ISRCTN38351718 https://doi.org/10.1186/ISRCTN38351718

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

Submission date
04/07/2025

Recruitment status
Recruiting

Registration date
11/07/2025

Overall study status
Ongoing

Last Edited
11/07/2025

Condition category
Oral Health

[X] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

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

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Scientific, Principal investigator

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

Integrated Research Application System (IRAS)
344120

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
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)
notYetSubmitted (United Kingdom)

Study design
Mixed methods participatory implementation study carried out in four work packages

Primary study design
Other

Study type(s)
Other

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(s)
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.

Key secondary outcome(s))

There are no secondary outcome measures

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

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Upper age limit
100 years

Sex
All

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
United Kingdom

England

Study participating centre
General dental practices
North East London
London
United Kingdom
E1 2AD

Sponsor information

Organisation
Queen Mary University of London

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

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