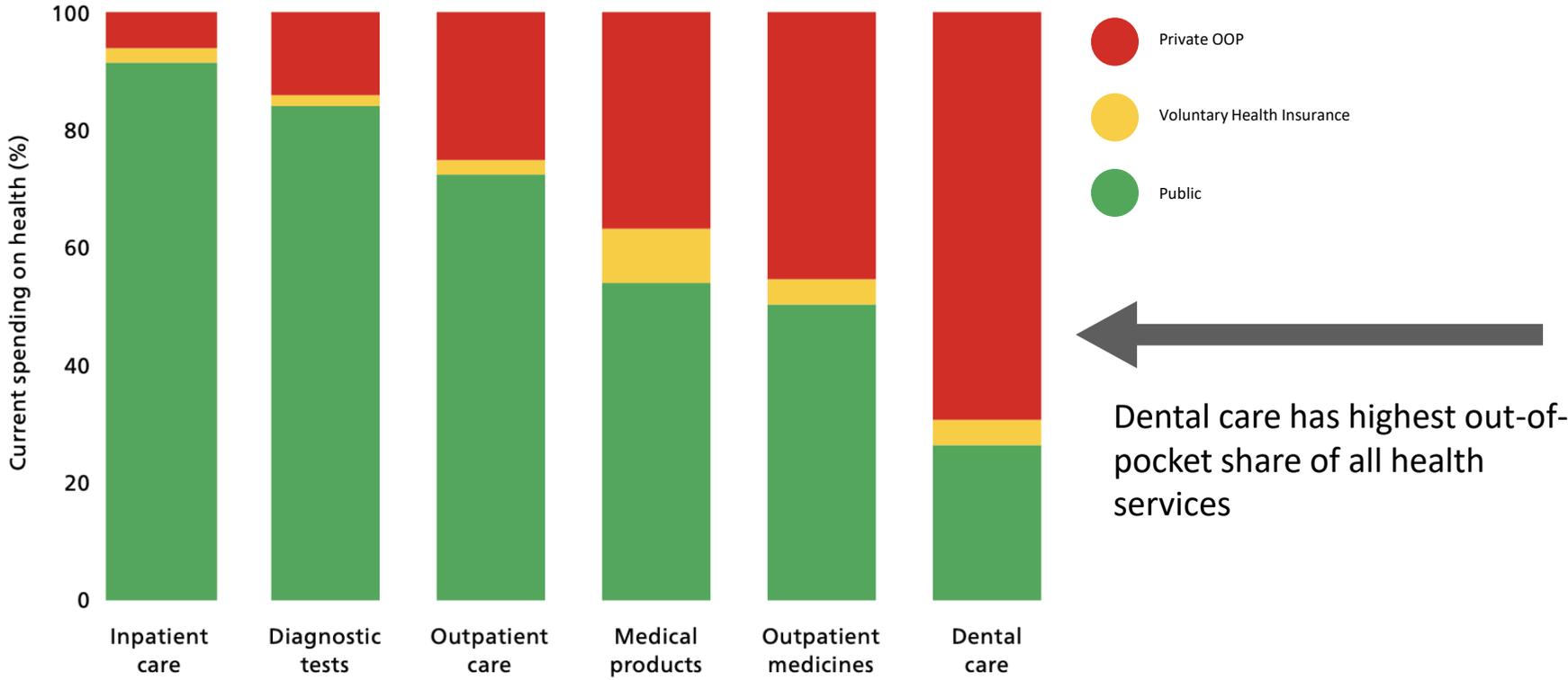
“**Coverage of dental care for adults is very limited** in some countries, including high-income countries. Lack of dental care coverage leads to **financial hardship** for richer households, who can afford to pay out of pocket, and **unmet need for poorer households**.

This pattern is also likely to apply to **preventive services**, underlining the importance of ensuring that such services are **adequately covered and free at the point of use**, at least for poor people.”



World Health Organization (WHO) Regional Office for Europe. Can people afford to pay for health care? New evidence on financial protection in Europe. Copenhagen: WHO Euro; 2019

Breakdown of current spending on health by health service and financing scheme, EU28, 2016



Oral conditions in  
middle and older  
adulthood... the canary  
in the coalmine?





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# Insights from the EU DELIVER project

DEliberative ImproVEment of oRal care quality





DELIVER



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DELIVER

# DELiberative ImproVEment of oRal care quality

Budget:  
€5,017,333.75

Duration: 48  
months

# Partners





# DELIVER

DEliberative ImproVEment of oRal care quality



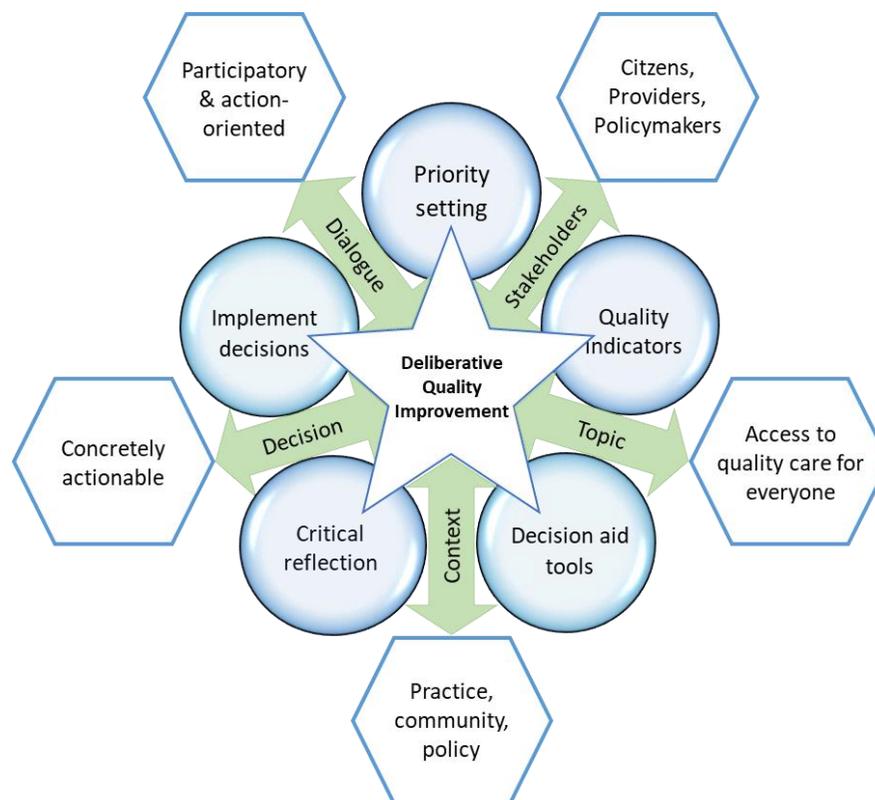
This project receives funding from the European Union's Horizon research and innovation program under grant agreement No 101057077







# Goal: DELIVER Quality Improvement Model



Provide and implement a blueprint model for improving quality and safety of oral care for everyone

## Project objectives:

**DELIVER will create a synergistic problem-solving ecosystem to improve the quality of oral care**

**Objective 1:** co-develop oral care quality indicators for applicability on the practice-, community-, and policy-levels and feed these indicators into an EU-wide monitoring framework (WP2)

**Objective 2:** co-develop and evaluate novel quality improvement (QI) interventions:

**(i)** PROMs/PREMs-based QI in dental practices (WP3)

**(ii)** Community-based QI in vulnerable groups (WP4)

**(iii)** Quality-oriented commissioning of oral health services (WP5)

→ Leverage interactive digital tools (WP6) and regulatory learning (WP7) to support QI

**Objective 3:** merge the knowledge gained into the DELIVER Quality Toolkit with manuals and tools for actionable and context-adaptive approaches for oral care quality improvement (WP8)

# What is expected to be generated by the end of the project?



Quality  
Improvement Toolkit



Online platform



Guidelines for  
policymakers

# What outcomes are expected after successful dissemination and exploitation of project results?

- 1 Better access to oral care for vulnerable communities:** significantly improved access to quality oral care without causing financial hardship and with less hospitalisation;
- 2 Quality indicators:** indicators that matter and are not a burden to providers;
- 3 Quality-improvement in dental practices:** fewer treatment errors, less overtreatment, patient empowerment, higher value-for-money;
- 4 Better governance/regulation:** significantly improved oral health system conditions will ensure patient safety and boost quality improvement in EU oral health systems;
- 5 Empowering information system:** this will provide a key infrastructure, for the short and long term, to enable and support deliberative improvement of oral care quality in practices, vulnerable communities, and policymaking, resulting in a learning system;
- 6 Academia:** improved preparedness and leadership abilities of the future oral health workforce, thereby ensuring the delivery of high quality and safe oral care.



**DELIVER**



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Phase 1: Priority setting

Phase 2: In-depth analysis of quality improvement approaches

Phase 3: Integrative synthesis

WP1: Project management

WP2:

- Define Quality of Oral Care (“shared vision”)
- Situational analysis
- Most pressing issues
- Quality indicators

Case studies:

WP3: PROMs/PREMs-based quality improvement in practices

WP4: Community-based quality improvement in vulnerable people

WP5: Quality-oriented commissioning of oral health care

WP6: Development of information systems platform

WP7: Governance and regulation of oral care quality

Multi-country monitoring framework

**DELIVER Quality Toolkit:**

Core set of indicators

Manuals:

- QI in dental practices
- QI in vulnerable groups
- QI-based commissioning
- Good governance

Digital one-stop-shop

- Dashboards
- Decision aids
- AI algorithms
- Patient app inventory

WP8: Knowledge transfer

Project months 1-12

Project months 13-42

Project months 43-48

Phase 1: Priority setting

Phase 2: In-depth analysis of quality improvement approaches

Phase 3: Integrative synthesis

WP1: Project management

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WP8: Knowledge transfer

Project months 1-12

Project months 13-42

Project months 43-48

# DELIVER has co developed



Definition of quality oral care



A list of pressing issues concerning oral care quality improvement



A list of quality indicators for practice, community and policy levels



A situation analysis of status quo of quality improvement

# How did we define quality?

Who is "we"?

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## Stakeholders in Quality improvement:

- Patients
  - Citizens
  - Providers
  - Policymakers
  - Researchers
  - Vulnerable populations
-

# Definition of Oral Care Quality

IOM (2001):  
6 domains

Righolt et al (2020):  
7 domains

DELIVER  
(2022-2026)



DEVELOPED WITH  
44 STAKEHOLDERS



WORLD CAFÉ  
METHODOLOGY



ONLINE  
WORKSHOPS



DELIVER



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# Pressing Issues surrounding Oral Care Quality Improvement

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Identified using nominal group technique with 39 stakeholders



Practice level



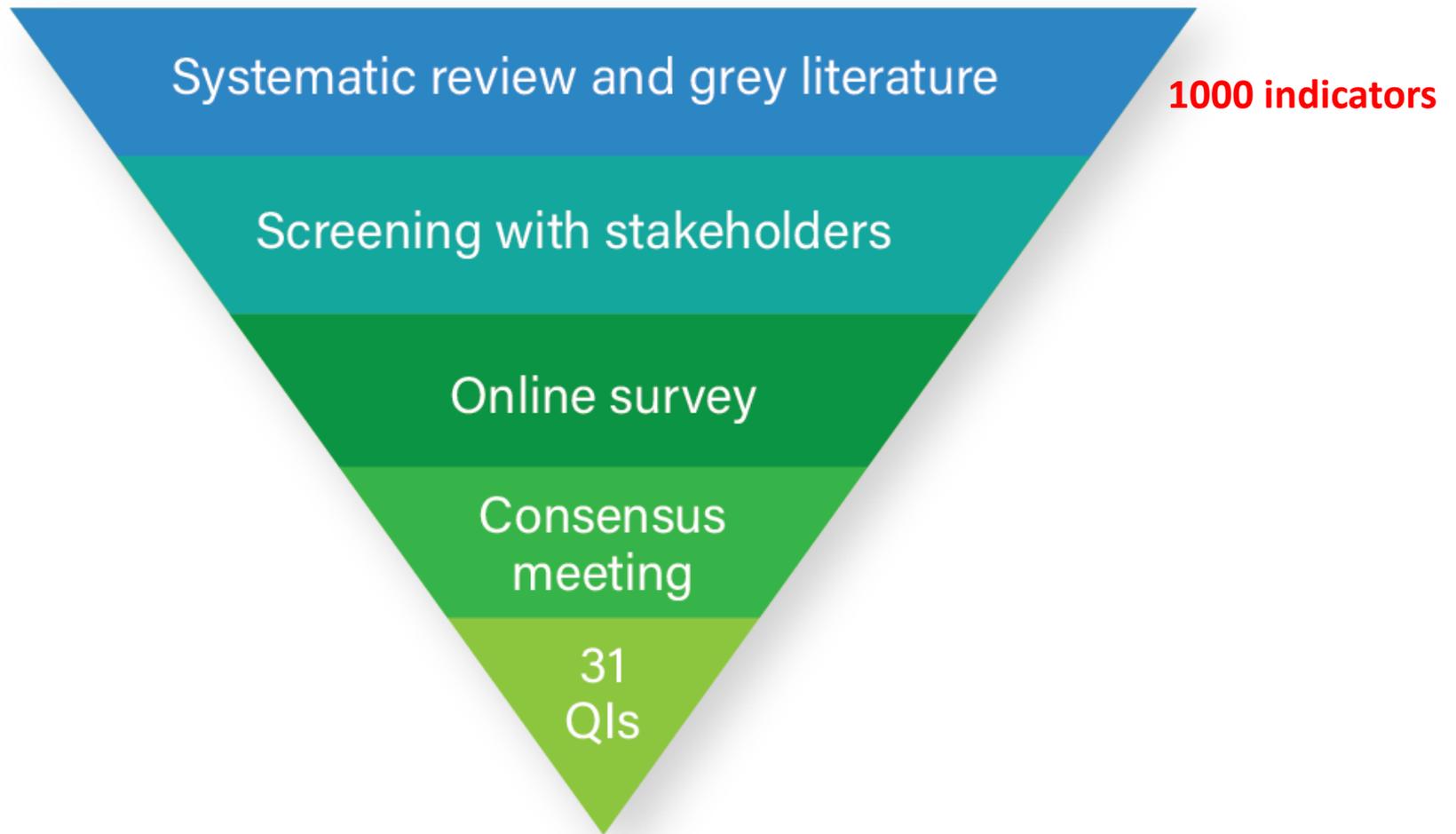
Community level



Policy level

# Consenting on core harmonized quality indicators for oral care

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# Situation Analysis (Barriers and Facilitators)

## Practice level

- Useful activity vs box ticking exercise
- QI rarely involves patients

## Community Level

- Divergent viewpoints- who is responsible ?
- System unfair -Not equally accessible

## Policy Level

- Wide variation especially considering coverage

## EU and Global level

- Challenges such as spatial and cultural differences





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# Objectives of WP 8 (MFA)



To coordinate and manage a Dissemination, Exploitation and Communication Plan (DEC plan)



To create and implement communication tools for defined audiences identified in a stakeholder analysis.



To build an extended project community and network with relevant stakeholders through DEC activities.



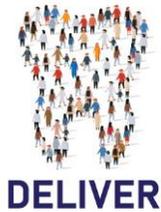
To disseminate project results through events and workshops



To produce plans for post-project exploitation.



To integrate the knowledge from WPs2-7 into the DELIVER Quality Toolkit.



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# Tasks of WP 8

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**T8.1 To set up, update and implement DEC Plan (month 1-48)**

**Ongoing**

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**T8.2 Design and implementation of a set of communication tools (month 1-48)**

**Ongoing**

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**T8.3 Dissemination and Communication activities**

**Ongoing**

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**T8.4 IP management and Exploitation Planning**

**In process**

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**T8.5 Integrative synthesis of knowledge from WPs 2-7 into the DELIVER  
QUALITY TOOLKIT**



It's time to **DELIVER**



# Prioritization, incentives and Resource use for sUustainable **DENT**istry



This project receives funding from the European Union's Horizon research and innovation program under grant agreement No 101094366

# **PRUDENT: Prioritization, incentives and Resource use for sUstainable DENTistry**



This project receives funding from the European Union's Horizon research and innovation program under grant agreement No 101094366

# www.prudentproject.eu



## Collaboration

The PRUDENT project is a collaboration with partners from Germany, Denmark, England, Estonia, France, Hungary, Ireland, Malta, Norway and Portugal.



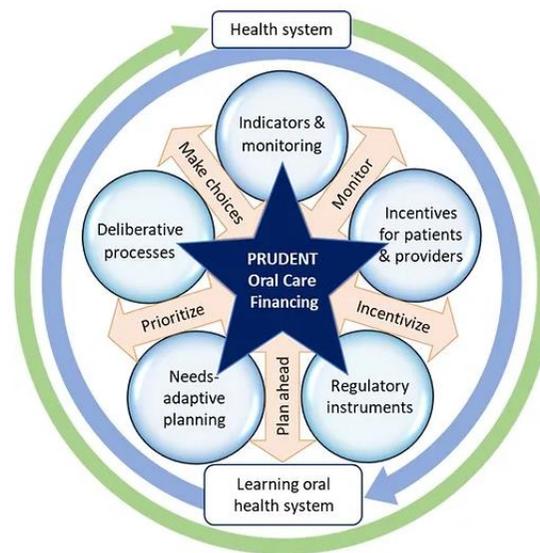
## Project Duration

The project will run from January 2023 to December 2027.



## Funding

This project is funded by the European Union through [Horizon Europe](#).



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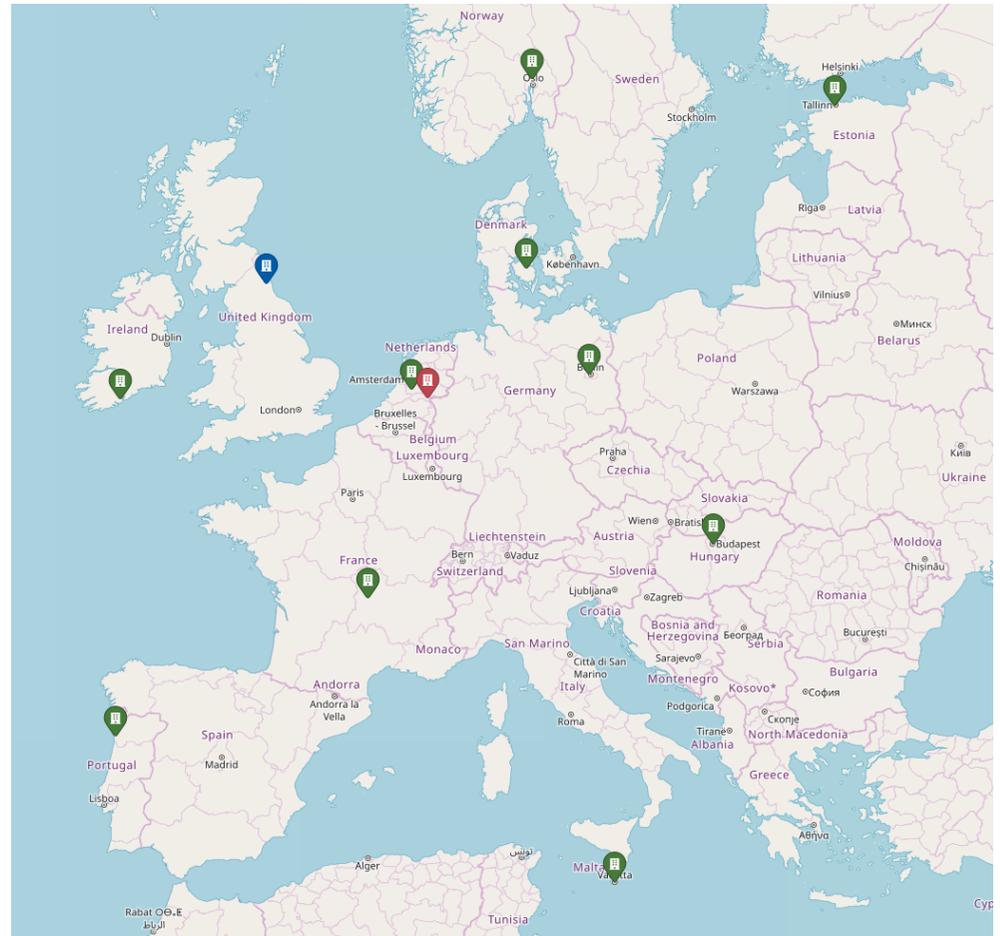
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# Project

## partners:

- Radboudumc (PI)
- SDU-DaCHE
- UNEW
- TUB
- UCC
- UCA
- ISPUP
- MFA
- UiO
- Lygature
- SU
- EDA



## Project objectives:

**PRUDENT will create a learning oral health system that converts indicators, incentives, regulations, needs-adaptive resource planning & deliberative processes into sustainable oral health improvements.**

**Objective 1 - Develop a harmonized core set of oral health system indicators**, implement them in a novel EU-wide monitoring system and integrate them in deliberative processes to set priorities for oral care financing.

**Objective 2 – Identify optimization strategies for oral health care financing.** Real-world and lab experiments on provider payment and oral care insurance coverage, needs-adaptive resource planning, regulatory learning and digital decision aid tools will be leveraged to help accelerate transformations in oral care financing.

**Objective 3 - Harness innovative knowledge transfer strategies** for the co-development and co-production of sustainable implementation strategies for oral and general health care financing.

The PRUDENT project aims to **enhance the financing of oral health systems** through novel evidence and implementation of better financing solutions together with citizens, patients, providers, and policymakers.



The ultimate deliverable will be the **PRUDENT Financing Model**  
(a blueprint for oral & general health systems).

# Objectives?

Maximise health

Reduce clinical  
measure of  
disease (which?)

Good access

Reduce  
inequalities

Psycho-social  
wellbeing

Improve quality of  
life

Prioritise  
vulnerable groups

High quality care

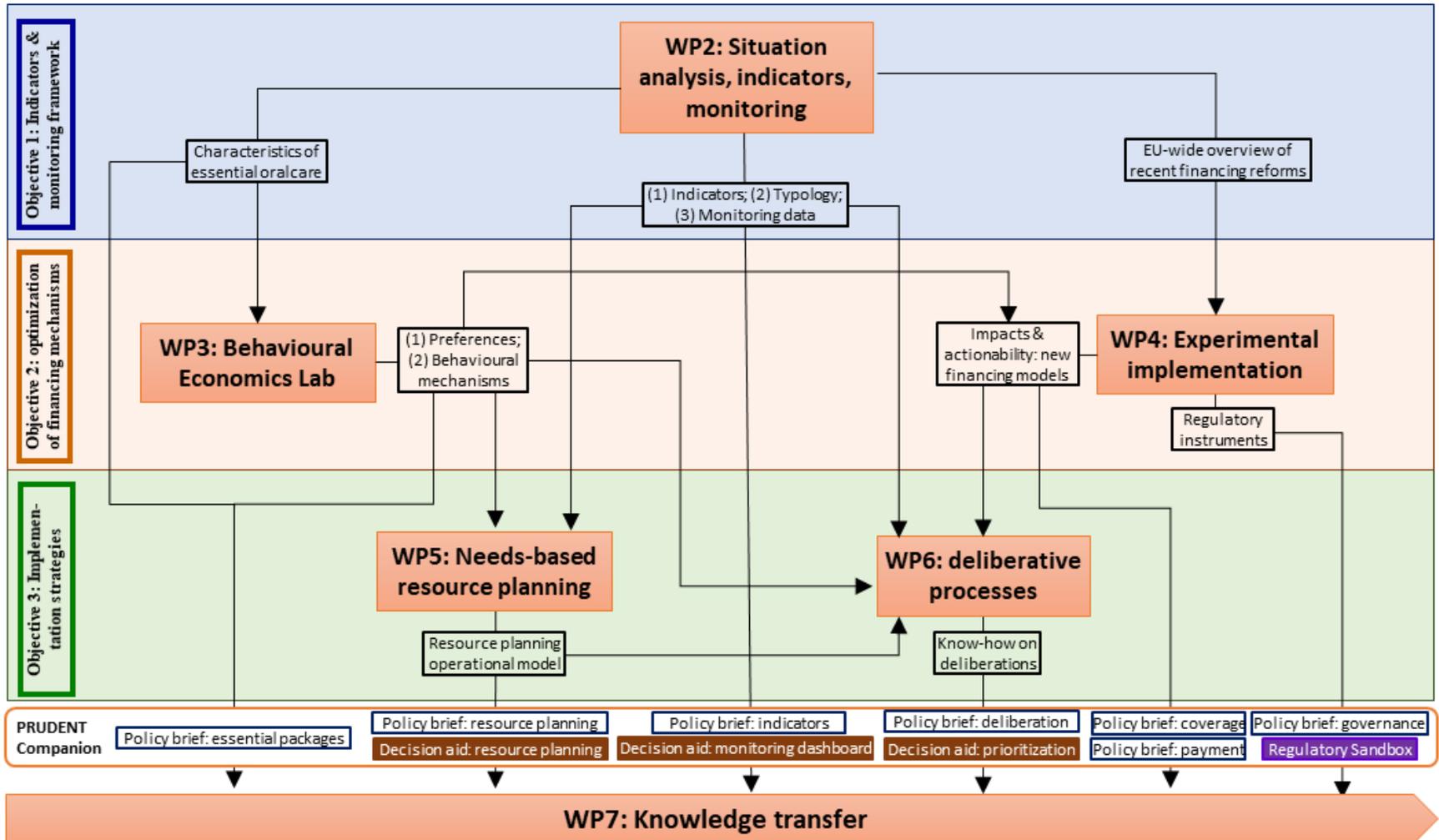
Safe and  
acceptable

Best use of  
workforce

Politically  
acceptable

Fits with other  
health priorities

## WP1: Project coordination and management

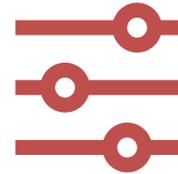


# situation analysis, indicators, monitoring

## Objectives:

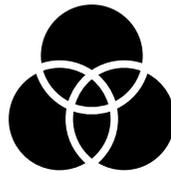


Situation analysis of oral health care financing mechanisms and typology of oral health financing



Developing a harmonized set of oral health financing and oral health care performance indicators

Consensus on essential oral health care



Monitoring framework of oral health care performance

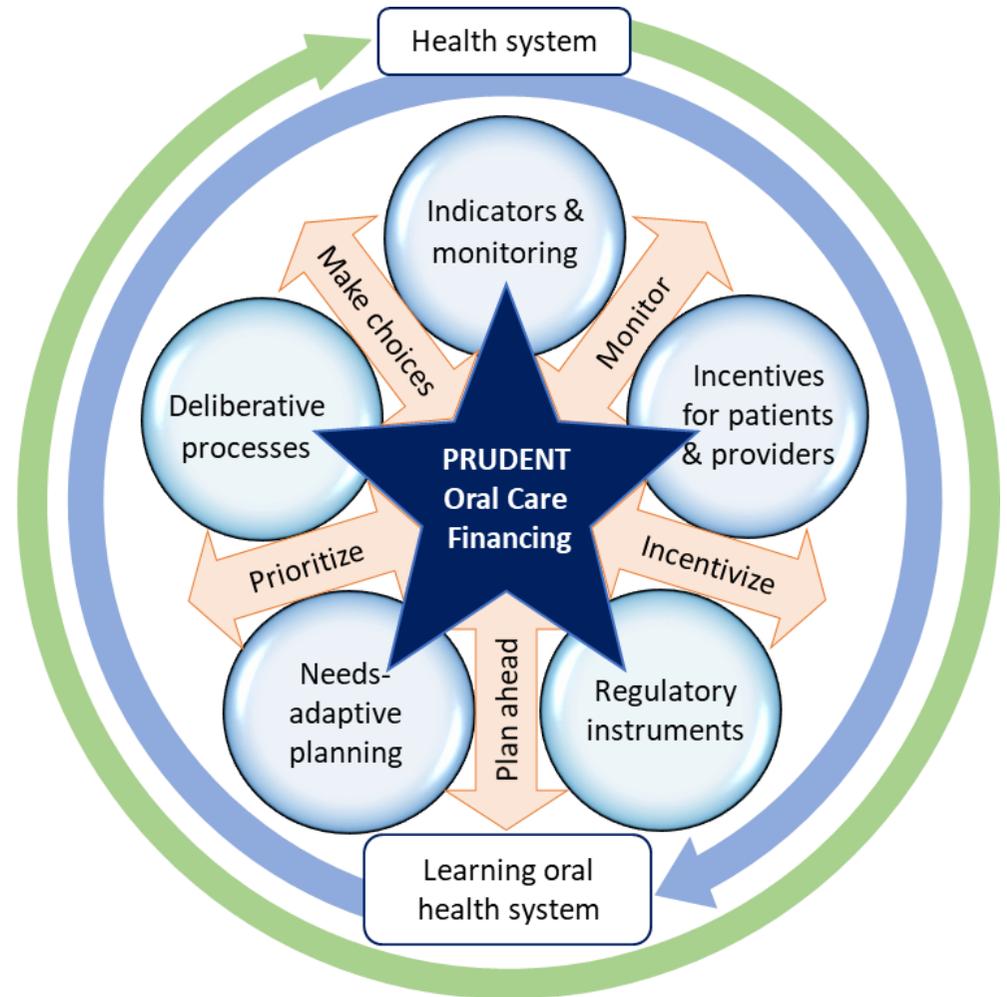


**Expected results:**

**PRUDENT Financing Companion:**

Policy briefs and decision aid tools to leverage:

- *Indicators for monitoring*
- *Incentives providers/patients*
- *Regulatory instruments*
- *Needs-adaptive planning*
- *Deliberative processes*



# *What are the expected wider scientific, economic and societal effects of the project?*

- 1 Health policy and systems adopt a holistic approach for the evaluation of health outcome
- 2 Citizens benefit from improved access to health services, including financial risk protection
- 3 Health services have improved governance mechanisms and are more effective, efficient
- 4 Citizens are supported to play a key role in managing their own health care
- 5 Shift to community-based, people-centred, integrated health care
- 6 Care providers save resources by using innovative digital solutions
- 7 Synergies with EU4Health: health system resilience, resource efficiency, reinforcing the health workforce

**Long-run economic benefits in EU: 21bn EUR p.a. [treatment costs ↓ by 13bn; productivity ↑ by 8bnEUR]**



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# THANK YOU!



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For more information on the DELIVER Project  
visit [www.deliverproject.eu](http://www.deliverproject.eu)

FOR QUESTIONS AND COMMENTS, [pauline.j.vassallo@gov.mt](mailto:pauline.j.vassallo@gov.mt)