

# Update of a questionnaire for periodontitis screening

<b>Submission date</b> 27/02/2023	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 18/03/2023	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 06/03/2023	<b>Condition category</b> Oral Health	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Medical professionals should advise their patients to visit a dentist if necessary. Due to the lack of time and knowledge, screening for periodontitis (gum disease) is often not done. To alleviate this problem, a screening model for total and severe periodontitis in a medical care setting was developed at the Academic Center of Dentistry Amsterdam (ACTA). These models were externally validated in a medical care setting. The aim of this study is to find out whether it is possible to update the models for periodontitis screening in a medical care setting for better performance.

### Who can participate?

Patients between 18 and 80 years of age who have at least one of their own teeth

### What does the study involve?

Participants complete an oral health questionnaire, demographic data are collected, and a periodontal examination is performed.

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

The benefit of participation is to get a free periodontal screening. There are no risks involved.

### Where is the study run from?

Amsterdam University Medical Centers (location Academic Medical Center) (Netherlands)

### When is the study starting and how long is it expected to run for?

October 2021 to May 2023

### Who is funding the study?

Investigator initiated and funded

### Who is the main contact?

Nina Nijland, [ninanijland@hotmail.com](mailto:ninanijland@hotmail.com)

## Contact information

**Type(s)**

Principal investigator

**Contact name**

Miss Nina Nijland

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**Additional identifiers****Clinical Trials Information System (CTIS)**

Nil known

**ClinicalTrials.gov (NCT)**

Nil known

**Protocol serial number**

Nil known

**Study information****Scientific Title**

Update of a rapid, non-invasive tool for periodontitis screening in a medical care setting: a cross-sectional study

**Acronym**

UPSIMS

**Study objectives**

It is possible to update the models (previously made by Verhulst et al. [2019]) for periodontitis screening in a medical care setting for better performance.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 08/11/2021, Ethical Committee of the Academic Center for Dentistry Amsterdam (Gustav Mahlerlaan 3004, 1081 LA Amsterdam, Netherlands; +31 (0)20 59 8080888; etc@acta.nl), ref: 2021-59159

**Study design**

Single-centre cross-sectional study

**Primary study design**

Observational

**Study type(s)**

Screening

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

Periodontitis

**Interventions**

Patients were required in an outpatient medical setting from the internal medicine policlinic in the Amsterdam UMC (University Medical Center) as the update cohort. The two prediction models (Verhulst et al [2019]) will be updated based on the update cohort. First, the self-reported oral health (SROH) questionnaire was conducted. Second, demographic and systemic health data (age, sex, education level, smoking, BMI and diabetes status) were collected. Finally, the periodontal examination took place. Participants from the prior study (Nijland, Overtom et al. 2021) served as the validation cohort.

**Intervention Type**

Other

**Primary outcome(s)**

Performance of the models measured with the area under the receiver-operating characteristic curves (AUC) at baseline

**Key secondary outcome(s)**

Calibration of the updated models assessed based on calibration plots and the overall observed: expected ratios (O: E ratios) at baseline

**Completion date**

01/05/2023

**Eligibility****Key inclusion criteria**

1. 18 and 80 years of age
2. Have at least one of their own teeth

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Lower age limit**

18 years

**Upper age limit**

80 years

**Sex**

All

**Key exclusion criteria**

1. <18 and >80 years of age
2. Complete edentulism with or without full dentures (regardless of dental implant support)
3. Need for antibiotic prophylaxis before probing
4. Not speaking Dutch or English

**Date of first enrolment**

01/11/2021

**Date of final enrolment**

08/07/2022

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

Netherlands

**Study participating centre**

Amsterdam UMC, location AMC

Meibergdreef 9

Amsterdam

Netherlands

1105 AZ

**Sponsor information****Organisation**

Academic Center for Dentistry Amsterdam

**ROR**

<https://ror.org/04x5wnb75>

**Funder(s)**

**Funder type**

Other

**Funder Name**

Investigator initiated and funded

## Results and Publications

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

The datasets generated during and/or analysed during the current study are/will be available upon request from Nina Nijland (ninanijland@hotmail.com). Data is available after the study publication. The data consists of: medical data of the participants (diabetes state, BMI), oral status in Community Periodontal Index of Treatment Needs (CPITN) score, and answers to the SROH questions. Participants were asked to participate, if so, they got an information letter and signed informed consent. A key document connected the research numbers to the AMC patient numbers. This document was stored together with the completed questionnaires in separate folders in a closed closet at the Department of Periodontology at ACTA.

**IPD sharing plan summary**

Available on request

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes