Analysis of the updated WHO draft global strategy on oral health against the key asks and recommendations in FDI's joint response

February 2022

Following a public consultation process, the World Health Organization (WHO) made **the updated draft global strategy on oral health** available in January 2022, for approval at the 150th session of WHO's Executive Board (EB150) through decision **EB150(4)**. The revised version incorporates many of the suggestions made within **the joint response submitted by FDI with the support of 65 organizations**, including the call for a new strategic objective on the health workforce.

FDI commends many of the changes made to the strategy, viewing them as necessary to securing a more comprehensive and integrated oral health response. The continued **alignment with FDI's roadmap** – ***Vision 2030: Delivering Optimal Oral Health for All*** is also extremely encouraging to see. In particular, the revised vision of the *Global strategy*, "UHC [Universal Health Coverage] for oral health for all individuals and communities 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." This vision urges Member States to integrate oral health promotion, oral disease prevention, and basic oral healthcare within their UHC benefit packages, **reiterating the essentiality of oral health services and presenting oral health as a fundamental human right**.

Moreover, in line with pillar 3 of FDI's Vision 2030, "Building a resilient oral health workforce for sustainable development", FDI's joint response asked for a new strategic objective on the [Oral] Health Workforce, given the complex and comprehensive actions needed to optimize the health workforce to meet people's oral health needs. The **new strategic objective on Health Workforce brings in a strong focus on competency-based education, innovative planning models, and both intra- and inter-professional collaboration**. For this, the scope of practice of the different health professions involved in oral health promotion and oral healthcare needs to be defined in the context of a wider team approach, and the referral mechanisms must be reinforced. This objective **will need to address how current payment system models for oral health providers can be reformed to encourage a shift towards prevention** in oral healthcare.

During the consultation phase, FDI also commented that the strategy would benefit from a more comprehensive description of all the implications that the associations between oral health and general health have for health systems. The **updated version now specifies the co-morbidity burden of oral diseases with other noncommunicable diseases (NCDs)**, highlighting the link between periodontal disease and conditions such as diabetes and cardiovascular disease. Moving forward, and as reflected in the recently published joint FDI-NCD Alliance briefing note ***WHY and HOW to integrate oral health into the NCD and UHC responses***, it is **important for poor oral health to be considered as an NCD risk factor in itself**, given the influence it can have in disease and treatment outcomes.

FDI also suggested a new guiding principle on sustainability given the implications it has across the different elements of the strategy, and the responsibility that WHO and Member States have towards promoting a sustainable oral health response. Instead of a new principle, **the updated version now includes a standalone paragraph to raise awareness about the environmental importance of phasing down the use of dental amalgam, reducing the use of natural resources, and improving waste management**.

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Within the context of sustainability, FDI asked for reference **to the role of dentistry in efforts to reduce antimicrobial resistance (AMR)**, including through dental infection prevention and control, and antibiotic stewardship – as dentists currently prescribe up to 10% of antibiotics for human use worldwide. This is **still not acknowledged in the updated version**, despite an implicit reference to AMR when talking about the impact of COVID-19 on essential oral health services, including the increase in antibiotic prescriptions.

On a positive note, the update version brings **more attention to the social determinants of [oral] health**; different **public policies to reduce sugar intake, and tobacco and alcohol use** have been specified; more information on **noma**, a neglected oral disease, has been provided; and there is **explicit mention of the high out-of-pocket payments and catastrophic health expenditure associated with oral healthcare specifically**.

While most of the updates of the *Global strategy* have been very positive, there is **one big setback in terms of recognizing the role that the oral health community plays in society: national dental associations (NDAs) are currently incorrectly depicted as private sector in the updated version**. Health professional bodies are a core element of civil society as recognized by WHO on many occasions. FDI has a membership of almost 200 organizations, most of them NDAs, who are independent and not-for-profit organizations promoting oral health to advance public health efforts in their countries and regions. For instance, many NDAs, such as in New Zealand or Thailand for example, have been very active in implementing public policies to reduce sugar consumption. We are therefore **urging WHO to rectify this misclassification and put the paragraph on national dental associations and other oral health professional organizations under the category of civil society, and not private sector**.

Furthermore, while FDI commended the inclusion of orofacial clefts as part of the oral disease burden in the *Global strategy*, the **updated version did not, as requested, reconsider the prevalence of orofacial clefts to be 1 in 700 births** when taking into account the prevalence of all clefts of the lip and palate together with considerable ethnic and geographical variation, and to **reflect the many risk factors associated with orofacial clefts**: such as tobacco and alcohol use, exposure to certain chemicals and medications, and poor nutrition during pregnancy. Orofacial clefts **should also be presented as a severe condition**, leading to high rates of infant mortality in settings with no timely access to quality surgery.

Finally, it is important to highlight that **there are many opportunities to advance different NCD areas through this *Global strategy***. For instance, the updated version brings special attention to smokeless tobacco as part of tobacco control policy; the social implications of alcohol use are also reflected in, and associated with, the prevalence of traumatic dental injury; more action on sugar intake reduction can be channelled through oral health promotion efforts; and the relevance of HPV vaccination in the context of oral cancer has also been highlighted.

What's next?

The WHO's draft global strategy on oral health will be **discussed and submitted for final approval at the 75th session of the World Health Assembly (WHA75)** from 22–28 May 2022. We understand that the *Global strategy* can still be further updated if requested by Member States prior to WHA75, and **FDI will be advocating for the improvements highlighted above, and we encourage our network to do the same** and further support the development and implementation of the *Global strategy* and it subsequent action plan and monitoring framework on oral health in line with Vision 2030.

The following pages contain a detailed analysis of the updated WHO's draft global strategy on oral health against the key asks and recommendations in FDI's joint response. Please note that all the responses submitted during the public consultation for the Global strategy can be accessed here.

Section	Paragraph in first version	FDI's comments on the first version	Paragraph in updated version	Main changes on the updated version
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.**	1	No substantial changes were made, although worth noting that maybe the timeframe cannot be indicated as it was not specified in the resolution on oral health tasking the development of this *Global strategy* (**WHA74.5**).
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.	2	In line with our comment, reference was made to the resolution on **social determinants of health** (**WHA74.16**).
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	3	The **definition of oral health was changed** to: *"Oral health is the state of the mouth and teeth. It enables individuals to perform essential functions, such as eating, breathing and speaking, and encompasses psychosocial dimensions, such as self-confidence, well-being and the ability to socialize and work without pain, discomfort and embarrassment. Oral health varies over the life course from early life to old age, is integral to general health and*

		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.		*supports individuals in participating in society and achieving their potential."* While this remains a very strong definition and refers to the state of the mouth and teeth (and not only to their well-being), it would have been important to also include that oral health involves the performance of essential functions without pain, discomfort, and embarrassment, but also **without disease** as per our comment.
Global Overview of Oral Health: 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. 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.	4	No substantial changes were made.
	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	5	**On noma:** It is now specified that noma is a noncommunicable necrotizing disease, that typically occurs in young children living in extreme poverty, and that it starts as a lesion of the gums inside the mouth destroying the soft and hard tissues of the mouth and face. Our comment on the importance to specify that the aetiology of noma is unknown was processed under updated para 13. The *Global strategy* continues not to highlight the lack of data on noma. **On orofacial clefts:** The prevalence of cleft lip and/or palate remains unchanged and it's unclear where the number "1 in 1500 births" comes from as the references used say that the prevalence for only cleft palate is approximately 1 in 1500 births (**WHO, 2020**) or 1 in 1000 births for cleft palate, cleft lip, and

[*] 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

		relevant when talking about the burden of oral diseases and shows the lack of prioritization and (oral) health surveillance capacity. • **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. 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.		cleft lip and palate (Salari N, *et al.* 2021). The *Global strategy* continues not to highlight clefts as severe conditions, especially when there is no timely access to quality surgery.
	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.	6	The following paragraph was added in line with our comment: *"**Oral diseases often have comorbidity with other NCDs**. Evidence has shown an association between oral diseases, particularly periodontal disease, and a range of other NCDs, such as diabetes and cardiovascular disease."*
Global Overview of 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	7 8	This was divided into two paragraphs. The updated para 8 now says in line with our comment: *"**High out-of-pocket payments and catastrophic health expenditure associated** with oral health care often lead people not to seek care when needed."*

Social and Economic Costs of Poor Oral Health		oral healthcare, often leading people not to seek care when needed.		Importantly, in the updated para 7, **stigmatization** has been also added as a personal consequence of untreated oral diseases and conditions.
	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.	9	In line with our comment, ***"older people living alone or in care homes"*** were included as part of the vulnerable members of societies disproportionately affected by oral diseases and conditions. Importantly, **people *"living in remote and rural communities"*** were also mentioned as part of this group.
	-	-	10	An **additional paragraph on sustainability** was added under this section, which could have been inspired by our suggestion to add a guiding principle on sustainability given the implications that sustainability has for the oral health response: *"The environmental impact of the oral health care system is a great concern, as shown in the Minamata Convention on Mercury, a global treaty that obliges parties to implement measures to phase down the use of dental amalgam, which contains 50% mercury. Other environmental challenges related to oral health care include the use of natural resources, such as energy and water; the use of safe and environmentally sound dental material and oral care products; and sustainable waste management."*
Global Overview of Oral Health: 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".	11	In line with our comment, **social determinants of health** were also mentioned under this section and defined as: *"[…] the structural, social, economic and political drivers of oral diseases and conditions in society."*

	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. 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."	12 13	This was divided into two paragraphs. The updated para 12 mentioned as oral disease risk factors ***"both smoking and smokeless tobacco"*** in line with our comment. Importantly to note that mental health conditions were added as part of the leading NCDs sharing risk factors with oral diseases. The updated para 13, in line with our comment, tried to provide **more background on the risk factors associated with cleft lip and palate**, mentioning maternal active or passive tobacco smoking, and with **traumatic dental injury**, mentioning alcohol use, traffic accidents, and sports injuries. This is a very positive development, however, **the many risk factors associated with cleft lip and palate should be reflected**: not only smoking, but tobacco and alcohol use, exposure to certain chemicals and medications, and poor nutrition during pregnancy. The fact **that the aetiology of noma is currently unknown was flagged** in the updated para 13 in line with our comment. Other risk factors were mentioned/specified in association with noma: vaccine-preventable diseases, and deficiencies in water, sanitation, and hygiene as part of poor living conditions.
Global Overview of Oral Health:	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	14	These two paragraphs were restructured. In line with our comment, the updated para 15 **listed a series of public health policies to reduce the intake of free sugars and the use of**

Oral Health Promotion and Oral Disease Prevention		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.	15	**tobacco and alcohol**: *"Upstream strategies to reduce the intake of free sugars and the use of tobacco and alcohol include policies, taxes and/or regulation of the price, sale and advertisement of unhealthy products. Midstream policy interventions include creating more supportive conditions in key settings, such as educational settings, schools, workplaces and care homes."* However, **poor oral health could be better presented as an NCD risk factor** in itself, given the influence it can have in disease and treatment outcomes.
	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.	16	Under this paragraph, **fluoridation of the water supply** was specified as a community-based method for essential oral disease prevention.
Global Overview of Oral Health: 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**	17 18	This was divided into two paragraphs. The updated para 18 **defined the scope of essential oral health care**: *"Essential oral health care covers a defined set of safe, cost-effective interventions at the individual and community levels to promote oral health, as well as to prevent and treat the most prevalent and/or severe oral diseases and conditions, including appropriate rehabilitative services and referral."* And this included **reference to the importance of appropriate referral** in line with our comment.

		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.	19	This section also now mentions that oral health training has rarely focused on **optimizing the roles of the wider health team**. As per our comment, to optimize the engagement of a wide range of oral health workers, **it is important for them to have defined scopes of practice, access to an education and tools that encourage intra-professional collaboration, and clear referral mechanisms**. This could be better specified in the *Global strategy* and its subsequent action plan.
	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*. 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*	20	This section now mentions the **impact of COVID-19** on the provision of essential oral health care, but also **on public health programmes**, which addresses our comment about the need to also look at prevention strategies in health emergency planning. However, **the role of dentistry in AMR is still not acknowledged** in the *Global strategy*, despite an implicit reference to AMR when talking about the impact of COVID-19 on essential oral health services, including through an increase in antibiotic prescriptions.

		strategy (further down, we are suggesting adding a new guiding principle on sustainability).		
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.	21	The vision of the *Global strategy* was updated to: *"UHC for oral health for all individuals and communities by 2030, enabling them to enjoy the highest attainable state of oral health and contributing to healthy and productive lives."* This **remains very aligned with Vision 2030's pillar 1**.
	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.	22	The following addition was made in this section: *"In addition, upstream interventions are needed to strengthen the prevention of oral diseases and reduce oral health inequalities."* This reinforces our focus on the need for **more action on oral health promotion and oral disease prevention** that tackled the social and commercial determinants of [oral] health.
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.	23	No substantial changes were made.

Guiding 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.	24	No substantial changes were made. It was only specified that upstream actions are *"on the social and commercial determinants of oral health"*.
Guiding 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.	25	The paragraph now says, ***"related conditions and comorbidities"***, and the issue of comorbidities with oral diseases is now specified under *Global Overview of Oral Health: Oral Disease Burden*.
Guiding 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.	26	This principle has been slightly updated with a **focus on the competencies of the health workforce**, and not only the oral health workforce, to deliver essential oral health care services across the continuum of care. This is in line with our ask for more inter-professional collaboration, including training on oral health for non-oral health workers. Unfortunately, there is **no longer a reference to ensuring that the oral health workforce is of adequate size**. However, it now specifies that **oral health needs should be met by the health workforce, particularly for underserved populations**, which shows the importance of the adequate geographical distribution of oral health workers. It is now also specified that: *"The new WHO Global Competency Framework for Universal Health Coverage should guide the development of health workforce models for oral health."*
Guiding 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**	27	This principle now refers to the importance of engaging the perspectives of **people affected by poor oral health** (before it said, people affected by oral diseases and conditions). This helps moving away from the current disease-specific approach

		approach, putting people and not diseases at the centre of health systems, and breaking down the silo between oral health and general health.		in line with our comment. It also specifies that **people-centred care involves fostering a more holistic approach** to needs assessment, oral health literacy, self-care…
Guiding 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	**Our comment was not processed, although it is understood that essential oral health services should be accessible across the life course.** This principle has been slightly updated not only referring to the role of risk factors across people's life course, but also of the social and commercial determinants [as root causes of oral diseases and conditions]. Moreover, it was also added that *"These [strategies that include essential oral health care across the life course] may include age-appropriate, evidence-based interventions that are focused on promoting healthier eating, tobacco cessation, alcohol reduction and self-care."* This reinforces our focus on the need for more action on oral health promotion and oral disease prevention, **including by empowering people through health literacy and self-care**.
Guiding 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**.	29	Our suggestion was not really processed as, for instance, the new strategy objective on the Health Workforce doesn't refer to need to educate on evolving digital technologies for oral health. That said, the **strategic objective on Oral Health Care (updated para 40) now says that the role of digital technologies for delivery of accessible and effective essential oral health care should be examined**. Important to highlight that in the updated version, digital technologies are specified as being ***"Artificial intelligence (AI), mobile devices and other digital technologies"***.
Suggested additional guiding 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	-	This suggested guiding principle was not added, but see updated para 10, which is **a new paragraph on sustainability**. However, the *Global strategy* **continues not to refer to the role of dentistry in AMR**, which is an important element for sustainability in the oral health response.

		the oral health research agenda, as well as WHO and Member States' responsibilities towards sustainability in dentistry.		
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**."	30-32	**This strategic objective was divided into three paragraphs. Updated para 30 specifies that a** political and resource commitment to oral health, ideally, *"would include a **guaranteed minimum share of public health expenditure that is directed exclusively to national oral health programmes**."* Under para 31, on national oral health units, it is now specified that such units should include professionals trained in public health, and that they should not just seek integration within NCD/public health services but also within education services. These updates are very aligned with Vision 2030, but it's still important to highlight that such oral health units need to address both preventive and curative efforts. Under para 32, the following addition was made when referring to sustainable partnerships: *"For example, **collaboration between the ministry of health and the ministry of environment is critical** to address environmental sustainability within oral health care, such as the implementation of the Minamata Convention on Mercury and challenges related to the management of chemicals and waste (including mercury)."* This is indeed an area that requires strengthened collaboration.
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	33-34	This strategic objective was slightly modified to specify the role of **oral health education** for oral health promotion and self-care. Moreover, it specified that free sugars intake should be limited to less than 10% of total energy and ideally to less than 5% **in line with WHO guideline on sugars intake for adults and children**. When mentioning community-based methods to prevent dental caries, it now **specifies: *"such as fluoridation of the water supply where appropriate, topical fluoride application and the use of quality, fluoride toothpaste."*** All these changes are strongly in line with Vision 2030 and FDI's joint response.

		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**.		
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.	35-37	This is a new strategic objective (becoming *Strategic objective 3*) that follows FDI suggestion for a new strategic objective that focused on the health workforce for oral health, given the different challenges affecting the [oral] health workforce, and therefore the different areas needing action on, such as education, distribution, planning, and intra- and inter-professional collaboration. This new strategic objective specified the **need for an *"adequate number, availability and distribution of skilled health workers*** *to deliver an essential package of oral health services to meet population needs."* And it calls for **the planning and prioritization of oral health services to be included in all costed health workforce strategies and investment plans**. It also calls for a **wider team approach** including the different oral health professionals, but also "other **relevant health professionals who have not traditionally been involved** in oral health care, such as primary care physicians and nurses." It specifies that implementing **such approach may require reassessing and updating national legislative and regulatory policies** for the licensing and accreditation of the health workforce, which echoes FDI ask for the scope of practice of the different health professions involved in oral health promotion and oral healthcare to be defined in the context of a wider team approach. There is a **strong focus on competency-based education and the role of health educators**, and on how health professionals should be equipped to respond to the public health and environmental aspects of oral health services. The **competencies on evidence-informed decision-making, reflective learning about the quality of oral health care, inter-professional**

				communication and the provision of people-centred health care were highlighted. For oral health integration, the **role of intra- and inter-professional education and collaborative practice** is also highlighted.
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".	38-40	This is now *Strategic objective 4*. The **scope of essential oral health care is no longer described here**, but under the section *Global Overview of Oral Health: Oral Health Care Systems* (updated para 18). This strategic objective continues to highlight the role of health professionals at the PHC level to deliver oral health services but also for other NCDs. Although it **continues without specifying how oral health professionals 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). Other important changes to highlight are that when referring to the need to expand insurance policies and programmes for oral health services, it now specifies **private and public insurance policies and programmes**. It also added the role of **digital health technology for oral health services at PHC level**, saying this may *"include the development of policy, legislation and infrastructure to expand the use of digital health technologies, such as mobile phones, intra-oral cameras and other digital technologies, to **support remote access and consultation for early detection and referral to services for the management of oral diseases and conditions**."* Another change that was noted is the removal of the point on the role of oral health providers in reporting suspected abuse or neglect, but it might be covered under the subsequent action plan or under WHO's Health Workforce work.
Strategic Objective 4: Oral Health	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,	41-43	This is now *Strategic objective 5* and has been considerably expanded. When talking about areas for data collection, **it now also refers to data on social and commercial determinants, workforce, and oral health services readiness**. Now, when referring to **systems that can be used, demographic and health**

Information Systems		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***.		**surveys are specified** (this could include the STEPS survey). The **importance of protecting patient data** is also now mentioned, and there is an increased focus on **monitoring oral health inequalities**. There is also a **new para 43, referring to the role that digital technologies can play in oral health surveillance**: *"New oral health epidemiological methods, including high-resolution video, multispectral imaging and mobile technologies, have the potential to improve the quality of population-based oral health data while reducing costs and complexity. WHO's new mobile technologies for oral health implementation guide, for example, provides guidance on using mobile technologies for population-based and health service delivery surveillance."*
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**.	44-46	This is now *Strategic objective 6* and instead of referring to a new research agenda, it **highlights the importance of continuing with context and needs-specific research**, with a focus on the way forward. It highlights the **need for more research on implementation sciences** (such as on implementing the NCD "best buys"). **Additional research priorities** have been added on upstream interventions; barriers to access to oral health care; oral health inequalities; oral health promotion in key settings such as schools. The research areas into *"minimally invasive interventions, alternative dental restorative materials"* have been replaced by **just *"mercury-free dental restorative materials"***. There is also a **new para 46 with a focus on the importance of translating evidence into policy and clinical practice guidelines**: *"The translation of research findings into practice is equally important and should include the development of regionally specific, evidence-informed clinical practice guidelines. Researchers have an important role in supporting the development and evaluation of population oral health policies and evaluating and applying the evidence generated by new public health interventions."*

Role of 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 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.	47-52	This section now includes the **importance of working with WHO collaborating centers**, but there is still no reference to collaboration with the regional WHO offices. Updated para 48 now says: *"WHO will also collaborate with Member States to ensure that there is uptake and accountability for the strategy at the national level, particularly in national health policies and strategic plans."* This is an important development as it **highlights the role that WHO will have in holding governments accountable for their commitments through the upcoming monitoring framework**. It now also refers to the need for comprehensive **technical guidance** from WHO ***"on environmentally sustainable oral health care**, including mercury-free products and less invasive procedures."* In reference to the oral health data platform and WHO oral health information systems and surveillance activities, it now says that **WHO will develop new standardized data-gathering technologies and methods**, in addition to oral health indicators for population health surveys.
Role of 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	53-58	Overall, across the updated *Global strategy*, the importance of **both national and subnational strategies** to advance oral health has been highlighted. Under this section in particular, there were some changes made, but **there was no reference to the responsibility that Member States have to involve the oral health community in AMR efforts and develop country-wide emergency plans** that ensure the uninterrupted provision of essential oral health services, in line with our comments. Changes worth noting are **the increased focus on Member States' role to promote a wider team approach and competency-based education** for health workers that meet and respond to populations' evolving oral health needs. The term *"advocating"* for Member States was maintained instead

		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.**		of using more action-oriented verbs such as "implementing", "recognizing" in line with our comments. An **emphasis on evidence-based regulatory measures** was added to address the underlying determinants of health; however, there is **no longer specific mention of health taxes or regulation of the sale and advertisement of unhealthy products**, and it is now encouraged that Member States **work *"with commercial entities*** *to encourage them to reformulate products to reduce sugar levels, reduce portion sizes or shift consumer purchasing towards products with lower sugar content."* On a positive note, ***"implementing community-based methods to prevent dental caries"*** has been added as an area of work for Member States. It now also specified their role *"developing and standardizing updated methods and technologies for gathering oral health epidemiological data,* ***integrating electronic dental and medical records*** *[…]"* – a point strongly in line with Vision 2030 as integrated records is an essential step to improve referral mechanisms. Among the areas that Member States must prioritize for analysis ***"operational research"*** has been added, in addition to oral health system and policy data, and the evaluation of oral health interventions and programmes.
Role of 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.	59-60	International partners are specified as being: *"**UNICEF, UNEP, the International Telecommunication Union and other United Nations agencies, as well as development banks and other** international partners"*. Their role in collaborative research has been replaced by their role in ***"developing targets and indicators for streamlined global collaboration"***, highlighting their role in implementation and surveillance.
Role of 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	61-62	This section has been revised by specifying that *"Civil society is a* ***key stakeholder in setting priorities for oral health care services and public health****."* It also specifies the need for

		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.**		*"Actively engaging in **meaningful partnership with civil and community organizations**, as well as **co-designing/co-producing** innovative approaches to oral health care, provide an opportunity to develop more responsive and sustainable models of care."* There is now reference to the role of civil society (and consumers) in advocating towards governments and industries for the availability of healthy products, but **there is no explicit reference to the role of civil society in accountability and denouncing industry interference** as we suggested. When talking about networks for the availability of healthy **food and beverages**, it is specified now that these should be **low in free sugars**.
Suggested additional roles section: **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	-	This suggested section was not added.

		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."		
Role of 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.	63-66	This section was updated to say ***"reducing"*** **instead of** ***"eliminating"*** **the marketing, advertising and sale of products that cause oral diseases and conditions**, but it did provide **examples of these products**: *"such as tobacco products and food and beverages that are high in free sugars."* It was also specified that *"Increased* ***private sector transparency and accountability*** *is a key component of such actions."* Importantly, *"Dental professionals in the private sector can support national governments in implementation of the strategy through public-private partnerships for the provision of essential oral health care"* has been now replaced by *"National dental associations and other oral health professionals organizations have a responsibility to support the oral health of their communities. They can collaborate with and support national and subnational governments in implementing the strategy through the provision of essential oral health care, […]."* **We don't understand why national dental associations are currently and incorrectly depicted as private sector** as WHO has always recognized health professional bodies as member of civil society and **national dental associations are independent and not-for-profit organizations promoting oral health to advance public health efforts** in their countries and regions. **<u>This misclassification must be corrected.</u>**

Annex: List of organizations that joined FDI's submission to WHO consultation on the first draft global strategy on oral health (September 2021)

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