

# Improving the adoption of clinical guidelines for the treatment of gum disease in primary dental care

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## Plain English summary of protocol

### Background and study aims

Gum disease is a common problem for adults in East London. It can cause bleeding gums, bad breath, loose teeth, and even tooth loss if not treated. The good news is that gum disease can be prevented and managed in dental practices. In 2020, new guidelines were published to help dental teams treat gum disease. However, many NHS dental practices are not using these guidelines.

This study aims to work with dental teams, patients, and NHS managers to create a solution that helps more practices follow the guidelines.

### Who can participate?

Dental practices in North East London will be invited to take part. Within each practice, we will invite dentists, dental hygienists, reception staff, and patients with gum disease to join the study.

### What does the study involve?

The study has four stages:

1. Dental practices will receive a postal survey asking if they want to take part in research.
2. We will speak with dental staff, patients, and NHS managers to understand what makes it hard to follow the guidelines.
3. Together, we will design a solution to help practices use the guidelines more effectively.
4. We will test this solution in a small number of practices to see how well it works and make improvements if needed.

### What are the possible benefits and risks of participating?

Taking part could help improve care for patients with gum disease and reduce the need for hospital referrals. It may also help dental teams work more effectively.

There are no major risks to taking part. All information will be kept confidential, and participants can choose to leave the study at any time.

### Where is the study run from?

Queen Mary University of London (UK)

When is the study starting and how long is it expected to run for?  
April 2025 to March 2028

Who is funding the study?  
Barts Charity (UK)

Who is the main contact?  
1. Prof. Eduardo Bernabe, e.bernabe@qmul.ac.uk  
2. Prof. Aalia Karamat, a.karamat@qmul.ac.uk

## Contact information

### Type(s)

Scientific, Principal Investigator

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## Additional identifiers

### EudraCT/CTIS number

Nil known

### IRAS number

344120

### ClinicalTrials.gov number

Nil known

### Secondary identifying numbers

COCR0047

## Study information

### Scientific Title

Co-development and feasibility of an implementation strategy to improve the adoption of clinical guidelines for periodontal treatment in primary dental care

### Study objectives

The current proposal aims to co-develop and evaluate the feasibility of an implementation strategy to improve the adoption of BSP guidelines for treatment of periodontitis in NHS primary dental care.

The objectives are to:

1. Evaluate the willingness of primary dental care practices to engage in research (WP1).
2. Identify contextual barriers to and facilitators of the implementation of BSP guidelines in primary dental care practices (WP2).
3. Co-design a theoretically-based implementation strategy that addresses perceived barriers to and maximizes the potential facilitators of implementation (WP3).
4. Evaluate the feasibility of delivering the implementation strategy in primary dental care practices and gather data to inform a definitive implementation trial (WP4).

### Ethics approval required

Ethics approval required

### Ethics approval(s)

Not yet submitted (United Kingdom)

### Study design

Mixed methods participatory implementation study carried out in four work packages

### Primary study design

Other

## **Secondary study design**

### **Study setting(s)**

Dental clinic

### **Study type(s)**

Other

### **Participant information sheet**

Not available in web format, please use contact details to request a participant information sheet

### **Health condition(s) or problem(s) studied**

Periodontal disease

### **Interventions**

The intervention will be an implementation strategy that will be codeveloped with key informants (clinical teams, service commissioners and patients) to address identified barriers and leverage facilitators.

The project will recruit participants into different work packages (WP). For WP 2 and 3, key informant groups (commissioners of dental services, patients, dentists, dental hygienists and receptionists) will be interviewed to identify factors that can encourage or impede the implementation of the BSP guidelines in primary dental care. In WP3, the key informant groups will participate in two co-design workshops to develop an implementation strategy. In WP4, patients with periodontal disease will be recruited into the study and will receive periodontal treatment, over multiple visits, as recommended by the BSP guidelines.

### **Intervention Type**

Other

### **Primary outcome measure**

The feasibility study (WP4) will evaluate implementation outcomes using the RE-AIM framework. The following indicators will be measured for each RE-AIM domain (including their corresponding timing during the 12-month life of the feasibility study):

1. Reach: numbers of periodontal patients who were approached and deemed eligible, recruitment rates, and reasons for non-participation (measured after all patients have been recruited).
2. Effectiveness: proportion of engaging patients after step 1, engaging patients with periodontitis remission/control (probing pocket depth <4 mm) and stable periodontitis (probing pocket depth = 4 mm and no bleeding on probing) after step 2, and appropriate referrals to specialised services (measured after each step of periodontal treatment).
3. Adoption (uptake): participation rates at GDP-level and clinical staff-level, reasons for non-participation, and representativeness of participating GDPs and clinical staff (measured after the recruitment stage is completed).
4. Implementation: adaptations made to the implementation strategy, consistency of its delivery across GDPs and clinical staff, and direct costs of implementing the strategy (measured at 12 months). A full economic evaluation will not be carried out, only the feasibility of collecting such data.
5. Maintenance: patients' attendance to maintenance recalls (attrition rate), comparison of the

characteristics of recall attenders versus non-attenders and the number of periodontal patients that were treated as per the BSP guidelines after recruitment targets were achieved (measured at 12 months).

The above quantitative indicators will be complemented with qualitative data from interviews with members of the clinical team (dentists, dental hygienists and receptionists) and patients to gather in-depth information on the different domains of the RE-AIM framework.

### **Secondary outcome measures**

There are no secondary outcome measures

### **Overall study start date**

01/04/2025

### **Completion date**

31/03/2028

## **Eligibility**

### **Key inclusion criteria**

#### **1. Work Package 1: Practice Recruitment**

1.1. All general dental practices (GDPs) within the NHS North East London Integrated Care Board area — including City of London, Hackney, Tower Hamlets, Waltham Forest, Newham, Redbridge, Barking and Dagenham, and Havering — will be invited to participate.

1.2. To be eligible, GDPs must:

1.2.1. Have a cohort of at least 250 patients who regularly attend the practice.

1.2.2. Provide periodontal care under an active NHS contract.

1.2.3. Include a dental hygienist as part of the clinical team (i.e. they provide routine scaling and polishing in primary care).

#### **2. Work Packages 2 and 3: Staff and Patient Recruitment**

2.1. From each participating GDP, the following staff will be recruited:

2.1.1. At least one dentist

2.1.2. At least one dental hygienist

2.1.3. At least one receptionist involved in the administrative (e.g. referral process, booking appointments) and/or clinical management of periodontal patients

2.2. Up to two adult periodontal patients will also be recruited from each GDP. These patients should be at different stages of treatment.

#### **3. Work Package 4: Patient Eligibility and Volume**

3.1. Eligible GDPs should see at least one eligible patient with periodontal disease per week.

### **Participant type(s)**

Patient, Health professional

### **Age group**

Adult

### **Lower age limit**

18 Years

**Upper age limit**

100 Years

**Sex**

Both

**Target number of participants**

A sample size of 18 members of clinical teams in 6 GDPs (6 dentists, 6 hygienists and 6 receptionists), 12 periodontal patients and 1 commissioner of dental services for WP2 and WP3. Thirty periodontal patients for WP4.

**Key exclusion criteria**

GDPs that are not situated in the Northeast of London, do not see patients with periodontal disease or do not provide treatment for periodontal patients

Children or adult patients without periodontal disease.

**Date of first enrolment**

01/10/2025

**Date of final enrolment**

31/03/2027

**Locations****Countries of recruitment**

England

United Kingdom

**Study participating centre****General dental practices**

North East London

London

United Kingdom

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**Sponsor information****Organisation**

Queen Mary University of London

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**Sponsor type**

University/education

**Website**

<http://www.qmul.ac.uk/>

**ROR**

<https://ror.org/026zzn846>

## **Funder(s)**

**Funder type**

Charity

**Funder Name**

Barts Charity

**Alternative Name(s)****Funding Body Type**

Private sector organisation

**Funding Body Subtype**

Trusts, charities, foundations (both public and private)

**Location**

United Kingdom

## **Results and Publications**

**Publication and dissemination plan**

The academic outputs of this project will be research publications and conference presentations. We will publish the findings in journal articles. We will also present findings at international conferences, such as the International Association for Dental Research (IADR) general meeting and the European Association for Dental Public Health (EADPH) congress.

Non-academic outputs are written reports and press releases to maximize impact on Local Health Authorities. Plain summaries and tailored reports will be prepared for patients in the project. We will disseminate findings across GPs through existing Local Dental Networks to widen the reach of the study. We will proactively contribute commentaries and viewpoints to

media outlets through Queen Mary's Public Relations Team and create a dedicated project website, raising its profile and communicating findings broadly.

**Intention to publish date**

30/09/2026

**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study will be stored in a non-publicly available repository hosted by Queen Mary University of London. The datasets can be made available upon request from the PI of this project (see contact details below).

**IPD sharing plan summary**

Stored in non-publicly available repository, Available on request