

Update of a questionnaire for periodontitis screening

Submission date 27/02/2023	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 18/03/2023	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 06/03/2023	Condition category 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

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, Overtoom 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