

# Periodontitis

## The Socioeconomic Benefits of Prevention and Early Intervention

### Periodontal diseases



Periodontal diseases (those that mainly affect the gingiva) are caused by the inflammation and destruction of the soft tissues that hold the teeth in place



Periodontitis, a form of periodontal disease, is common worldwide



If left untreated, it could lead to serious health and socioeconomic consequences



Despite its severity, periodontitis is often overlooked by patients

### The global burden of periodontitis

In **2017**, an estimated **743** million people worldwide had severe periodontitis

#### Major risk factors for periodontitis



Advanced age



Poor oral hygiene



Socioeconomic deprivation

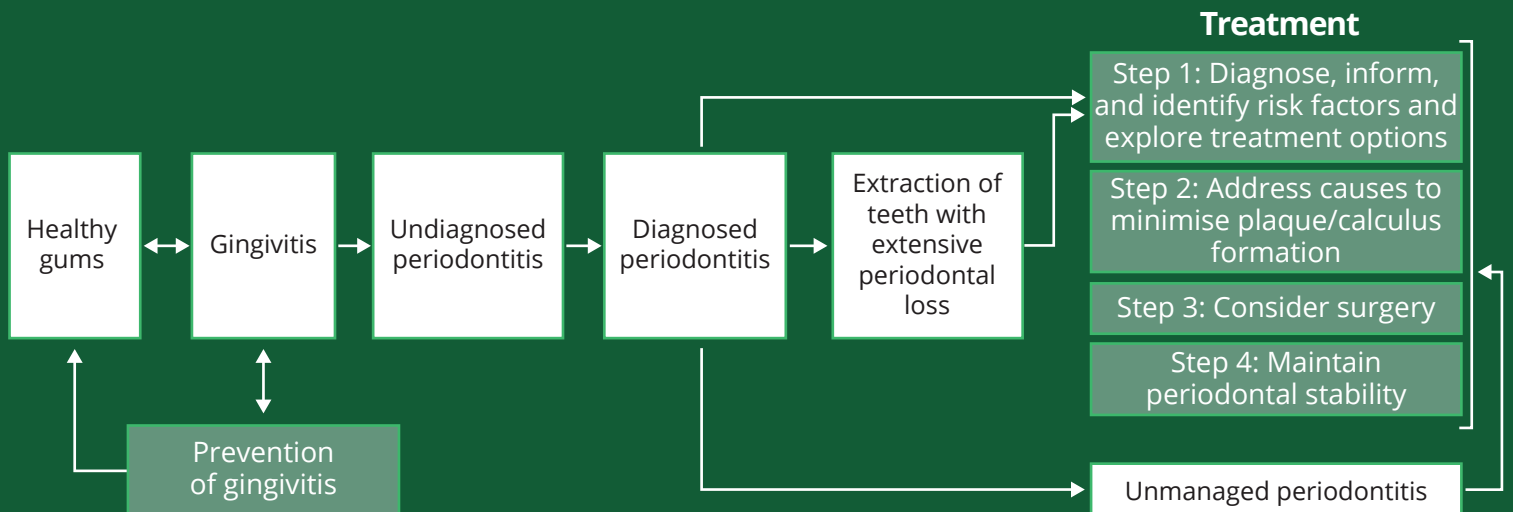


Smoking



Consumption of sugary foods

#### Roadmap for periodontitis prevention and treatment



# Why take periodontitis seriously?

## Uncontrolled periodontitis:

Introduces bacteria and pro-inflammatory molecules into the bloodstream



Increases the risk of type 2 diabetes and cardiovascular disease

## Emerging research links the disease with:



- Cognitive decline
- Alzheimer's disease
- Dementia



Adverse pregnancy outcomes



Rheumatoid arthritis



Respiratory disease



Cancer

## Necessary reforms to control periodontal disease

### Societal/Individual



Daily effective plaque removal



Daily interdental cleaning



Use of mouth rinses and fluoridated toothpastes



Regular dental visits

### Healthcare:

Integrate medical records and enable access to general and dental healthcare practitioners



Inform patients diagnosed with periodontitis about their general health risks

- Reduce duplication of prevention advice
- Impart training in effective home-based self-management

### Governmental:

Organise dental healthcare camps in low-income or disadvantaged communities

Develop strategies to limit the adverse influence of the processed foods industry on health



Avoid inclusion of industry stakeholders with conflicting business interests in health policy committees

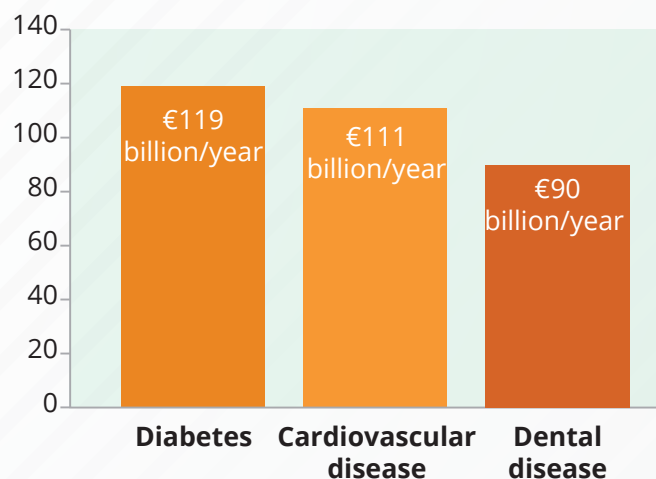
Make dental healthcare affordable

## Good oral health: Costs and benefits

Dental disease is the **third most expensive disease** among 28 EU member states

Owing to a lack of studies assessing the return-on-investment (ROI) for periodontitis, the Economist Intelligence Unit (EIU) developed a model to evaluate the cost and health outcomes of treating periodontitis at different disease stages in six European countries:

- France
- Germany
- Italy
- Netherlands
- Spain
- United Kingdom



### Modelled scenarios



### Measured outcomes

#### Health



- Total healthy life years (HLYs) gained

#### Cost



- Total costs (in Euros)
- Cost per HLY

#### Benefits

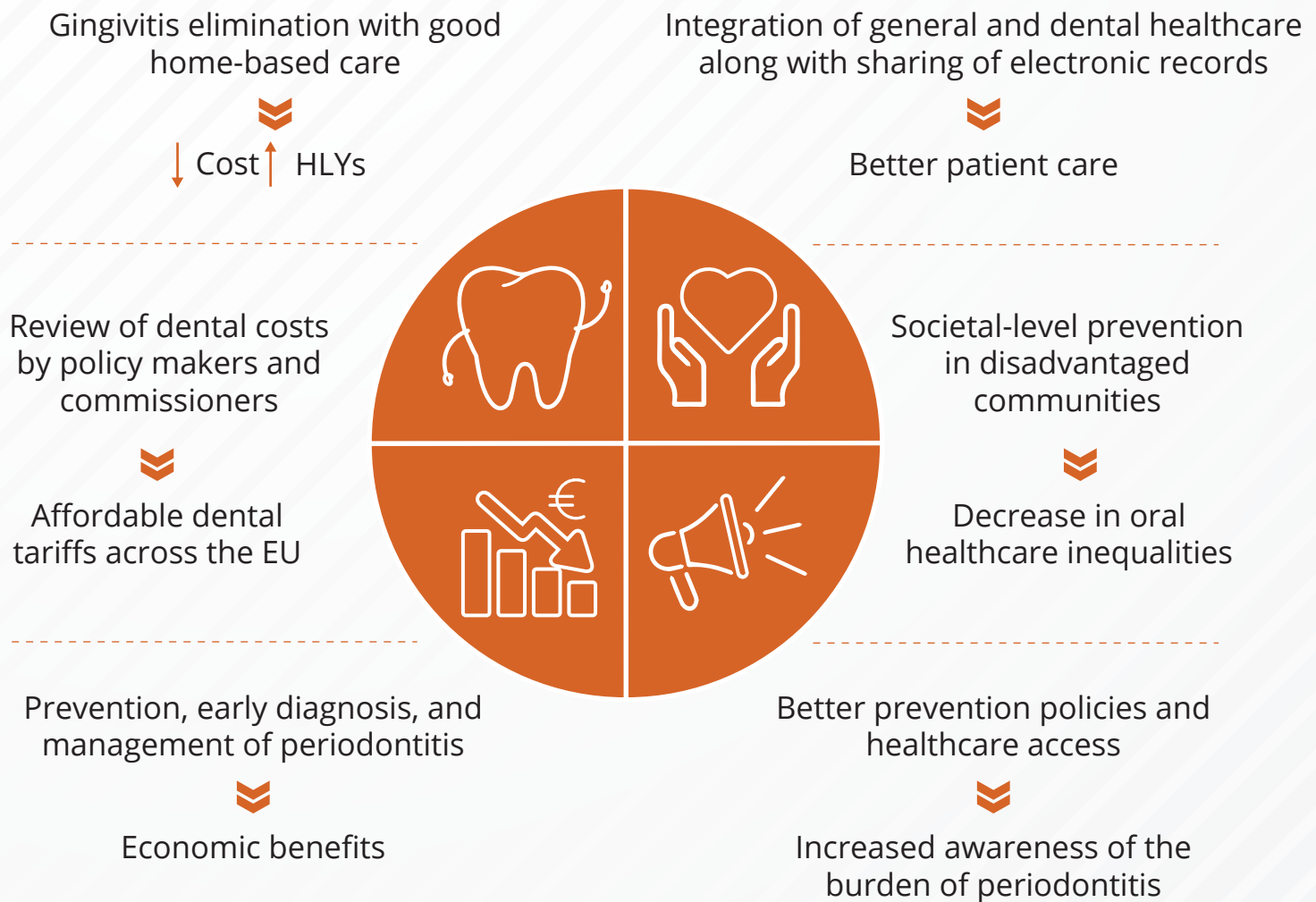


- Incremental cost-effectiveness ratio
- ROI

The study found that **Scenario 3 (Gingivitis elimination)** has the best cost-to-benefit ratio and hence is the most beneficial for governments to undertake



# A public health perspective for periodontal disease management



- ✓ **A paradigm shift in societal, governmental, and healthcare strategies for the prevention and early treatment of periodontitis has socioeconomic advantages**
- ✓ **Governments can greatly benefit from preventing progression of gingivitis into periodontitis with early interventions and dental health promotion**

Content adapted from:

The Economist Intelligence Unit. (2021). *Time to take gum disease seriously: The societal and economic impact of periodontitis*. <https://impact.economist.com/perspectives/sites/default/files/eiu-efp-oralb-gum-disease.pdf>

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