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(REVIEW ARTICLE)



# Campaign proposal for "National oral health improvement in Romania" (2025-2030)

Nicusor Muşat \*

Department of Research and Development, Company PRANOYA DENTAL SRL, Bucharest, Romania.

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### **Abstract**

The "National Oral Health Improvement Campaign (2025-2030)" proposes a viable strategy to address the significant oral health disparities in Romania, particularly among underserved populations in rural and low-income areas. Romania faces critical challenges, including a lack of access to dental services, low public awareness of preventive care, and limited public funding.

This campaign seeks to tackle these issues through a multi-faceted approach that includes expanding preventive care, introducing a tiered dental insurance model, and increasing dental service accessibility in rural areas. A key innovation is the flexible allocation of Social Health Insurance (CAS) contributions, allowing citizens to dedicate a portion of their health insurance specifically toward dental care.

The campaign also promotes public-private partnerships and community-based initiatives, such as mobile dental clinics and mandatory rural service rotations for dental residents. Modelled after successful programs in countries like Sweden, Brazil, and South Korea, the campaign aims to reduce the prevalence of dental diseases, improve access to care, and align Romania's oral health outcomes with EU health standards. The plan will be implemented with a  $\in$  8.4 million budget and a rigorous monitoring framework to ensure measurable progress and accountability over five years.

Keywords: Oral Healthcare; Dental Policy; Insurance Model; Romania reform

## 1. Introduction

Romania's oral healthcare system is at a critical juncture, facing deep-rooted challenges that disproportionately affect underserved populations, particularly in rural and low-income areas. With limited public funding, a lack of preventive care awareness, and significant disparities between urban and rural dental service access, the nation struggles to provide equitable oral health services. To address these systemic issues, the "National Oral Health Improvement Campaign (2025-2030)" has been proposed as a comprehensive five-year plan aimed at transforming the state of oral healthcare in Romania.

The campaign focuses on several key objectives: expanding preventive care programs, introducing flexible dental insurance through Social Health Insurance (CAS) contributions, improving rural access to dental services, and fostering public-private partnerships. By allowing citizens to allocate a portion of their CAS contributions specifically toward dental insurance, the campaign empowers individuals to take charge of their oral health while optimizing the allocation of healthcare resources. This initiative aims to make dental care more affordable and accessible, particularly for children, low-income individuals, and rural residents who have historically been underserved.

A major innovation within the campaign is the introduction of a tiered dental insurance model, which will provide different levels of coverage based on income and health needs. Vulnerable populations will receive fully subsidized basic

<sup>\*</sup> Corresponding author: Nicuşor Muşat

coverage, while working adults and high-income individuals can access more comprehensive options through higher contribution tiers. Additionally, mobile dental clinics and mandatory rural service rotations for dental residents will be deployed to ensure consistent dental care in remote areas, bridging the urban-rural gap.

The campaign also includes large-scale public awareness efforts, such as the annual National Oral Health Week, designed to educate the population on the importance of preventive care and promote regular dental check-ups. These initiatives will be supported by strong public-private partnerships, where private dental clinics and professionals will be incentivized to participate in the national effort.

With a total budget of €8.4 million, the campaign is modeled after successful programs from countries like Sweden, Brazil, and South Korea, ensuring that it aligns with EU health standards while addressing Romania's unique healthcare landscape. Key performance indicators (KPIs) will be rigorously monitored to track progress and ensure accountability throughout the implementation of the campaign. This initiative offers Romania a transformative opportunity to reduce the burden of oral diseases, improve healthcare equity, and create sustainable improvements in the nation's overall public health.

## 2. Romania's Current Oral Health Landscape

Despite progress made in recent years, Romania continues to grapple with severe oral health challenges that are compounded by economic, geographic, and systemic barriers. Understanding these challenges is crucial for developing targeted interventions that will be effective in addressing the root causes of the crisis.

## 2.1. Urban vs. Rural Disparities in Access to Dental Services

A significant portion of Romania's population lives in rural areas, where access to dental services is severely limited. Rural residents face a higher prevalence of untreated dental conditions, with 72.3% of rural adults missing teeth compared to 57.9% in urban areas. This urban-rural divide is characterized by:

- **Shortage of Dental Professionals in Rural Areas**: While Romania has a high dentist-to-population ratio overall, this is concentrated in urban centers, leaving rural areas with inadequate dental workforce coverage.
- Lack of Dental Facilities: Many rural areas lack permanent dental clinics, forcing residents to travel long distances for basic dental care, which is often unaffordable and inaccessible.
- **Economic Barriers**: High out-of-pocket costs for dental care deter rural residents from seeking necessary treatment, leading to high rates of untreated dental conditions.

## 2.2. Low Awareness of Preventive Care

Preventive care is a cornerstone of good oral health, yet it remains underutilized in Romania due to:

- **Cultural and Educational Gaps**: There is a lack of public awareness regarding the importance of regular dental check-ups, daily brushing, and flossing. Many Romanians are unaware of the long-term benefits of preventive care.
- Low Adoption of Daily Oral Hygiene Practices: Only 56% of Romanian adults brush their teeth twice daily, indicating an improvement in oral hygiene practices. However, over 70% still do not use floss, interdental brushes, or oral irrigators, which reflects a continued gap in comprehensive preventive care. Just 44% of adults rate their oral health as poor or very poor, and only 44% visited a dentist in the past year despite 92% agreeing that regular checkups are important. This is due to a combination of lack of education, poor knowledge for dental hygiene products, and ingrained cultural habits (CMSR, 2024).

# 2.3. Limited Public Funding for Dental Care

While most services still require out-of-pocket payments, 32% of insured Romanians have accessed dental services through public insurance (CNAS), particularly for routine checkups, fillings, and extractions, creating significant barriers to access, especially for low-income and vulnerable populations. Key issues include:

- **Inadequate Public Insurance Coverage**: Current public health insurance provides minimal coverage for dental care, excluding most preventive and restorative services.
- **High Costs of Private Dental Care**: The high costs associated with private dental services make quality care inaccessible for many, particularly those in low-income brackets.

### 2.4. Burden of Dental Diseases

The burden of dental diseases in Romania is substantial, with high prevalence rates of caries and periodontal diseases among children and adults alike. Key statistics include:

- **High Rates of Caries**: 66.3% of Romanian children suffer from dental caries, while 64.6% of adults have untreated caries. Additionally, 73.3% of adults suffer from edentulism (missing teeth), with many lacking prosthetic replacements.
- **Untreated Dental Conditions**: A significant portion of the adult population suffers from untreated dental issues, leading to complications such as tooth loss, infections, and systemic health problems.

This five-year campaign aims to address these pressing issues by building on the successes of previous initiatives while introducing new, targeted strategies and expanding insurance coverage to ensure sustainable improvements in oral health outcomes.

## 3. Goals and Objectives (2025-2030)

The 2025-2030 National Oral Health Improvement Campaign is built around five core objectives, each aimed at addressing specific challenges in Romania's oral health landscape.

## 3.1. Expand Preventive Care

**Objective**: Increase public awareness and access to preventive dental services for both rural and urban populations, with a particular focus on underserved groups such as children, the elderly, and low-income families.

## 3.1.1. Strategies

- Nationwide Public Education Campaign: Launch a comprehensive public education campaign using television, radio, and social media to promote the importance of daily oral hygiene, regular dental check-ups, and healthy dietary habits. Educational materials will be distributed in schools and community centres to reinforce the message.
- **School-Based Oral Health Programs**: Implement oral health programs in schools that include biannual dental check-ups, distribution of hygiene kits (toothbrushes, toothpaste, dental floss), and interactive workshops on proper brushing and flossing techniques.
- **Community Outreach Initiatives**: Establish partnerships with local organizations and NGOs to conduct community-based oral health awareness drives, particularly in rural and low-income areas.

## 3.1.2. Expected Outcomes

- 50% increase in the number of children and adults receiving preventive care services by 2030.
- 40% reduction in the incidence of caries and periodontal diseases among participating populations.

**Successful Model**: Sweden's comprehensive preventive dental care for children has significantly reduced dental diseases and long-term healthcare costs, serving as an effective model for Romania to emulate (Pälvärinne, Widström, Forsberg, Eaton, & Birkhed, 2018).

### 3.2. Flexible Allocation of CAS Contributions

**Objective**: Enable citizens to allocate a portion of their CAS contributions toward dental insurance based on individual health needs, ensuring that funds are used efficiently and reflect the actual healthcare requirements of the population.

## 3.2.1. Strategies

- **Policy Reforms**: Amend existing health insurance regulations to introduce flexibility in the allocation of CAS contributions, allowing up to 10% to be directed specifically toward dental insurance.
- **Development of an Online Portal**: Create an online platform where citizens can easily manage their CAS allocations, view their dental insurance benefits, and track their utilization of services.
- **Public Information Campaign**: Educate the public on the new allocation options through a dedicated campaign, providing guidance on how to optimize their contributions based on personal health needs.

## 3.2.2. Expected Outcomes

- Increased utilization of dental insurance benefits, with 30% of eligible citizens opting for dental-specific allocations by 2027.
- Enhanced satisfaction with healthcare choices and improved management of individual health expenditures.

**Successful Model**: Japan's health insurance system allows individuals to tailor their contributions to suit their healthcare needs, resulting in better health outcomes and more efficient use of resources (JHPN, 2024).

## 3.3. Implement and Scale a Tiered Dental Insurance Model

**Objective**: Introduce a tiered dental insurance model that provides differentiated levels of coverage based on income and health needs, ensuring that essential dental services are accessible to all Romanians, regardless of financial status.

### 3.3.1. Strategies

- **Tier 1: Basic Public Coverage**: Fully subsidized coverage for preventive and basic restorative services for vulnerable groups such as children, low-income individuals, and seniors.
- **Tier 2: Standard Public Coverage**: Subsidized coverage for working adults, providing 70-80% coverage for preventive and basic restorative services.
- **Tier 3: Premium Public Coverage**: Premium coverage options for high-income individuals, including comprehensive and cosmetic dental services.

# 3.3.2. Expected Outcomes

- 80% of children and low-income individuals enrolled in the basic public coverage tier by 2028.
- 50% increase in the number of working adults utilizing the standard coverage tier.

**Successful Model**: South Korea's national health insurance system includes a tiered dental coverage plan that effectively caters to the needs of different population segments, improving access to essential services (Asia Pacific Observatory, WHO South-East Asia, 2015).

# 3.4. Strengthen Rural Care Delivery

**Objective**: Expand access to dental services in rural areas through mobile clinics, mandatory rural rotations for dental residents, and enhanced collaboration with rural clinics.

## 3.4.1. Strategies

- **Expansion of Mobile Dental Clinics**: Deploy additional mobile units equipped to provide a range of preventive and basic restorative services to underserved rural areas.
- Rural Service Requirement for Dentist Residents: Mandate rural rotations for resident dentist, ensuring consistent coverage in remote areas. Provide incentives such as stipends and housing allowances to encourage participation for younger dentists.
- **Collaboration with Rural Clinics**: Strengthen partnerships with existing rural clinics, facilitating shared use of facilities and resources between local dentists and campaign participants.

### 3.4.2. Expected Outcomes

- 1 million dental services delivered in rural areas by 2030.
- 60% increase in dental visit rates in rural communities.

**Successful Model**: Brazil's "Brasil Sorridente" program successfully utilized mobile clinics and mandatory rural service to improve access to dental care in underserved regions (Government of Brasil, 2024).

## 3.5. Expand Public and Private Partnerships

**Objective**: Engage private dental clinics and professionals in the national campaign through incentives and subsidies, increasing service coverage and accessibility across regions.

### 3.5.1. Strategies

- **Tax Incentives and Grants**: Offer tax breaks and grants to private clinics that allocate a portion of their services to the national program, particularly in underserved areas.
- **Training and Mentorship Programs**: Encourage private clinics to participate in training programs, providing mentorship to dentist residents and young professionals working in rural areas.
- **Public-Private Collaborative Initiatives**: Develop joint initiatives between public health authorities and private clinics to conduct community outreach and education programs.

## 3.5.2. Expected Outcomes

- 25% increase in the number of private clinics participating in the campaign by 2027.
- Improved distribution of dental services across urban and rural areas.

**Successful Model**: Finland's public-private partnerships in dental care have successfully enhanced service delivery and access, particularly in underserved regions (Niiranen, Widström, & Niskanen, 2008).

## 3.6. Track and Evaluate Progress

**Objective**: Implement a robust monitoring and evaluation framework to assess the impact of the campaign, ensure accountability, and allow for course corrections as necessary.

## 3.6.1. Strategies

- **Development of Key Performance Indicators (KPIs)**: Establish clear KPIs for each objective, including metrics such as the number of people receiving preventive care, reduction in dental disease prevalence, and insurance enrolment rates.
- **Annual Surveys and Reports**: Conduct annual national surveys and publish progress reports to track the campaign's impact and identify areas for improvement.
- **Feedback Mechanisms**: Implement feedback mechanisms for patients, dental professionals, and community partners to provide insights on the program's effectiveness and suggest improvements.

## 3.6.2. Expected Outcomes

- Continuous improvement in program implementation, with adjustments made based on real-time data and stakeholder feedback.
- Achievement of key targets, including increased preventive care utilization, reduced dental disease rates, and expanded insurance coverage.

# 4. Flexible Allocation of CAS Contributions for Dental Insurance

**Objective**: Provide Romanians with greater control over their healthcare contributions by allowing them to allocate a portion of their CAS contributions specifically toward dental insurance. This initiative aims to increase access to dental services and ensure that resources are used more efficiently.

# 4.1. Mechanism of the Allocation System

**Choice for Employees**: Employees can opt to allocate up to 10% of their CAS contributions toward dental insurance. This flexibility allows individuals to customize their healthcare expenditures based on personal needs and preferences. For example:

**Younger Individuals**: Those with fewer medical needs may choose to allocate more of their contributions toward dental insurance, benefiting from preventive and basic restorative services.

**Older Individuals**: Those with more complex healthcare needs may prefer to retain more funds for general healthcare, allocating a smaller portion to dental insurance.

**Customizable Contributions**: The allocation system will be flexible, allowing individuals to adjust their contributions annually or semi-annually based on anticipated healthcare needs. This dynamic approach ensures that funds are directed where they are most needed, reducing waste and enhancing the efficiency of the healthcare system.

**Transparency and Control**: An online platform will be developed to provide citizens with a clear view of their CAS allocations. Features will include:

- **Dashboard**: A user-friendly dashboard showing the breakdown of contributions, including how much is allocated to dental insurance and the services covered.
- **Service Tracker**: A tracker to monitor the utilization of dental services, helping individuals make informed decisions about their future allocations.
- **Guidance Tools**: Personalized recommendations based on age, health status, and previous service utilization to help users optimize their allocations.
- **Rollout and Public Education**: A nationwide campaign will be launched to inform citizens about the new allocation options. Key components will include:
- **Informational Materials**: Brochures, videos, and online resources explaining the benefits and mechanics of the allocation system.
- **Workshops and Webinars**: In-person and virtual sessions to educate the public, answer questions, and provide guidance on making the best use of the allocation options.
- Support Services: A helpline and online chat service to assist individuals with any queries or issues related to their CAS allocations.

### 4.1.1. Expected Outcomes

30% of eligible citizens opt for dental-specific allocations within the first three years of implementation.

Improved utilization of preventive and basic restorative dental services, with a corresponding reduction in untreated dental conditions.

## 5. Expanded Tiered Dental Insurance Model (2025-2030)

The tiered dental insurance model is a cornerstone of the campaign, designed to provide equitable access to essential dental services for all Romanians. The model will be expanded and refined over the 2025-2030 period, with adjustments to coverage limits and benefits based on the initial implementation's success.

## 5.1. Overview of the Tiered Insurance Model

## 5.1.1. Tier 1: Basic Public Coverage (Fully Subsidized)

Target Group: Children (up to age 18), low-income individuals, and seniors (65+ years).

### Coverage

- **Preventive Services**: Full coverage for annual check-ups, prophylaxis, fluoride or hydroxyapatite treatments, and dental sealants.
- **Basic Restorative Services**: 70-90% coverage for fillings, extractions, and root canals.
- **Emergency Care**: Full coverage for acute dental emergencies, such as abscesses, severe toothache, and traumarelated injuries.
- **Eligibility Criteria**: Automatically available to those registered with the public health insurance system, with additional support for those below the poverty line.

#### Estimated Annual Cost per Individual

€120-€180, adjusted for inflation and service expansion.

• **Successful Model**: Sweden's free dental care for children has significantly reduced oral health issues in youth populations, providing a model for preventive care that can be adapted to Romania (Pälvärinne, Widström, Forsberg, Eaton, & Birkhed, 2018).

### 5.1.2. Tier 2: Standard Public Coverage

• **Target Group**: Working adults with moderate income levels.

### Coverage

- **Preventive Services**: 70-80% coverage for annual check-ups and cleanings.
- **Basic Restorative Services**: 50-70% coverage for fillings, extractions, and root canals.
- **Dental Prosthetics**: 50% coverage for dentures, bridges, and other necessary prosthetic devices.
- **Eligibility Criteria**: Available to all employed individuals who contribute to the CAS, with sliding-scale subsidies based on income.

### Estimated Annual Premium

€120-€250 per individual, adjusted for service expansions and inflation.

• **Successful Model**: South Korea's National Health Insurance system includes a comprehensive dental coverage plan with multiple tiers, allowing working adults to access essential and preventive dental care (Asia Pacific Observatory, WHO South-East Asia, 2015).

### 5.1.3. Tier 3: Premium Public Coverage

• **Target Group**: High-income individuals seeking comprehensive dental care, including advanced and cosmetic procedures.

## Coverage

- **Preventive Services**: Full coverage for regular check-ups and cleanings, ensuring optimal oral health maintenance.
- **Advanced Restorative and Cosmetic Services**: 50-70% coverage for crowns, bridges, implants, and cosmetic treatments such as teeth whitening and veneers.
- **Orthodontic Care**: Partial coverage for medically necessary orthodontic treatments, including braces and aligners.
- **Eligibility Criteria**: Open to all citizens, with higher premiums reflecting the extensive coverage offered.

### **Estimated Annual Premium**

€350-€600 per individual, reflecting expanded coverage and service availability.

• **Successful Model**: Japan's tiered health insurance allows for premium coverage that includes comprehensive and cosmetic dental services, enabling high-income individuals to receive advanced care (JHPN, 2024).

## 5.2. Cost Estimates and Funding Mechanisms

The following estimates are based on projected inflation and service expansion between 2025 and 2030. Citizens can choose to allocate up to 10% of their CAS contributions toward these premiums depending on their healthcare needs.

**Table 1** Cost Estimates and Funding Mechanisms

Tier	Estimated Annual Premium (EUR)	Annual Cost to the State per Individual (EUR)
Tier 1 (Basic Public Coverage)	Free for vulnerable groups	€120-€180
Tier 2 (Standard Public Coverage)	€120-€250	€150-€250
Tier 3 (Premium Public Coverage)	€350-€600	€300-€600

# 5.2.1. Funding Mechanisms

- **Flexible CAS Contributions**: Citizens' ability to allocate up to 10% of their CAS contributions toward dental insurance will provide a significant funding source for the expanded insurance model.
- **Government Subsidies**: The government will provide additional funding to cover the cost of subsidies for low-income individuals and children, ensuring that vulnerable groups have access to essential services.

• **Public-Private Partnerships**: Collaborations with private insurers and dental service providers will be explored to supplement funding and expand coverage options.

### 5.2.2. Expected Outcomes

- 85% of eligible children and low-income individuals enrolled in Tier 1 by 2028.
- 60% increase in the number of working adults utilizing Tier 2 coverage by 2030.
- 40% of high-income individuals opting for Tier 3 coverage, ensuring financial sustainability for the program.

## 6. Expanded Access to Rural Areas (2025-2030)

Expanding access to dental care in rural areas is a critical component of the campaign. This chapter outlines key initiatives designed to address the significant service gaps in these underserved regions.

#### 6.1. Mobile Dental Clinics

**Objective**: Deploy a network of mobile dental clinics equipped to provide preventive and basic restorative care to rural and underserved areas, ensuring that all Romanians have access to essential dental services.

#### 6.1.1. Actions

- **Purchase and Equip Mobile Units**: Procure 25 state-of-the-art mobile dental units equipped with the necessary tools and technology to provide a wide range of services, including screenings, cleanings, fillings, and extractions.
- **Strategic Deployment**: Deploy units to regions with the lowest access to dental care, prioritizing areas identified through GIS mapping and health surveys as having high unmet needs.
- **Staffing**: Collaborate with dental schools, professional associations, and NGOs to staff mobile clinics with dentist residents, volunteers, and contract dentists. Offer incentives such as stipends, lower rates loans, and professional development opportunities to attract and retain staff.
- **Integrated Services**: Ensure that mobile clinics are integrated with local health systems, enabling referrals for more complex treatments and ensuring continuity of care.

### 6.2. Expected Outcomes

- 1 million dental services delivered by mobile units by 2030, including preventive care, basic restorative treatments, and emergency interventions.
- 60% increase in rural dental access across underserved regions, reducing the prevalence of untreated dental conditions.

**Successful Model**: Brazil's "Brasil Sorridente" program used mobile dental units to successfully expand access to dental services in rural areas, reducing untreated dental conditions and improving oral health outcomes (Government of Brasil, 2024).

### 6.3. Mandatory rural rotations for Dentist Residents

**Objective**: Ensure that underserved areas have access to essential dental services by mandating rural service rotations for dentist residents.

### 6.3.1. Actions

- **Policy Implementation**: Introduce legislation requiring all dentist residents to complete at least six months of service in designated rural areas as part of their residency program.
- **Incentives and Support**: Provide additional stipends, housing allowances, and travel reimbursements to residents serving in rural areas. Offer career incentives such as priority placement in competitive specialty programs for those who complete extended rural service.
- **Mentorship and Supervision**: Establish a mentorship program pairing experienced dentists with residents in rural placements, providing guidance and support throughout their rotations.

## 6.3.2. Expected Outcomes

- 80% of rural clinics covered by dental residents by 2027, ensuring consistent access to care in underserved areas.
- 30% reduction in the urban-rural disparity in dental service access by 2030, as measured by dental visit rates and treatment outcomes.

**Successful Model**: South Korea mandates rural service for medical and dental residents, ensuring that underserved communities receive essential healthcare services and reducing health disparities (Asia Pacific Observatory, WHO South-East Asia, 2015).

### 6.4. Collaboration with Rural Clinics

**Objective**: Strengthen partnerships with existing rural clinics to expand service capacity and improve the quality of care available in underserved areas.

#### 6.4.1. Actions

- **Shared Use of Facilities**: Facilitate agreements between campaign mobile clinics and existing rural dental clinics for the shared use of facilities and equipment, maximizing resources and reducing costs.
- **Training and Capacity Building**: Provide training and capacity-building support to rural clinic staff, focusing on the latest techniques in preventive and restorative dentistry, as well as best practices for patient management and community outreach.
- **Telemedicine Integration**: Introduce telemedicine capabilities in rural clinics to enable remote consultations with specialists, enhancing the scope of services available locally and reducing the need for patients to travel for advanced care.

### 6.4.2. Expected Outcomes

- Increased capacity and service delivery in rural clinics, with a 50% increase in the number of patients served annually by 2030.
- Improved quality of care and patient outcomes, as evidenced by higher patient satisfaction and reduced rates of untreated dental conditions.

**Successful Model**: Finland's integration of public-private partnerships in rural health care has improved service delivery and access, particularly in remote regions (Niiranen, Widström, & Niskanen, 2008).

## 7. National Oral Health Week and Public-Private Partnerships

### 7.1. National Oral Health Week (2025-2030)

**Objective**: Organize an annual National Oral Health Week to provide free preventive services, raise public awareness about oral health, and promote education on the importance of regular dental care.

### 7.1.1. Actions

- **Partnerships with Dental Clinics**: Partner with both public and private dental clinics to offer free services, including check-ups, prophylaxis, fluoride or hydroxyapatite treatments, and sealants during the event.
- **Nationwide Media Campaign**: Launch a coordinated media campaign to promote National Oral Health Week, using TV, radio, social media, and community outreach to engage the public and encourage participation.
- **Community Events**: Host community events such as dental fairs, educational workshops, and interactive activities in schools, community centers, and public spaces to engage families and children in oral health education.
- **Distribution of Oral Hygiene Kits**: Distribute oral hygiene kits (toothbrushes, toothpaste, floss) to participants, particularly children and low-income families, to reinforce the importance of daily oral hygiene.

### 7.1.2. Expected Outcomes

• 5 million Romanians served during National Oral Health Week over five years, receiving free preventive services and oral health education.

• Increased public awareness of the importance of preventive dental care, with participation from both rural and urban communities, leading to improved oral hygiene practices and higher rates of regular dental visits.

**Successful Model**: Chile's national oral health program includes events like Oral Health Week to engage the public in preventive care, resulting in increased dental visits and improved oral health awareness (Celis, Conway, Macpherson, & McMahon, 2022).

## 7.2. Expanding Public-Private Partnerships

**Objective**: Increase the reach and impact of the campaign by engaging private dental clinics and professionals in the national effort to expand access to oral health services.

#### 7.2.1. Actions

- **Tax Incentives and Grants**: Offer financial incentives, such as tax breaks and grants, to private clinics that allocate a portion of their services to the national program. Priority will be given to clinics serving underserved areas or participating in rural outreach.
- **Training and Mentorship Programs**: Establish a mentorship program where experienced private practitioners provide training and support to dental residents and young professionals working in rural or underserved areas. This will help bridge the gap in service delivery and improve the quality of care.
- **Joint Initiatives**: Develop collaborative projects between public health authorities and private clinics, such as community health fairs, mobile clinic deployments, and public awareness campaigns. These initiatives will leverage the expertise and resources of private practitioners to enhance the overall impact of the campaign.

### 7.2.2. Expected Outcomes

- 25% increase in the number of private clinics participating in the campaign by 2027, expanding service capacity and improving access to care.
- Enhanced quality and reach of dental services, particularly in underserved areas, as measured by increased patient satisfaction and improved health outcomes.

**Successful Model**: Finland's public-private partnerships in dental care have successfully enhanced service delivery and access, particularly in underserved regions, by integrating private practitioners into the national healthcare system (Niiranen, Widström, & Niskanen, 2008).

## 8. Monitoring and Evaluation (2025-2030)

Establish a robust monitoring and evaluation framework to track the progress and impact of the campaign, ensuring that objectives are met and resources are used effectively.

## 8.1. Key Performance Indicators (KPIs)

The following KPIs will be used to measure the success of the campaign:

### 8.1.1. Increase in Twice-Daily Brushing

- Goal: Raise the percentage of Romanians brushing their teeth twice daily from 56% to over 85% by 2030.
- **Method**: Conduct annual national surveys focused on oral hygiene habits, supplemented by data from schools and community health centres.

### 8.1.2. Increase in Dental Visits

- **Goal**: Achieve a 60% increase in annual dental visits in rural areas by 2027.
- Method: Monitor insurance claims, clinic data, and service reports from mobile dental clinics and rural health centres.

### 8.1.3. Reduction in Untreated Cavities

- Goal: Reduce the incidence of untreated cavities among children by 30% by 2030.
- **Method**: Conduct annual school-based dental screenings to assess improvements in dental health among children.

### 8.1.4. Expanded Insurance Coverage

- **Goal**: Ensure that 85% of children and low-income individuals are enrolled in the expanded dental insurance program by 2028.
- **Method**: Track insurance enrolment data and the number of preventive and restorative services covered by the new insurance system.

### 8.1.5. Rural Outreach Impact

- Goal: Deliver at least 1 million dental services (check-ups, cleanings, extractions) in rural areas over five years.
- **Method**: Monthly service delivery reports from mobile dental units and rural health clinics, supplemented by patient satisfaction surveys.

### 8.2. Monitoring and Evaluation Framework

- **Data Collection**: Develop a centralized data collection system to gather and analyze data from various sources, including public and private clinics, mobile units, schools, and community health centres.
- **Digital Monitoring Systems**: Implement digital tools and platforms to streamline data collection and reporting, ensuring timely and accurate tracking of KPIs.
- **Annual Surveys**: Conduct annual national surveys to assess changes in public awareness, oral hygiene habits, and access to dental services.
- **Feedback Mechanisms**: Establish feedback channels for patients, healthcare providers, and community partners to provide insights and suggestions for program improvement.
- **Impact Assessment**: Conduct a mid-term and final impact assessment to evaluate the overall effectiveness of the campaign, including a cost-benefit analysis to measure the return on investment.
- **Mid-Term Review (2027)**: Analyze progress toward key targets, identify challenges, and make necessary adjustments to the campaign strategy.
- **Final Evaluation (2030)**: Assess the overall impact of the campaign, including improvements in oral health outcomes, reductions in healthcare costs, and alignment with EU health standards.
- Reporting: Publish annual progress reports detailing the campaign's achievements, challenges, and next steps.
  These reports will be made available to the public and key stakeholders, ensuring transparency and accountability.

### 8.2.1. Expected Outcomes

Timely identification of issues and challenges, allowing for course corrections and optimization of resources.

Achievement of key targets, including increased preventive care utilization, reduced dental disease rates, and expanded insurance coverage, contributing to improved public health outcomes.

## 9. Budget Breakdown for 2025-2030

The budget for the 2025-2030 campaign accounts for inflation, service expansion, and the scaling of successful programs. The overall budget is set at €8.4 million to reflect the expanded scope of the campaign. Citizens will have the flexibility to allocate a portion of their CAS contributions to dental insurance, helping to fund essential services and reduce out-of-pocket expenses.

Table 2 Budget Breakdown for 2025-2030

Category	Cost (EUR)
Legislative Reforms and Policy Changes	€800,000
Media and PR Campaign	€1,000,000
Expanded School Programs and Hygiene Kits	€500,000
Mobile Dental Clinics (Purchase and Operations)	€1,500,000
National Oral Health Week	€400,000
Public-Private Partnership Incentives	€1,500,000

Subsidies for Dental Materials and Treatments	€2,500,000
Monitoring and Evaluation	€200,000
Total Budget	€8.4 million

## 9.1.1. Detailed Budget Justification

### Legislative Reforms and Policy Changes (€800,000)

- Costs associated with developing and implementing the policy changes required for the flexible allocation of CAS contributions and the expanded tiered dental insurance model.
- Includes expenses for legal consultations, regulatory adjustments, and public consultations.

### Media and PR Campaign (€1,000,000)

- Comprehensive public education and awareness campaigns, including TV, radio, social media, and community outreach.
- Production and dissemination of informational materials and advertisements promoting preventive care and the new insurance options.

## Expanded School Programs and Hygiene Kits (€500,000)

- Implementation of school-based oral health programs, including biannual dental check-ups and distribution of hygiene kits.
- Development and dissemination of educational materials for schools and community centres.

## Mobile Dental Clinics (Purchase and Operations) (€1,500,000)

- Purchase and outfitting of 25 mobile dental units, including equipment and technology necessary for providing a range of dental services.
- Operational costs, including staffing, fuel, maintenance, and coordination with local health authorities.

# National Oral Health Week (€400,000)

- Organization, promotion, and logistics for the annual National Oral Health Week, including partnerships with dental clinics, media outreach, and community events.
- Costs associated with free dental services provided during the event.

## Public-Private Partnership Incentives (€1,500,000)

- Financial incentives for private clinics participating in the national campaign, including tax breaks, grants, and support for training programs.
- Costs associated with developing and managing public-private partnerships and collaborative initiatives.

## Subsidies for Dental Materials and Treatments (€2,500,000)

- Subsidies for high-quality dental materials and treatments, including bulk procurement agreements with suppliers to reduce costs.
- Support for low-income patients requiring advanced restorative treatments.

## Monitoring and Evaluation (€200,000)

- Development and implementation of the monitoring and evaluation framework, including data collection systems, annual surveys, and impact assessments.
- Costs associated with publishing annual progress reports and conducting mid-term and final evaluations.

**Total Budget**: €8.4 million, designed to cover all aspects of the campaign and ensure comprehensive implementation across the country.

### 10. Conclusion

The 2025-2030 National Oral Health Improvement Campaign represents a transformative approach to addressing Romania's oral health crisis. By leveraging innovative strategies such as flexible CAS contributions, a tiered dental insurance model, and expanded rural outreach, the campaign aims to create sustainable improvements in access to quality dental care.

Drawing on successful models from countries like Sweden, South Korea, Brazil, Japan, Chile, and Finland, the campaign is tailored to Romania's unique needs and challenges. It focuses on expanding preventive care, improving public awareness, and reducing the burden of dental diseases across the country.

With a total budget of €8.4 million, the campaign is a strategic investment in Romania's future, promising long-term health benefits, reduced healthcare costs, and alignment with EU health standards. The Romanian government is encouraged to act swiftly in implementing this plan, ensuring that all citizens have access to the dental care they need to lead healthy, productive lives.

## 10.1. Call to Action (CTA)

Romania stands at a crucial juncture in addressing its oral health crisis. The implementation of this national campaign is not only an investment in the nation's public health but also an opportunity to ensure equitable access to high-quality dental care for all citizens. By adopting these proven strategies, Romania can make significant strides in improving oral health outcomes, reducing healthcare costs, and meeting European health standards. The time to act is now—invest in the health of Romania's future by implementing this transformative campaign.

# Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

#### References

- [1] Asia Pacific Observatory, WHO South-East Asia. (2015). *World Health Organization*. Retrieved from World Health Organization: https://iris.who.int/bitstream/handle/10665/208215/9789290617105\_eng.pdf?sequence=1
- [2] Celis, A., Conway, D. I., Macpherson, L. M., & McMahon, A. D. (2022). National Child Oral Health Improvement Programmes for Chile. *International Journal of Epidemiology, Volume 52*, e110–e115. doi:https://doi.org/10.1093/ije/dyac191
- [3] CMSR. (2024). *cmsr.ro*. Retrieved from Colegiul Medicilor Stomatologi din Romania: https://cmsr.ro/wp-content/uploads/2024/06/Rezumat-Studiu-national-privind-starea-de-sanatate-orala-a-romanilor-1.pdf
- [4] Government of Brasil. (2024). *Brasil Sorridente Program*. Retrieved from Brasil Sorridente: https://www.gov.br/saude/pt-br/composicao/saps/brasil-sorridente
- [5] JHPN. (2024). *Japan Health Policy Now*. Retrieved from Japan Health Policy Now: https://japanhpn.org/en/section-3-1/
- [6] Niiranen, T., Widström, E., & Niskanen, T. (2008). Oral Health Care Reform in Finland aiming to reduce inequity in care provision. *BMC Oral Health 8, 3,* 8,3. doi:https://doi.org/10.1186/1472-6831-8-3
- [7] Pälvärinne, R., Widström, E., Forsberg, B. C., Eaton, K. A., & Birkhed, D. (2018). The healthcare system and the provision of oral healthcare in European Union member states. Part 9: Sweden. *British Dental Journal 224*, 647–651. doi:https://doi.org/10.1038/sj.bdj.2018.269