FDI World Dental Federation's submission to WHO consultation on the draft *Global strategy on tackling oral diseases*, for consideration at EB150 and WHA75

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This submission was prepared by FDI World Dental Federation, and the following organizations are co-signatories:

1. ADF - Association dentaire française
2. AIO - Italian Dental Association
3. ANDI - Associazione Nazionale Dentisti Italiani
4. Asociación Odontológica Panameña
5. Associacao Dentaria Timor Leste (ADETIL)
6. Association des chirurgiens dentistes du Burkina (ACDB)
7. Association des Chirurgiens-Dentistes du Bénin (A.C.D.B.)
8. Association marocaine de prévention bucco-dentaire (AMPBD)
9. Australian Dental Association
10. Azerbaijan Stomatological Association
11. Bahamas Dental Association
12. Bangladesh Dental Society
13. British Dental Association (BDA)
14. Bulgarian Dental Association (BgDA)
15. Bundeszahnärztekammer e.V. (German Dental Association)
16. Cercle des Médecins-Dentistes du Grand-Duché de Luxembourg
17. Chambre Syndicale Dentaire, Belgium
18. Chinese Stomatological Association
19. Chinese Taipei Association for Dental Sciences
20. Colegio de Cirujano Dentistas de Chile
21. Colegio de Cirujanos Dentistas de Costa Rica
22. Colegio de Odontólogos de Bolivia
23. Commonwealth Dental Association
24. Cyprus Dental Association
25. Danish Dental Association
26. Dental Association of Seychelles
27. Dental Association of Thailand
28. Dental Chamber of Kosovo
29. Egyptian Clinical Dental Society
30. Ethiopian Dental Professional's Association (EDPA)
31. Fiji Dental Association
32. Finnish Dental Association
33. Hong Kong Dental Association
34. Indonesia Dental Association
35. International Diabetes Federation (IDF)
36. Irish Dental Association
37. Japan Dental Association
38. Kenya Dental Association
39. Korean Dental Association
40. Malaysian Dental Association
41. Mexican Dental Association (Asociación Dental Mexicana)
42. Mongolian Dental Association
43. NCD Alliance
44. Non-communicable Diseases Alliance Kenya
45. Norwegian Dental Association
46. OMD - Portuguese Dental Association
47. Philippine Dental Association
48. Polish Dental Society
49. Romanian Dental Association of Private Practitioners (RDAPP)
50. Russian Dental Association
51. Samara State Medical University
52. Serbian Dental Society
53. Slovenian Dental Association
54. SmileTrain
55. Société de Médecine Dentaire, asbl
56. South African Dental Association
57. Sri Lanka Dental Association
58. Stomatological Society of Greece
59. Tanzania Dental Association
60. The Armenian Dental Association
61. Tunisian Dental Syndicate for Private Practice
62. Turkish Dental Association
63. Ukrainian Dental Association
64. VVT - Verbond der Vlaamse Tandartsen
65. Zimbabwe Dental Association

To the attention of
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FDI World Dental Federation (FDI) — representing over one million dentists and close to 200 national dental associations — and the aforementioned organizations thank the World Health Organization (WHO) for preparing the draft *Global strategy on tackling oral diseases* (hereinafter "*Global strategy*") following the request made by Member States on the recent resolution on Oral health (WHA74.5). We commend WHO for this document to advance the effective integration of oral health within health systems at the national, regional, and global levels; and we strongly welcome the opportunity to comment on the current draft.

The implementation of the *Global strategy* represents a historic opportunity to tackle oral diseases as part of the global disease burden, to reduce oral and general health inequalities, and to ensure that oral health promotion and oral healthcare are fully embedded into strategies addressing noncommunicable diseases (NCDs) and aiming at Universal Health Coverage (UHC). **We have reviewed the current draft and share the following comments and suggestions for consideration.**

Strengths of the current draft

Overall, we are extremely pleased to see that the *Global strategy* aligns with FDI's roadmap – *Vision 2030: Delivering Optimal Oral Health for All*. In particular, the vision of the *Global strategy*, "universal oral health coverage for all people by 2030", is fully reflected in pillar 1 of FDI's Vision 2030, "Universal coverage for oral health", with the associated target of: "By 2030, essential oral health services are integrated into healthcare in every country and appropriate quality oral healthcare becomes available, accessible, and affordable for all."[1]

We commend the language and structure of the *Global strategy* for being clear and logical. It provides background on the nature of the document and explains its purpose of informing the implementation-oriented *Action plan for public oral health* to be approved in 2023, together with a progress monitoring framework and measurable 2030 targets.

The *Global strategy* complements the resolution on Oral health. It recognizes that cleft lip and palate contributes to the burden of oral diseases, and the role that adequate exposure to fluoride plays in the prevention of tooth decay (dental caries) – the most prevalent disease worldwide. It mentions different fluoride delivery mechanisms and recognizes them as *essential prevention methods*, including community-based fluoridation *where appropriate*[*], topical fluoride applications, and use of fluoridated toothpaste. The

[*] For instance, water fluoridation is an effective and safe way to systematically protect oral health in populations with a moderate to high risk of dental caries, thus reducing oral health inequalities. The recommended level of fluoride needs to be provided and therefore, fluoridation needs to be accompanied by quality control measures and regular monitoring. There might be regions with water naturally rich in fluoride, or where fluoride is already available through other sources (e.g., through fluoridated milk, salt, or dietary supplements). Source: FDI. *Promoting Oral Health through Water Fluoridation*. FDI Policy Statement adopted by the FDI General Assembly: September 2014, New Delhi, India. Original version adopted by the FDI General Assembly: November 2000, Paris, France. New Delhi: FDI World Dental Federation; 2014. Available from: https://www.fdiworlddental.org/promoting-oral-health-through-water-fluoridation.

Global strategy also complements the resolution by acknowledging the lack of political commitment and resources given to oral health within national health systems until now, and therefore the need to allocate sufficient national budget for oral diseases prevention and control.

Oral health promotion, oral disease prevention, and basic oral healthcare are also presented as essential health services that should be part of countries' UHC benefit packages. Coverage of essential oral health services varies tremendously between countries (and even between high-income countries). For instance, in the European Union, only the national health systems of Croatia, Germany, and Slovakia cover more than half of the countries' total oral healthcare expenditure. This demonstrates the too often isolation of oral health within health systems, separating the mouth from the body at the health system level and underestimating the impact of oral health on general health. Synergies to reduce overall health-system costs by early and cost-effective oral health interventions and referrals for other NCDs are a missed opportunity now picked up by the *Global strategy*.

It is very positive to see that the definition of "universal oral health coverage" within the vision of the *Global strategy* refers to the three core elements of UHC – ensuring the quality, equitable access, and financial protection for a wide range of health services (i.e., health promotion, prevention, treatment, and rehabilitation) that are people-centered (responding to individuals' evolving needs across their life course). Primary health care (PHC) is the cornerstone of UHC and key to ensuring the accessibility and affordability of essential oral health services for all. **The focus on PHC under both the *Global strategy*'s guiding principles and the strategic objectives** is most welcome to guide national implementation and reduce oral health inequalities.

Another welcomed focus within the *Global strategy* is the need for a wider team approach in dentistry, increasing access to oral health services, especially in low- and middle-income countries where there are often shortages of oral health workers. 69% of the world's dentists only serve 27% of the global population, and there are risks of simultaneous over- and undersupply of oral healthcare. We need enough health workers who are competent in delivering oral health interventions, and geographically distributed in accordance with populations' needs. Dental teams, and thus oral healthcare outreach, can be reinforced by building a strong cadre of other oral health workers (such as dental hygienists) and non-physician healthcare providers (such as community health workers, nurses, and other allied health workers) to deliver adequate oral healthcare within their scope of practice, especially at the PHC level.[2]

By recognizing the important role of oral health promotion and oral disease prevention for populations' health, and in line with FDI's Vision 2030, **the *Global strategy* rightly acknowledges the need to reorient health systems towards population-wide prevention rather than individual treatment interventions where possible**. The focus on addressing upstream determinants (social and commercial) to reduce oral health inequalities and oral healthcare costs is crucial, especially through public policies and regulation aiming to reduce sugar consumption and increasing access to adequate levels of fluoride.

There is also a **commended focus on enabling individuals to achieve optimal oral health by increasing oral health literacy efforts** (including through digital solutions), leading to increased capacity for individuals to self-manage and make decisions about their oral health. In terms of shared risk factors with other NCDs, the **explicit mention of other forms of tobacco use than smoking ("betel quid and areca nut use") and human papilloma virus (HPV) is very timely**, given their association with increased incidence of oral cancers.[3,4] **Lack of breastfeeding** is also mentioned as a common NCD risk factor that needs to be addressed, as it is linked, for example, with a higher risk of developing early childhood caries and obesity.[5]

Research and surveillance should be supported in parallel to these efforts through the development and integration of national information systems that include oral health data and indicators. We therefore **strongly welcome the prioritization of oral health information systems and oral health research as strategic objectives of the *Global strategy*, and the announcement of an oral health data platform**. The standardization of oral health indicators will be a crucial step to allow monitoring of progress in oral health across countries and support research. The scope of oral health research will need to span across health, behavioural, and social science disciplines to better understand both the complexity of clinical associations between oral and general health, and the challenges in implementing dental public health interventions and integrating oral health services.

Two major strengths of the *Global strategy*, include **the recognition of the role of civil society in the oral health response and the fact that oral health is considered a fundamental human right**. We agree with the need to amplify the voices of people living with and affected by oral diseases and conditions. Their experience and expertise in terms of identifying real gaps in meeting people's oral health needs is a powerful asset in ensuring that health and social services are effective and relevant to the beneficiaries they are intended to serve. Therefore, we need more than amplifying their voices, ensuring both health workers and people living with oral diseases and other NCDs are meaningfully engaged in decision-making and policymaking, care delivery, and advocacy efforts.

Barriers to be addressed by the current draft

The biggest challenge in the oral health response is the lack of implementation and integration within national health systems, which is somewhat implied by the *Global strategy* when recognizing the lack of political leadership and financing that has been allocated to oral health. **The *Global strategy* remains a very high-level document without providing specific guidance nor indicators or targets for the achievement of its strategic objectives, beyond the guiding principles.** We understand the rationale behind this is that the 2023 *Action plan for public oral health* will focus more on identifying strategies for national implementation and integration, proposing measurable 2030 targets and a progress monitoring framework for accountability. However, we find the *Global strategy* could be improved by addressing more specifically the current challenges faced by populations, the oral health community, and health systems *(see general and specific comments hereinafter)*.

When considering the economic costs of poor oral health, **it is important to highlight the weight that out-of-pocket payments have specifically in oral healthcare within health systems**. In low- and middle-income countries, coverage of oral health services is often very low or non-existent, exposing households to a higher risk of catastrophic health expenditure if they receive dental treatment, or even entirely precluding access to oral healthcare.[6] **More specific reference to this is needed, as well as to the complexity of payment systems for oral health workers** to promote a focus on preventive interventions and ensure the effective integration of oral health services within national UHC benefit packages.

Currently, **the *Global strategy* only links oral health with NCDs by recognizing the common risk factors of oral diseases and other NCDs**. However, the associations between oral health, NCDs, and general health go beyond sharing risk factors. Oral diseases often manifest together with other NCDs in the form of comorbidities. For instance, periodontal (gum) disease is the sixth most prevalent disease worldwide, affects the alveolar bone leading to tooth loss, and often manifests as a common complication of diabetes. It can also affect blood glucose control increasing the risk of diabetes.[7] Higher prevalence of hypertension, a risk factor for cardiovascular complications, has also been observed in people with poor periodontal health,[8] and oral bacteria has been linked with the development of dementia, cardiovascular disease, and systemic infection.[9,10] Moreover, good oral health can positively impact NCD treatment outcomes.[11,12,13] Given these

strong associations between oral health and NCDs, when talking about oral health promotion and oral disease prevention, **the *Global strategy* should also acknowledge poor oral health as a risk factor for NCDs beyond oral diseases; and the case for interprofessional collaboration between oral health and non-oral health workers should be made more explicitly**.

In line with this, **we strongly welcome the inclusion of a guiding principle on the need for a new oral health workforce model, but this needs to encompass issues beyond education and resource planning**. As reiterated in pillar 3 of Vision 2030 (*Building a resilient oral health workforce for sustainable development*), strategies around intra- and inter-professional collaboration are key to ensure wider access to oral healthcare and integration of medical and oral health services, especially in light of the associations between oral health and NCDs mentioned above. For instance, oral health workers can have a role increasing access to NCD prevention (e.g., tobacco cessation support, dietary advice),[14] screening (e.g., for oral cancers, diabetes, and hypertension),[15,16,17] and care (e.g., contributing to optimal diabetes management).[18]

Another aspect that would require more specificity is the issue of retention and distribution of the oral health workforce, this is not an issue only between countries, but also within countries (i.e., between urban and rural areas), having health districts with no availability of oral health services at all. Thus, **given the complexity around optimizing the oral health workforce to increase access to oral health promotion, oral healthcare, and other NCD services, we urge WHO to consider the inclusion of a strategic objective specifically on *Oral Health Workforce***, addressing challenges around education, planning, and collaboration.

We commend the *Global strategy* for recognizing the disruption caused by COVID-19 on essential oral health services and its impact on increasing antibiotic prescriptions. Indeed, dentistry has a role in antimicrobial resistance (AMR), including through antibiotic stewardship – dentists currently prescribe up to 10% of antibiotics worldwide.[19] However, the role of dental teams in infection prevention and control, and antibiotic stewardship is not widely recognized by WHO, for instance, in the Global action plan on antimicrobial resistance. This leads to a lack of engagement of dentists in AMR multisectoral efforts. **The *Global strategy* offers an opportunity to link AMR efforts and the role of dentistry beyond the context of COVID-19. We therefore urge WHO to consider and include this as part of an additional guiding principle on sustainability.**

Sustainability has indeed become an increasingly relevant issue for dentistry. The imperative of reducing waste of resources by promoting prevention, is both a commitment and challenge for the oral health profession. A good example of this is the Minamata Convention on Mercury calling for the phase down of use of dental amalgam. The Minamata Convention is a legal instrument bringing the opportunity to invest in prevention and promote less invasive dentistry, find alternatives to dental amalgam that are accessible, affordable, durable, and environmentally friendly, as well as improve waste management. **The *Global strategy* should better reflect on the role that sustainability plays in the oral health response by adding sustainability as a guiding principle**, which is already guiding the oral health research agenda and WHO and Member States' roles, and it reinforces the strategic objective on *Oral Health Promotion and Oral Disease Prevention*.

Specific comments, recommendations, and reserves

Section		Para	Comment
Background	*Nature and purpose*	1	It is concerning to see that the *Global strategy* does not include a specific timeframe; however, it will inform the 2023 *Action plan for public oral health* and its 2030 targets. Having a specific timeframe supports monitoring and accountability efforts and leaves the door open for a revised *Global strategy* after 2030 based on the lessons learnt from the implementation of the future action plan and 2030 targets. **We therefore recommend that the *Global strategy* outlines a specific timeframe from the year of its adoption (scheduled for 2022) to 2030.**
	Supporting documents and processes	2	The *Global strategy* is strongly aligned with other WHO and UN documents and processes not mentioned in the strategy's background. For instance, the **Global Action Plan for Healthy Lives and Well-being for All** supports the achievement of the health-related Sustainable Development Goal targets; the **Global Strategy on Digital Health 2020–2025** is relevant given that optimizing digital technologies for oral health is one of the strategy's guiding principles; and given the strong reference made to the social determinants of oral health, **WHA74.16 (2021) on Social determinants of health** should be also included, although this resolution was adopted in parallel with the WHA74.5 (2021) on Oral health.
Global Overview of Oral Health	*Definition of oral health*	3	We strongly welcome the holistic and life-course approach of the definition of oral health, which aligns well with *FDI's definition of oral health*[†]. However, to fully align with *FDI's definition of oral health*, **we urge WHO to define oral health as both "the health and well-being of the mouth",** including the execution of many functions with confidence and without pain, discomfort, and disease. *FDI's definition of oral health* was overwhelmingly approved in 2016 by FDI's General Assembly, formed by close to 200 national dental associations from over 130 countries.
	Oral Disease Burden	4	When talking about the burden of the main oral diseases, **we urge WHO to highlight that dental caries alone are the most prevalent condition among NCDs (or any other disease group)**, to show the magnitude of this single oral disease.[20] It is then important to show the percentage of people affected by the main oral diseases altogether (almost half of the world's population) and how their collective prevalence remains unchanged.

[†] FDI's definition of oral health (2016): "Oral health is multifaceted and includes the ability to speak, smile, smell, taste, touch, chew, swallow, and convey a range of emotions through facial expressions with confidence and without pain, discomfort, and disease of the craniofacial complex." Source: Glick M, Williams D, et al. A new definition for oral health developed by the FDI World Dental Federation opens the door to a universal definition of oral health. *Int Dent J*. 2016;66(6): 322–324. Available from: https://doi.org/10.1111/idj.12294

		5	We strongly welcome the reference to cancers of the lip and oral cavity, noma, and cleft lip and palate under the *Oral Disease Burden* section, demonstrating that within the field of oral health there are serious inequalities and devastating conditions. Specifically, we ask for: • **Clarification that noma (cancrum oris) "is a non-contagious necrotizing disease"** to fight misconceptions about this disease and also specify the causative agent of noma remains unknown and that there is no global data on its prevalence / incidence since the 1990s as this is relevant when talking about the burden of oral diseases and shows the lack of prioritization and (oral) health surveillance capacity.[21] • **The global prevalence of cleft lip and/or palate is reconsidered to be "of approximately 1 in 700 live births with considerable ethnic and geographical variation"** as this is the estimated prevalence when considering the collective burden of cleft lip, cleft palate, and cleft lip and palate.[22] Moreover, it is important to note that cleft lip and/or palate as severe birth defects, leading to high rates of infant mortality in rural and poor settings when there is no timely access to quality surgery.[23]
		New	**We urge WHO to consider an additional paragraph under the *Oral Disease Burden* section which considers the comorbidity of oral diseases and other NCDs**, to highlight the association between oral health and NCDs beyond shared risk factors. For instance, this new paragraph can mention several associations between oral diseases and other NCDs in line with the WHO resolution on Oral health. It can also stress the two-way relationship between periodontal disease and diabetes and include the global prevalence of periodontal disease among people living with diabetes. It can also mention that, for people living with diabetes, there is strong evidence that good periodontal health leads to improved blood glucose control, reduces the likelihood of hospitalization, and lowers the cost of treating diabetes.[24]
	Social and Economic Costs of Poor Oral Health	6	**A stronger emphasis could be made on the higher proportion of out-of-pocket payments and catastrophic health expenditure** that is associated with oral healthcare, often leading people not to seek care when needed.
		7	**Older people should be mentioned** among the vulnerable members of societies being disproportionally affected by oral diseases and conditions and having poor access to oral health services.[25]
	Commercial Determinants and Risk Factors of Oral Health	8	**We welcome the explicit mention of commercial determinants of health** in the *Global strategy*, and their role in the oral disease burden and in exacerbating health inequalities. **We suggest referring to all upstream determinants of oral health under this section**, and therefore add the following sentence at the end of this paragraph: "Together with the wider social and economic determinants of health,

			commercial determinants are upstream drivers of poor oral health among populations globally".
		9	**We strongly welcome the explicit mention of betel quid and areca nut use, lack of breastfeeding, and HPV as shared risk factors for oral diseases and other NCDs**; however, we suggest the following edit: "These risk factors include all forms of tobacco use (including smoking and smokeless tobacco use such as betel quid and areca nut use), harmful alcohol use, […]." This way we are **specifying smoking and smokeless forms of tobacco use**, and by using the term "smokeless tobacco" (and not just "betel quid and areca nut use"), we are also encompassing other forms of smokeless tobacco use that have been associated with a higher incidence of oral cancers, such as toombak, snus, etc.[26] The following sentences must also be clarified: • "Some of these risk factors are also associated with cleft lip and palate and traumatic dental injury." It is very positive to see an implicit reference to **the role of primary prevention in orofacial clefts, and alcohol as a risk factor for traumatic dental injury**, showing the health and social implications of alcohol use – **these points should be made more explicitly in the *Global strategy***. • "The risk factors for noma include malnutrition, coinfections, poor oral hygiene and poor living conditions." It would be more accurate to say: "**Noma is a complex and multifactorial disease with unknown causative agent**, the risk factors associated with noma include malnutrition, coinfections, poor oral hygiene and poor living conditions."
	Oral Health Promotion and Oral Disease Prevention	10	**We fully align with this paragraph and suggest specifying "(public policy and regulation)"** as the evidence on the effectiveness of self-regulation alone is weak. We also suggest **mentioning here that, given associations between oral health and NCDs, poor oral health should also be considered as a risk factor**; and thus, the importance of integrating oral health promotion and oral disease prevention into other NCD programmes.
		11	**We fully align with this paragraph and suggest specifying a few examples of public health initiatives to reduce sugar consumption**, such as taxation of sugary drinks, implementation of clear nutrition labelling, regulation of all forms of marketing and advertising of food and beverages high in sugar to children, improvement of the food environment in public institutions (i.e., schools, hospitals, public buildings, and workplaces), and increasing awareness and access to clean water.
		12	We strongly welcome this paragraph, recognizing the role of fluorides in the prevention of dental caries. **We suggest specifying the benefits of community-based methods (e.g., fluoridation) where appropriate**, mentioning the cost-effectiveness of these interventions and the need to accompany these interventions with regular monitoring.
	Oral Health Care Systems	13	Isolation of oral health services within health systems needs to stop and this paragraph describes the

			current situation. A health system reform would require a change of mindset for both public and private health sectors. For instance, oral healthcare is often covered by a separate insurance policy if at all. This is to reflect the existing separation that is made between health services. **This should be more clearly reflected in this paragraph, that oral health services are often considered a separate complementary health service, rather than part of a country's essential health services**. Moreover, when talking about primary care facilities, **we suggest mentioning the impact that improving referral mechanisms** as part of integrating oral health services at the PHC level can have on increasing access to basic care and facilitating access to specialized care when needed.
		14	**This paragraph needs further elaboration if it aims to describe the challenges to optimize the oral health workforce within healthcare systems**. The oral health workforce needs to adapt and respond to the population's evolving needs (rather than just address needs). Current planning strategies rarely focus on the retention and continued education of oral health workers and ensuring a needs-based distribution of oral health workers within countries. Engaging a wide range of oral health workers is key to increase coverage of oral health services across communities, and for that, the different oral health professions need a defined scope of practice and access to education that encourages intra-professional collaboration and clear referral mechanisms.
		15	Reference to the impact that COVID-19 has had in disrupting access to essential oral health services is key. FDI has referred to the impact of lockdowns on people's oral health as being a *dental disaster*.[27] This reiterates again the essentiality of oral health services (including oral health promotion). Therefore, **this paragraph must also refer to the need for health emergency planning to include prevention strategies and development of digital health solutions**, such as mobile dentistry interventions. **It is also promising to see recognition of the role that dentistry plays in AMR stewardship, given the increased rate of antibiotic prescriptions during the pandemic**. This should be mentioned more generally in the *Global strategy* (further down, we are suggesting adding a new guiding principle on sustainability).
Vision, Goal, and Guiding Principles	**Vision**	16	We fully align with the strategy's vision which strongly resonates with Vision 2030's pillar 1 "Universal coverage for oral health". **We ask WHO to maintain this as it is.** A focus on oral health as an essential element of UHC will ensure equitable access to quality services and full integration of oral health within health systems, supporting the oral health workforce in the process.

			17	**We strongly welcome the recognition of oral health as a fundamental human right.** The description of the strategy's vision includes the three elements of UHC (quality, accessibility, and affordability) and asks for the oral health response to be needs-based. **We welcome reference to the wide range of services that universal oral health coverage should encompass, including prevention and rehabilitation**. Rehabilitation should not be forgotten in the context of oral healthcare, as this is an essential service. For example, for people undergoing oral surgery in the context of a cleft, noma, or other complications.
	Goal		18	Currently, **the *Global strategy* only provides very high-level guidance to Member States to strengthen their national oral health responses**. It is more accurate to say that the goal of the *Global strategy* is to define the guiding principles, strategic objectives, and different stakeholder roles that will inform the 2023 *Action plan for public oral health*. Otherwise, the *Global strategy* needs to be more specific and implementation-oriented.
	Guiding Principles	**Principle 1: A public health approach to oral health**	19	**We fully align with this principle** shifting the focus of the oral health response towards prevention. We welcome its population-wide approach, and reference to work across sectors. **A reference to working with fiscal actors (i.e., ministries of finances) could be made** as part of taxing unhealthy commodities and providing subsidies that incentivize healthy diets.
		Principle 2: Integration of oral health in primary health care	20	**We fully align with this principle** as integration of oral health services within PHC and NCD prevention, detection, and control efforts is essential to achieve optimal oral health for all. We suggest clarifying what is meant by "related conditions" as this is not explained in the *Global strategy*. As suggested earlier, it can be included under the *Oral Disease Burden* section by describing the oral disease comorbidities.
		Principle 3: A new oral health workforce model to respond to population needs	21	**This principle needs a more ambitious scope to optimize the oral health workforce.** A new model also needs to consider retention and geographical distribution of oral health workers according to the populations' needs. As outlined in the cross-cutting pillar of Vision 2030 (*Enabling a responsive and resilient profession: the case for educational reform*), a new oral health workforce model must support intra- and inter-professional education to strengthen collaboration and to allow the full integration of oral health services within health systems and at the PHC level. It should also be clarified that oral health workers can play a leading role in providing oral health training to non-oral health workers, better aligning with the education and training needs of health workers.
		Principle 4: People-centred oral health care	22	**We fully align with this principle**, and it can be reinforced by including in the definition of people-centred, that **this also involves for people to be treated holistically and not with a disease-specific approach**, putting people and not diseases at the centre of health systems, and breaking down the silo

				between oral health and general health.
		Principle 5: Tailored oral health across the life course	23	**We fully align with this principle**, especially in the context of how maternal, newborn and children health (MNCH) and other population/age-specific programmes could be leveraged. However, it can be reinforced by **specifying that oral health services, included within UHC benefit packages, should not be exclusive to a specific population group only** (e.g., in some countries, oral healthcare is only covered for children).[28]
		Principle 6: Optimizing digital technologies for oral health	24	**We fully align with this principle** and agree that digital technologies are key to making oral health services available at the PHC level and that governance for digital health needs to be reinforced in parallel. We welcome the wide range of uses described for digital oral health and **suggest adding reference to the need to educate oral health workers and primary care providers on digital and technological advances**.
		Suggested additional principle: **Sustainability**	New	Sustainability is an essential element to consider in the oral health response, prioritizing prevention, and ensuring dentistry reinforces other efforts to achieve sustainable health systems. **Under this new guiding principle that we urge WHO to consider, important issues around AMR and the phase down of use of dental amalgam can be covered**, guiding the strategic objectives on oral health promotion, prevention, and the oral health research agenda, as well as WHO and Member States' responsibilities towards sustainability in dentistry.
Strategic Objectives	**Strategic Objective 1: Oral Health Governance**		25-26	**We fully align with this strategic objective**, with the ultimate goal being that oral health services are recognized, integrated, covered, and well-resourced as an essential health service. We also appreciate the importance of working across stakeholders to maintain political and resource commitment and address upstream determinants. Regarding the national oral health unit, we suggest the following edit: "A dedicated, qualified, functional, well-resourced, and accountable oral health unit should be established or reinforced within noncommunicable disease structures and other relevant public health services and **should address both preventive and curative efforts**."
	Strategic Objective 2: Oral Health Promotion and Oral Disease Prevention		27-28	**We fully align with this strategic objective** and, given equal access to promotive and preventive services remains a challenge, we suggest the following edit: "Strategic objective 2 calls for evidence-based, cost-effective, **population-wide** and sustainable oral health promotion and interventions to prevent oral diseases and conditions.". Also, regulatory policies are key to restrict access to unhealthy commodities, but **the *Global strategy* should also refer explicitly to promotive public policies**, for instance, to increase access to healthy diets – such as setting market incentives, subsidies to buy fresh fruits and vegetables, etc. It is important to stress under this section that **only a combination of policies will ensure the success of oral health promotion and oral disease prevention efforts**.

	Strategic Objective 3: Primary Oral Health Care	29-30	**We fully align with having PHC as both a strategic objective and a guiding principle** to ensure access to oral health services for all, and we commend the mention of referrals in this process, the importance of financial protection, and access to essential consumables and medicines for oral health. Ensuring oral health workers are also part of primary care teams is an essential step. We, however, ask WHO to have a separate and specific strategic objective on *Oral Health Workforce*, addressing the challenges around health workforces' education, planning, and collaboration and specifying what is meant by: "[…] work side-by-side with other health workers in tackling oral health conditions and other non-communicable diseases, with a focus on addressing common risk factors and supporting general health check-ups".
	Strategic Objective 4: Oral Health Information Systems	31	**We fully align with this strategic objective** – having strong health information systems for oral and general health is a key element of health systems. For instance, without a strong oral health information system, Member States cannot implement a needs-based approach to oral health workforce planning. Existing surveillance instruments need to be reinforced by including oral health modules and WHO should help identify standardized oral health indicators. For instance, **WHO's STEPwise Approach to NCD Risk Factor Surveillance (STEPS) has a module on oral health that can be mentioned in the *Global strategy***.
	Strategic Objective 5: Oral Health Research Agenda	32	**We fully align with this strategic objective** – the scope of the oral health research agenda needs to span across health, behavioural, and social science disciplines to better understand both the complexity of clinical associations between oral and general health, and the challenges in implementing dental public health interventions and integrating oral health services. We strongly welcome the mention of cost-effectiveness analyses, and **we suggest for "alternative dental restorative materials" to be replaced by "dental restorative materials that can fully replace dental amalgam" for clarification**.
	Suggested additional strategic objective: **Oral Health Workforce**	New	**We urge WHO to consider the addition of a new strategic objective on oral health workforce specifically**, in line with the guiding principle: *A new oral health workforce model to respond to population needs*. This will help address the different challenges affecting the oral health workforce, such as education, retention, geographical distribution, planning, and intra- and inter-professional collaboration. **It needs to be specificized how oral health workers can help address shared risk factors** (e.g., via tobacco cessation support, dietary advice, etc.) **and support general health check-ups** (e.g., performing screenings for oral cancer, diabetes, and hypertension). Also, non-oral health workers can be trained to deliver brief oral hygiene interventions performing a risk assessment and referring patients to a dentist when relevant.
Role of Member States,	**WHO**	33-38	We commend the roles and work of WHO in the oral health response, and welcome the commitments made under the *Global strategy*, including around collaboration with global public health partners. **We ask WHO to consider and reflect on the collaboration with regional WHO offices for the**

Partners and Secretariat			**implementation of this strategy. We look forward to the announced oral health data platform, and we suggest adding more information on this** – for instance, whether this will help promote standardized indicators on oral health, obtain global analyses and report on the oral health status, and monitor progress made by Member States integrated oral health within their national health systems. We ask WHO to coordinate the upcoming 2030 targets and cost-effective interventions on oral health with efforts around the NCD implementation roadmap 2023-2030 for a unified NCD response, and to classify noma as a neglected tropical disease (NTD) within the road map for NTDs 2021–2030 to bring attention to this neglected disease increasing access to noma prevention and care to those who need it.
	Member States	39-44	We welcome the whole-of-government and whole-of-society approach to Member States' roles and responsibilities in the oral health response, and the importance for them to allocate resources and surveillance capacity to oral health services and the oral health workforce. **We also welcome the request for Member States to recognize fluoride toothpaste as an essential product within national essential medicines lists. We ask WHO to replace "advocating** for health taxes or regulation of the sale and advertisement of unhealthy products […]" to "implementing health taxes or regulation of the sale and advertisement of unhealthy products […]", and "advocating for its [fluoride toothpaste's] recognition as an essential health product within the national list of essential medicines" to "recognizing it [fluoride toothpaste] as an essential health product within the national list of essential medicines". **Member States should also be responsible for including dentistry in AMR efforts and develop country-wide emergency plans that ensure the uninterrupted provision of essential oral health services.**
	International Partners	45-46	**We align with this section** but the mentioning of **collaboration of international partners with national actors to ensure implementation** at the regional and national levels should be added.
	Civil Society	47-48	We welcome the recognition of civil society in the oral health response, including the role of people living with and affected by oral diseases, as well as how they can help assess progress. **This section could be strengthened further though.** For instance, the second paragraph can read as follows: "Civil society can lead grass-roots mobilization and advocacy for increased focus within the public agenda on oral health promotion and the prevention and control of oral diseases and conditions and **ensure Member States are accountable for their commitments**. **Civil society can denounce industry interference and directly advocate public policy and regulation** against unhealthy commodities, support governments in implementing risk factor programmes (including on tobacco control) and promote the availability of healthy products and fluoridated toothpaste (for instance, through subsidization or reduced taxes)". **It is important to specify that by engaging people living and affected by oral diseases (not just amplifying their voices), WHO and Member States can identify the real gaps in meeting people's needs**, making oral health services effective and relevant to the beneficiaries they

			are intended to serve. **And the same applies with health workers, by engaging them, WHO and Member States can identify the real challenges faced by the workforce and affecting retention rates and planning outcomes.**
	Suggested addition: **Academia**	New	**If research is a strategic objective of the *Global strategy*, a specific stakeholder mentioned here should be academia** (as it has been mentioned in WHO's discussion paper on draft recommendations for the prevention and management of diabetes over the life course, including potential targets, dated as of 17 August 2021). The following can be added under academia: "Consolidate and expand the evidence base on oral diseases causes and associations with NCDs and general health, health outcomes from oral health treatments, oral health inequalities, and cost-effectiveness analyses; and on interventions at the individual, community and societal level." "Engage health sciences with social scientists to consolidate and expand the evidence base on behavioural change interventions for oral health promotion and oral disease prevention."
	Private Sector	49-51	**We welcome the different ways in which the private sector can contribute to the oral health response**, by promoting good oral health in the workplace; disengaging from industry interference and supporting access to essential products; and the role of dental private practice.

We urge WHO to develop a *Global strategy* that is robust, time-bound, and implementation-oriented encompassing more ambitiously all the different areas that require reform in national health systems for oral health to become an integral element of NCD and UHC strategies.

The *Global strategy* would benefit from a more comprehensive description of all the implications that the associations between oral health, NCDs, and general health have for health systems. The importance of optimizing the oral health workforce to achieve the vision and goal of this *Global strategy* calls for a specific strategic objective on *Oral Health Workforce*. *Sustainability* should be also included as a guiding principle given the implications it has across the different strategic objectives of this *Global strategy*, and the responsibility that WHO and Member States have towards promoting and implementing a sustainable oral health response.

We stand ready to support WHO and Member States with the development and implementation of the *Global strategy*, the subsequent 2023 *Action plan for public oral health* (including its monitoring framework and 2030 targets), and the NCD “best buys” and other recommended interventions on oral health management, reinforcing the Global action plan for the prevention and control of NCDs 2013–2030 and its upcoming implementation roadmap 2023-2030.

On behalf of FDI and the co-signing organizations, we remain at your disposal for any questions or further information at advocacy@fdiworlddental.org.

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