

# Projects Report

## General Assembly 2024

### Adult Oral Health Standard Set validation study

#### Background

Traditional approaches to oral health assessment have primarily focused on clinical measures, overlooking the individual's subjective experience and the impact on their quality of life. Recognizing the need for a person-centred approach, FDI and the International Consortium for Health Outcomes Measurement collaborated to develop the Adult Oral Health Standard Set (AOHSS). This set of measures aims to reflect outcomes that matter most to patients, combining clinical measures with a focus on individual experiences. The development of AOHSS followed a thorough process to identify and include patient-valued outcomes in oral health assessment. The AOHSS was developed as a follow-up to the launch of FDI's new definition of oral health in 2016.

#### Partner

Previously FDI funded.

#### Advisory board

Prof. Georgios Tsakos (Chair); Dr Roger Keller; Prof. Gerry McKenna; Prof. Sarah Baker; Dr Michael Sereny; Prof. Paul Brocklehurst; Prof. Murray Thomson.

#### Project update

A study to test the validity of Person-Reported Oral Health Quality of Life (PROHQL) was carried out through an online Omnibus survey conducted by YouGov in a nationally representative sample of adults in the UK. The questionnaire included questions about Oral Health-Related Quality of Life (OHRQoL), overall health ratings, and demographic details as outlined in the AOHSS. Reliability, content validity, and construct validity of the survey were assessed. A follow-up questionnaire was sent to half of the initial sample a week later, with the specific aim of evaluating test-retest reliability. The research involved 2,077 participants in the initial survey and 961 participants in the follow-up questionnaire.

#### Next steps

The results will be presented through an article that will be submitted for publication in the *International Dental Journal* or another peer-reviewed journal, depending on acceptance, later this year.

### Consensus on Toothbrushing Methods

#### Background

The project aimed to address the lack of professional consensus on the correct toothbrushing methods recommended by dentists and dental teams. The resources, produced under the direction of the Task Team, experts from National Dental Associations, and dental educational bodies, presented various techniques (e.g., Modified Bass, Scrub, Fones Method, or electric toothbrush). Descriptions of these methods varied across guidance and materials. To help navigate the multitude of approaches for oral hygiene, a professional consensus on the different aspects of toothbrushing was established and a set of evidence-based recommendations proposed.

## Partner

Haleon

## Task Team

Prof. Paulo Melo (Chair); Prof. Elham Kateeb; Prof. Mariana Minatel Braga; Prof. Anne-Marie Glenn; Prof. Tanya Walsh; Dr Makiko Iwasaki.

## Committee

Science Committee

## Project update

### Systematic review

The Task Team completed a systematic review, identifying the available evidence on the effectiveness of different toothbrushing methods across various populations and their recommended frequencies. The systematic review was conducted with the support of the Cochrane Oral Health team. Following the completion of the Consensus Process, a peer-reviewed journal article was written and published in the *International Dental Journal*.

### Chairside guide for oral health professionals

A chairside guide for oral health professionals was developed based on the results of the systematic review. This guide will allow the recommendations to be easily communicated among dentists, dental teams, and their patients.

### Visual guide for patients

A visual guide for patients was developed based on the recommendations from the systematic review. The visual guide is written in plain language and contains illustrations to make it more easily understandable by the lay audience at which it is targeted.

## Next steps

The project has been successfully completed.

## Digital Cleft Care

### Background

The development of digital technologies opens opportunities in the field of prosthetic appliances in cleft care. Intraoral scanners allow accurate and more comfortably performed impressions. Dental software guides the computer-aided design of plates/splints and milling and cost-effective computer-aided manufacturing of the prosthesis. These technologies can revolutionize comprehensive cleft care. The project is being run in collaboration with "Smile Train", a non-profit organization involved in cleft care provision and research internationally.

## Partners

Smile Train, Dentsply Sirona.

## Task Team

Dr Puneet Batra (Chair); Dr Juan Pablo Gómez Arango; Dr Clement Seeballuck.

## Committee

Dental Practice Committee

## Project update

Phase 2 of the project commenced in June 2024.

Following the development of a Massive Open Online Course (MOOC) and Digital Workflows Platform in Phase 1, this new phase is focused on two main deliverables:

1. Translation of the MOOC into three languages (Spanish, French, Portuguese) to make the course more accessible, globally.
2. Development of four videos with real patients demonstrating digital cleft care workflows and equipment. The videos will be recorded in Smile Train Centres.

## Next steps

Video scripts are being developed by the task team, and the videos will be recorded and professionally edited for comprehensive dissemination in 2025. The MOOC translations will launch in Q4 2024.

## Electronic Health Records

### Background

The adoption and optimal utilization of integrated dental and medical electronic health records (EHRs) has the potential to transform healthcare and facilitate research. A crucial element in this process is to assess the applicability of these integrated health records in diverse healthcare settings according to the needs and preferences of end-users, including healthcare providers and researchers. This project therefore aims to gather their feedback and develop a recommended set of oral health indicators to be included in integrated EHRs. And in addition, provide guidance on the regular collection of data to facilitate comprehensive healthcare, thereby promoting and enhancing the overall well-being of patients.

### Partner

Henry Schein, Inc.

### Task Team

Prof. Mark Wolff (Chair); Dr Lina Weinert; Dr. Fred Horowitz; Dr Piret Väli; Dr Jina Lee Linton.

### Committee

Dental Practice Committee

## Project update

A scoping review has been conducted to establish the status of integrated and non-integrated EHRs globally and to assess if oral health indicators are included. The results of the scoping review were discussed at an International Advisory Group meeting together with other topics including interoperability, preferences, and constraints of EHRs. The in-person meeting took place in Chicago from 21–23 February 2024 and its objectives included, to:

- Convene leading experts in the domain to provide guidance, share insights, and contribute to the development of strategies that optimize the integration of dental and medical EHRs.
- Create an opportunity for engaging with end-users, including dental and other healthcare professionals, to obtain their perspectives on integrated EHRs for oral and general health.
- Generate a consensus statement regarding oral health indicators. This statement will reflect the collective agreement and insights of the participants, thus driving the advancement of EHRs and patient care in the field of oral health.

## Next Steps

A consensus statement on the integration and use of electronic health records is currently under development.

## Health and Safety in the Dental Workplace

### Background

Staff working in dental clinics are at numerous risks, such as the risk of infection by pathogens, exposure to chemical substances or radiation, musculoskeletal disorders from inappropriate working posture, and mental health issues. This project took place over multiple phases that focused on different topics:

- **Phase I: Ergonomics and posture.** Commencing in April 2019, the project was successfully completed, and the outputs included the production of a guide and videos on correct posture and other ergonomic issues in dental practice.
- **Phase II: Mental health and well-being.** Commencing in April 2021, a digital toolkit for dental teams and National Dental Associations was launched in January 2023. In addition, a three-episode podcast series was released through the FDI Dental Check-up podcast.
- **Phase III:** the current phase of this project launched in May 2023, and is focused on preventing cross-infection in dental practice.

## Partner

Morita Dental Product Corp.

## Task Team phase III

Assoc. Prof. Hani Al-Amad (Chair); Dr Stephanie Tiede; Prof. Laurie Walsh.

## Committee

Dental Practice Committee

## Project update

### Phase III – Infection Prevention and Control

The third phase of the project will result in an *International Dental Journal* Supplement about Infection Prevention and Control in the Dental Workplace. It is currently under production and will present the latest research in specific areas of cross-infection. It will contain five peer-reviewed articles covering: Airborne transmission; Blood-borne infections; Dental unit waterlines; PPE; and Decontamination.

### Next steps

Further to the Supplement being published, an FDI Oral Health Campus webinar will be hosted, which will be an opportunity for the project experts to present the findings. Additionally, a session at the FDI World Dental Congress (WDC) in Shanghai 2025 is being planned. This session will summarize all three phases of the work developed throughout the project.

## Mental Health and Wellbeing in Dentistry

### Background

Given the increasing concerns about mental health challenges faced by the oral health workforce, FDI will build on the work that started in 2021 as part of the second phase of the Health and Safety in the Dental Workplace project. Now a standalone project supported by the MPS Foundation since January 2024, it will build on the Digital Toolkit for Mental Health and Wellbeing for Dental Teams developed in 2022 to expand its reach to dental students exposed to high levels of stress and burnout.

### Partner

MPS Foundation

### Task Team

Prof. Tim Newton; (Chair); Dr Amanda Johnston; Prof. Matt Hopcraft; Dr Chisung Yuh.

### Committee

Dental Practice Committee

## Project update

### Scoping review

A scoping review of the link between the mental health and well-being of dental team members and the quality of oral healthcare is being developed by the task team. Developing the study protocol was the first step, and the task team is currently writing the article.

## Resources for dental schools

Resources to help provide relevant training to dental students will be identified through focus groups conducted with dental students and faculty staff from different regions of the world. FDI will then produce materials to address the gaps identified in the currently available resources, such as teaching aids and self-study tools.

## Resources for national dental associations

The mental health and wellbeing task team is developing a framework for national dental associations (NDAs) that want to improve or create mental health programmes at the national level. This framework will include links to the existing Digital Toolkit developed in Phase I of the project and will explain how to use the various resources. It will provide NDAs with a clear example of the priorities to consider when developing a mental health programme.

## Next steps

The scoping review article will be submitted to the *International Dental Journal* by the end of the year. An episode based on the project will be released through FDI's Dental Check-up podcast to celebrate World Mental Health Day in October.

## Oral Health and Cancer: Collaborative Care

### Background

The Oral Health and Cancer project started in 2020. The project aims to improve the integration of oral healthcare and cancer care, as well as the collaboration between different members of the care team. Its objective was to create a common language among healthcare professionals to recognize and manage oral health complications that may arise during cancer therapy more efficiently and proactively.

### Partner

Unilever

### Task Team

The task team has been dissolved.

### Committee

Education Committee

### Project update

A new French version of the app was released in May 2024.

## Oral Health for an Ageing Population

### Background

The Oral Health for an Ageing Population (OHAP) project was launched in 2015 to strengthen the role of the oral health community in achieving healthy longevity. The project advocates for oral health challenges to be addressed in health

promotion strategies and health policies for ageing populations. OHAP aims to ensure that people not only live longer lives but healthier ones too, free of oral diseases. Phase III of the project started in May 2024 and will run until April 2027.

## Partners

GC International & Nakao Foundation.

## Task Team

Prof. Kakuhiro Fukai (Chair); Prof. Judith Jones; Dr Sophie Dartevelle; Prof Hiroyuki Hirano; Prof. Gerry McKenna.

## Committee

Public Health Committee

## Project update

Two new resources were launched at the end of 2023: a Frailty Guide for dentists and a brochure for patients with exercises to prevent oral function decline. The Frailty Guide is a web app that provides targeted prevention advice based on the patient's dependency and oral frailty levels. Currently, the task team is working on an end-user evaluation with NDAs from the following countries:

- Costa Rica
- Lebanon
- Thailand
- USA
- Nigeria
- Japan

## Next steps

A session will be held during FDI's WDC 2024 on 14 September This will be followed by an in-person workshop in October to evaluate the results of the end-user evaluation, where the task team and invited NDAs will determine what changes, if any, need to be made to last year's resources.

## Oral Health within General Health

### Background

In line with FDI's Vision 2030, NDAs and wider health partners aspire to strengthen and accelerate the progress of countries toward optimal health for all. This project focuses on: 1) patients and the general public, 2) oral and non-oral health professionals, and 3) policymakers, NDAs, and other key stakeholders. It builds on the achievements and experiences gained from the successful ongoing projects: Whole Mouth Health, Whole Body Health, and the workshops "2 Risk Factors - Too Many Diseases."

### FDI Smile Grant

The FDI Smile Grant is part of the Oral Health within General Health project. The grant promotes preventive oral care at the local level. The CHF 5,000 award recognizes two member NDAs that are making a difference in oral health through innovative and sustainable community-based outreach projects in their countries.

## Partner

Colgate

## Task Teams

The existing Task Teams were approved by the Council but will be revised when the new phase of the project begins.

### Whole Mouth Health

Prof. Manu Mathur (Chair); Dr Rob Beaglehole; Dr Shaili Pradhan; Dr Shiamaa Al Mashhadani.

### Whole Body Health

Prof. Iain Chapple (Chair); Dr Graham Lloyd-Jones; Dr Sara El Khadra.

## Project update

Global data collection on the Whole Body Health web app is ongoing. Over 2,000 unique visitors have used the app and participated in the Whole Mouth Health Arcade. This data will highlight gaps in oral health literacy around the globe and be used to design resources that specifically address these gaps.

The Whole Body Health platform has been translated into French and Spanish. Additionally, “Snackables” have been created, breaking down the information into bite-sized pieces that can easily be shared through communication channels in low-resource settings.

The Smile Grant 2024 received 12 eligible applications, and the winners will be announced during the WDC 2024 in Istanbul.

## Next Steps

The Whole Mouth Health data will be analysed to produce a report on the status of health literacy globally. Additionally, an article based on the results will be submitted to the *International Dental Journal*.

The Whole Body Health platform will be further developed to highlight the common oral signs and symptoms of systemic diseases and the impact of social and commercial determinants of health. Additionally, the leaflets for non-oral health professionals, currently being developed by PHC, will be hosted here to create a comprehensive resource for both oral health professionals and the wider healthcare team.

## Oral Health Observatory

### Background

The Oral Health Observatory (OHO) aims to collect standardized data on oral health internationally. Analysis of the collected data will provide the basis for developing advocacy resources to support FDI, NDAs, and other interested stakeholders in their efforts to promote better policies for oral health. Dentists and their patients submit data about the patient’s oral health, quality of life, health behaviours, and other health determinants and moderating factors. The data is collected via a series of questions on a mobile application. An additional online questionnaire collects data about the participating dental practices.

Following a successful pilot phase, OHO entered Phase II, using the OHO tools and methodologies to collect data in 12 countries. Phase III aims to work with countries that have previously completed the data collection and to offer a tailored analysis of the data according to each country’s needs.



## Partner

Haleon

## Task Team

Dr Michael Sereny (Chair); Prof. Georgios Tsakos; Prof. David Williams.

## Committee

Dental Practice Committee

## Project update

### Data analysis and results publication

FDI is working with Sheffield University to analyse data collected in the participating countries. The aim is to generate data that can be used by participating NDAs for communication and advocacy purposes, as well as for adjusting policies and oral health programmes. The results of the analyses and the achievements of the six countries are expected to raise interest among other NDAs in participating in the OHO project.

Sheffield University is currently working with the Tanzania Dental Association on a primary data analysis and providing support to the Lebanese Dental Association (LDA). The LDA is utilizing the data collected during the OHO project to develop a National Oral Health Strategy that will be presented to the Ministry of Health. A workshop between the LDA, invited experts, and the OHO task team was held in Geneva in May 2024. During this workshop, a draft of the National Oral Health Strategy was produced.

The Federación Odontológica Colombiana is collaborating with stakeholders from key institutions on a proposal to develop a national Oral Health Observatory.

## Next steps

### Ongoing data collection

Data collection is ongoing in Kenya.

### Ongoing data analysis

Analysis of the data collected in Tanzania will be undertaken with the support of Sheffield University and a publication will be developed. Following this, priorities for oral health will be defined and an advocacy strategy will be developed to support the national oral health promotion effort of the Tanzania Dental Association.

### NDA workshops

Ongoing workshops will be organized with two National Dental Associations (Lebanon and China). These workshops aim to define how the stakeholders can use the collected data for oral health advocacy and policy development purposes. A further workshop for all participating countries will be held during the WDC 2024.

### New data collection

NDAs from Egypt and Nigeria have confirmed their interest in participating in the OHO project in 2024.

## WDC Session

A session is planned at the WDC in Istanbul.

## Sustainability in Dentistry

### Background

Dentistry has a significant environmental impact due to resource usage and waste production. The UN 2030 Agenda for Sustainable Development emphasises the need to develop actions that enable prosperity, human development, and economic growth in a sustainable manner. This underscores the necessity of reducing the environmental impact of dentistry without compromising the quality of care or harming the dental profession.

In January 2023, a new three-year phase of the project began, aiming to support the dental profession in its sustainability journey by providing a range of educational resources and advocacy guidelines.

### Partners

**Partners:** Sunstar, Haleon, Dentsply Sirona

**Supporters:** Colgate, Kulzer, SDI Limited

### Task Team

Prof. Nicolas Martin (Chair); Dr Mick Armstrong; Dr Duygu Ilhan; Dr Steven Mulligan; Dr Hasan Jamal; Asst. Prof. Donna Hackley.

### Committee

Dental Practice Committee

### Project update

## Resources for integration into existing curricula for under and post-graduate dental training establishments

A mapping exercise to identify opportunities and feasibility for introducing sustainability aspects into existing dental curricula has been conducted and published in a report. Based on this report, a slide deck with sustainability messages linked to specific subject areas is being developed. This resource will enable dental training institutions to easily integrate the topic of environmentally sustainable dentistry into their existing courses.

## Sustainability in Dentistry Summit

The second global FDI Sustainability Summit took place virtually from 18–20 June 2024, facilitating the sharing of case studies, ideas, and research projects. The three-day event provided attendees with an understanding of sustainability issues in oral healthcare and their impact on the environment and society. The summit offered a valuable networking opportunity for participants, allowing dentists and dental teams to showcase their success stories to inspire others. The summit was a success, with good attendance numbers and excellent feedback from all sides. Delegates from 91 countries attended the summit.

## Massive Open Online Course

In December 2023, FDI launched an introductory Massive Open Online Course (MOOC) on Sustainability in Dentistry for oral health professionals. To build on this course, a second MOOC focusing on the practical application of Sustainability in Dentistry will be launched at the end of 2024. In addition, MOOC 1 has been translated into Spanish, French, Arabic and Chinese to make the course more accessible for members around the world.

## Sustainability Award

Individuals and dental practices who have excelled at sustainable practices or approaches to improve sustainability in their dental practice can apply for the Sustainability Award via the FDI website. Winners will be announced at the Sustainability in Dentistry Session at WDC 2024.

## Next steps

The project will focus on the development of MOOC 2 and the sustainability resources for integration into existing dental curricula by the end of 2024.

## World Dental Development Fund

### Background

The World Dental Development Fund (WDDF) aims to support country-level efforts to improve oral health, primarily through establishing innovative prevention and access programmes in disadvantaged populations. The WDDF projects reflect the core values and principles of FDI. FDI strongly encourages NDAs to develop relevant projects and apply for support through the WDDF to positively impact oral health.

### Committee

Public Health Committee

### Awards 2024

During WDC 2023, PHC decided on the WDDF winners for project implementation in 2024. The projects that received FDI support are being implemented in Bangladesh, Nepal, Pakistan, Peru and the USA with the following targeted areas of intervention:

#### *Bangladesh's initiative to promote good oral health awareness among Refugee children*

Among the projects selected to receive support from FDI's WDDF, one is led by the Refugee Crisis Foundation in Bangladesh. Their outstanding initiative focuses on implementing a comprehensive programme, including supervised toothbrushing, handwashing, and the application of silver diamine, targeting schoolchildren in Cox's Bazar, home to the world's largest refugee camp.

#### *Nepal's community outreach initiative promotes good oral health practices among schoolchildren*

Kathmandu University's Dhulikel Hospital in Nepal has been awarded the WDDF grant to support their project titled "Promoting Oral Health in Nepal's Most Remote and Underserved Areas: A Campus-to-Community School-Based Programme." This initiative is scheduled to be implemented in the Karnali Province, the largest in Nepal. The primary objective of this project is to enhance the oral health status and habits of schoolchildren in these hard-to-reach regions. This will be achieved by training teachers and community health workers to conduct daily supervised toothbrushing programmes in rural settings. Additionally, the project seeks to evaluate and expand community engagement through various oral health promotion activities.

### *Pakistan's Aga Khan University Hospital to assess caries prevalence in Mithi, Sindh province*

The Aga Khan University Hospital in Pakistan is initiating a project with a primary focus on assessing the Decayed, Missing, and Filled Teeth (DMFT) index to determine the prevalence of caries in Mithi, situated within the Sindh province. By determining the prevalence of caries, the Aga Khan University Hospital aspires to develop effective preventive strategies to reduce the burden of caries among the population, especially in rural areas. In addition, this initiative seeks to implement an AI-enabled application for caries detection. This technology will be accessible to community healthcare workers, enabling them to assess the DMFT index in various regions across Pakistan.

### *Efforts to cultivate early oral health habits in Peru through mobile technologies*

The "mOralHealth Strategy: Oral Health from Childhood for a Healthier Peru" project, spearheaded by the Asociación Peruana De Odontología Preventiva Y Social (APOPS), is a visionary initiative with a clear goal in mind: to improve the health of Peruvian children under 6 years of age. With this initiative, APOPS will develop a health literacy and training programme that leverages the power of mobile technologies for oral health to prevent and control Early Childhood Caries (ECC). In addition, the project promotes an integrated approach by emphasizing that primary healthcare professionals, preschool educators and community workers are essential partners to empower families to control the determinants that affect the oral health of their children.

### *Developing a mobile dental application to increase oral health literacy in the USA*

The innovative HIVE Mobile Dental Application project from the Eastman Institute for Oral Health (EIOH) at the University of Rochester in New York, United States, aims to assess and enhance the oral health of people living with HIV/AIDS in the Rochester/Monroe County area. This will be achieved by using the HIVE mobile dental application and a self-administered survey. The application will empower users to improve their oral health knowledge, establish a dental care referral system, and support tobacco cessation efforts among those living with HIV/AIDS. Furthermore, the project will conduct an oral health needs assessment to identify unmet dental needs, tobacco product usage patterns, and barriers to tobacco cessation among people living with HIV.

## **Next steps**

The 2024 winners will be selected by PHC at WDC 2024 in Istanbul. The winners will be announced in October.