Interim Report

of the

Working Group on Oral Health and Dental Care

Health Bureau
The Government of the
Hong Kong Special Administrative Region
of the People's Republic of China

Content

List of Abbreviations

CCF	Community Care Fund
CSSA	Comprehensive Social Security Assistance Scheme
DH	Department of Health
EDAP	Elderly Dental Assistance Programme
EHVS	Elderly Health Care Voucher Scheme
HKCH	Hong Kong Children's Hospital
HTC	Healthy Teeth Collaboration
ID	Intellectual disability
NGO	Non-governmental organisations
OALA	Old Age Living Allowance
ODCP	Outreach Dental Care Programme for the Elderly
OHS	Oral Health Survey
RCHE	Residential care homes for the elderly
SDCS	School Dental Care Service
SOCS	Special Oral Care Service
SWD	Social Welfare Department
WHO	World Health Organisation

Summary

In response to the increasing demand for public dental services, the Chief Executive announced in the 2022 Policy Address to conduct a comprehensive review of the dental services provided or subsidised by the Government. The review would cover the relevant policy objectives, service scopes and service delivery models. The Working Group on Oral Health and Dental Care (Working Group) was established in end 2022. The terms of reference and membership list of the Working Group are attached as Annex 1.

Three meetings were convened by the Working Group in 2023. The work approach was first discussed, and it was agreed that enhancing the overall level of citizens' oral health should be the goal of the review. With this goal in mind, the scope and effectiveness of the existing oral care measures as well as dental service programmes were examined. Suggestions were then made on the long-term strategic development for oral health and dental care. The Working Group consolidated the following frameworks to form the basis of which enhancements to oral health care and dental services should be discussed in the whole review:

(1) To determine the service scope of primary dental services suitable for different age groups with the premise of preventing oral diseases according to the strategies of the Primary Healthcare Blueprint, and enhancing the oral health of the community through retention of natural teeth;
(2) To define various underprivileged groups, and review the existing needs and service coverage with a view to providing more targeted dental services;
(3) To review the manpower resources and related training arrangements of various dental professionals to tie in with the strategic development needs of the overall oral health and dental care; and
(4) To review the supporting arrangements for dental services, including the service models and financial arrangements under which services provided or subsidised by the public sector are delivered as well as the use of electronic health record, with a view to ensuring service efficacy.

The Working Group studied the service scope of primary dental services suitable for different age groups, and agreed that primary dental services are provided mainly for prevention of dental diseases. Ancillary dental workers should be allowed to play a more significant role, and the existing primary healthcare system should be made use of in the promotion of oral health and dental care to different age groups.

The Working Group also considered that the provision of public curative dental services must be targeted and prioritising underprivileged groups. The Working Group defined major categories of underprivileged groups, including persons with financial difficulties, persons with disabilities or special needs, and high risk groups.

The Working Group then reviewed the existing dental service programmes provided or subsidised by the Government, including the free emergency dental service provided to the general public (commonly known as General Public Sessions). Some have been successful in improving the oral health of the target beneficiaries. Others have not yet fully achieved the original policy objective, and require more guidance to promote the use of preventive dental services.

In order to plan for the development of dental services, the Working Group considered that some key factors should be taken in account, such as the notion that prevention is better than cure, ageing population, financial sustainability and manpower supply of dental professionals. At this stage, the Working Group recommended the Government to enhance the manpower supply of dental professionals, to make better use of the service capacity of non-governmental organisations (NGOs) and the private sector, and concluded the following areas for further service improvement (not in order of priority):

(1) To tackle the tooth decay problem among preschool children;
(2) To assist the adolescents in sustaining the habit of regular dental check-ups and developing this into a life-long habit upon leaving the School Dental Care Service;
(3) To consider making a better use of the resources already put in subsidising removable denture, by directing the emphasis on primary dental services;
(4) To extend special care dental services to cover persons with disabilities or special needs other than intellectual disability; and
(5) To enhance the prevention of dental diseases for people with medical conditions who are at high oral health risk at the early stage of the medical conditions.

In light of the preliminary recommendations of the Working Group, the Government plans to implement the following measures in the coming two years:

(1) to launch the Primary Dental Co-care Pilot Scheme for Adolescents as an interface with the School Dental Care Service for primary school students by providing partial subsidies for private dental check-ups services for adolescents aged between 13 and 17 so as to promote their habit of regular dental check-ups for the prevention of dental diseases;
(2) to collaborate with NGOs to enhance the emergency dental services targeting at the underprivileged groups with financial difficulties, to expand service capacity, service points and service scope to promote early identification and timely intervention of dental diseases;
(3) to strengthen the special care dental services currently provided by the Department of Health to persons with disabilities and special needs;
(4) to enhance the Elderly Dental Assistance Programme funded by the Community Care Fund to encourage early identification and timely intervention of dental diseases among the eligible elderly;
(5) to amend the Dentists Registration Ordinance to provide new pathways for admission of qualified non-locally trained dentists to practise in specified institutions and modernise the regulatory framework for dentists and ancillary dental workers ; and
(6) to gradually increase the training places for ancillary dental workers and provide tuition sponsorship.

The Working Group will continue to discuss in 2024 on topics that have not yet been completed in the above frameworks. The target is to submit a Final Report before the end of its tenure with recommendations on realising the policy directions and developing dental services.

Chapter 1. Definition of Oral Health

Oral health is integral to general health and is essential for individuals in performing daily activities and participating in society. The World Health Organisation ("WHO") defines oral health as the state of the mouth, teeth and orofacial structures that 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 socialise and work without pain, discomfort and embarrassment[1].

2. The negative consequences of poor oral health are not just limited to the oral cavity. An increasing amount of research is showing the association of oral health with a number of systemic health conditions. In very young children, tooth decay (dental caries), infections and abscesses may affect the developing permanent teeth as well as the health and development of the affected children. In functionally dependent elderly, the accumulation of plaque and bacteria in the oral cavity as a result of poor daily oral hygiene may be hazardous to their health. There is now sufficient evidence to prove the inter-relationship of gum diseases (periodontal diseases) and type II diabetes mellitus. The management of gum disease has a positive effect on the control of diabetes. Even among adults and functionally independent elderly, pain and discomforts arising from oral health conditions can be very distressing to daily life, as reflected in the local saying 'toothache is worse than a major illness'. Disabilities arising from oral problems may affect performance at school among children and lead to work hour loss in adults.

3. Globally, the dental diseases causing the most functional problems to normal life include complete tooth loss, tooth decay in the deciduous and permanent dentition, gum diseases and oral cancer. In Hong Kong, oral cancer is relatively uncommon, but untreated tooth decay affected 49% of the 5 years old children population and 31% of the adult age group. About 40% of the adult age group and 59% of elderly age group suffered from moderate to severe gum diseases respectively[2]. The Working Group agreed that dental

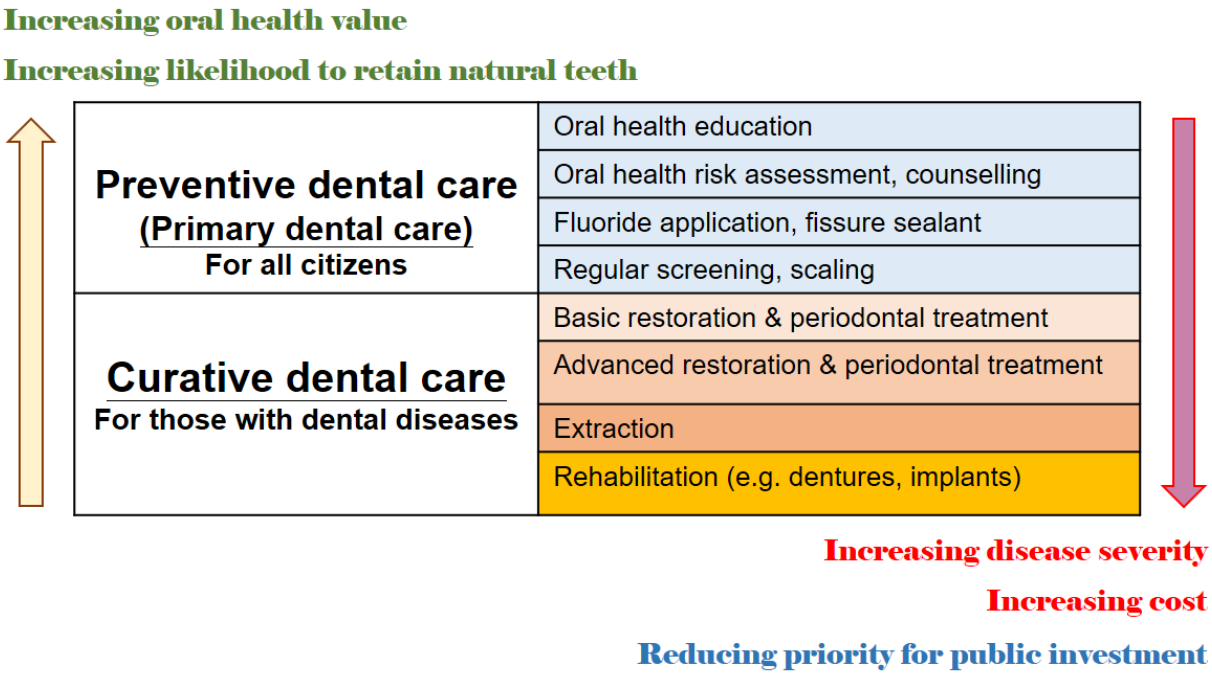
[1] Global oral health status report: towards universal health coverage for oral health by 2030. Geneva: World Health Organization; 2022

[2] Oral Health Survey 2011, Department of Health

diseases, mainly tooth decay and gum diseases, are the major dental public health threats to be tackled in Hong Kong.

4. The costs of managing dental diseases are high to individuals and to the community, which can lead to significant economic burden. The most cost-effective strategy should be prevention of tooth decay and gum diseases in order to avoid the potential functional and economic impacts. The Working Group considered that the concept shown in Figure 1 as fundamental in further deliberation and in making recommendations on oral health and dental care. This is in line with the strategies of prevention, early identification and timely intervention of chronic diseases promulgated in the Primary Healthcare Blueprint. It is the opinion of the Working Group that there is also a need to shift the focus from curative treatment to the prevention of disease in both the oral healthcare system and people's mindset.

Figure 1. Definition of primary dental care.



5. Maintaining personal daily oral hygiene habit and adopting a lifestyle conducive to oral health are the keys to promoting personal oral health. The lifestyle conducive to oral health recommended by Department of Health (DH) is attached as Annex 2. The Working

Group considered that the Government should help and promote citizens of all age groups to adopt the recommended lifestyle through primary dental care as shown in Figure 1. Focusing public resources on preventive dental services rather than curative dental services is more likely to bring about improvement in oral health for the population in the long run.

Chapter 2. Review of Existing Dental Services Provided or Subsidised by the Government

6. The Working Group conducted a comprehensive review of the dental services provided or subsidised by the Government to identify room for improvement. The details of the review are listed below.

7. The main oral health problem at the childhood stage is tooth decay. The deciduous dentition is affected among preschool children and the newly erupted permanent teeth are affected among primary school children.

Preschool children

Table 1. Tooth decay in the deciduous teeth of children from 1960 to 2011.

Time of study	With experience of tooth decay		With untreated tooth decay	
	Mean no. of teeth	% of population	Mean no. of teeth	% of population
1960[3]	9.2	89.0%	8.0	#
Fluoridation of drinking water since 1961				
1968[4]	5.3	85.1%	5.2	#
1980[5]	4.3	75.4%	4.0	#
1987[6]	3.0	63.3%	2.3	#
2001[7]	2.3	51.0%	2.1	49.4%
2011[8]	2.5	50.7%	2.3	49.4%

Data not available in original reports.

8. The tooth decay status in the deciduous teeth of preschool children is shown in Table 1. The level of tooth decay dropped after the fluoridation of drinking water in 1961. However, there was little change after 1987. Half of the old children aged 5 were found to be affected by tooth decay in 2011, which was not satisfactory.

[3] Children aged 6-8, in Report of the 1st (pre-fluoridation) dental survey of school children in Hong Kong.
[4] Children aged 5-6, in Dental Disease Pattern – Hong Kong WHO 1968 Survey.
[5] Children aged 6, in Report on the fluoridation dental survey of primary school children in Hong Kong.
[6] Children aged 6, in A report on a dental survey on primary school children in Hong Kong.
[7] Children aged 5, in Oral Health Survey 2001, Department of Health
[8] Children aged 5, in Oral Health Survey 2011, Department of Health

9. To address the tooth decay problem among preschool children, the Faculty of Dentistry of the University of Hong Kong launched the Jockey Club Children Oral Health Project in 2019. The Project is supported by the Hong Kong Jockey Club Charities Trust up to the 2025-26 academic year. The Project is serving more than 180 000 kindergarten students aged 3 to 6, by providing free dental check-ups and applying silver diamine fluoride to control tooth decay. Through the oral health education talks of the Project, dentists of the Project team introduced the common oral health problems and oral care methods to parents. Personalised counselling was provided to children with severe tooth decay and their parents. Training was also provided by the Project team to kindergarten teachers to enable them to convey oral health messages to students. According to the data collected by the Faculty of Dentistry of the University of Hong Kong, the Project was effective in slowing down tooth decay among preschool children[9]. It is the opinion of the Working Group that this Project should be continued.

10. Tooth decay was still found to be present among kindergarten children aged 3 to 6 despite the fact that such decay could be arrested by silver diamine fluoride. This implied that the lifestyle of some children had been at high risk of tooth decay at the stage before 3 years old. The Working Group considered that it is still necessary to reinforce the establishment of appropriate lifestyle by parents to their kids prior to the age of 3 in order to prevent the onset of tooth decay later in their life course.

Primary school children

11. The tooth decay status of the permanent teeth of primary school children over the years is shown in Table 2. Similar to the case of preschool children, the level of tooth decay dropped after the fluoridation of drinking water in 1961. Yet there was little change in the first few years after the establishment of the School Dental Care Service (SDCS) in 1980. After the adoption of a preventive policy for the SDCS after 1991, the level of tooth decay among 12 years old children was found to be further lowered in the Oral Health Survey (OHS) 2001 and was kept at a low level in 2011.

[9] F Zheng, E Lo, CH Chu. Outreach Service Using Silver Diamine Fluoride to Arrest Early Childhood Caries. International Dental Journal 2023;73(5):598-602

Table 2. Tooth decay in the permanent teeth of children from 1960 to 2011.

Time of study	With experience of tooth decay		With untreated tooth decay	
	Mean no. of teeth	% of population	Mean no. of teeth	% of population
1960[10]	4.4	94.9%	4.1	#
Fluoridation of drinking water since 1961				
1968[11]	2.0	68.3%	1.7	64.2%
1980[12]	1.5	57.3%	1.4	#
School Dental Care Service launched in 1980				
1987[13]	1.2	54.0%	0.3	#
Adoption of a preventive policy for the School Dental Care Service after 1991				
2001[14]	0.8	37.8%	0.1	6.9%
2011[15]	0.4	22.6%	0.1	5.4%

Data not available in original reports.

12. The DH has provided dental care including necessary dental treatment to primary school children since 1980[16]. Participating students were arranged to receive oral check-ups, basic dental treatment and preventive dental services at specified school dental clinics.

13. Service data indicated that the SDCS was effective in improving the oral health of primary school students after adopting the preventive policy (please refer to para. 30). The Working Group noted that there were suggestions to extend the SDCS to preschool and secondary school stages. The recommendation of the Working Group is included in Chapter 4.

Adults and elderly

14. In addition to the problem of tooth decay, adults and elderly face the problem of gum diseases as well as tooth loss due to delayed management of dental diseases or the spiral of repeated treatment and recurrence of dental diseases[17]. The level of oral health among adults and the elderly population in Hong Kong improved from 1991 to 2011

[10] Children aged 9-11, in Report of the 1st (pre-fluoridation) dental survey of school children in Hong Kong.
[11] Children aged 11-12, in Dental Disease Pattern – Hong Kong WHO 1968 Survey.
[12] Children aged 11, in Report on the fluoridation dental survey of primary school children in Hong Kong.
[13] Children aged 11, in A report on a dental survey on primary school children in Hong Kong.
[14] Children aged 12, in Oral Health Survey 2001, Department of Health
[15] Children aged 12, in Oral Health Survey 2011, Department of Health
[16] Including students with intellectual disability / physical disability (including cerebral palsy) in special schools up to the age of 18.
[17] Curative dental services may repair the consequences of dental diseases but are unable to affect the disease processes. Therefore dental diseases are likely to recur.

(Table 3). However, it was found in the OHS 2011 that a substantial proportion of adults and elderly still had varying degrees of untreated tooth decay and gum diseases, indicating the continued presence of inadequate self-care and/or inappropriate lifestyle related to oral health. The survey also found that adults and elderly tended to ignore oral symptoms and had delayed the seeking of dental care even for severe problems such as pain that disturbed sleep. Delayed management of dental problems would only result in further deterioration leading to more suffering, more complex and costly treatment, or even extraction of teeth. The Working Group suggested that adults and elderly have to change their mindset from curative-oriented to preventive-oriented in order to reduce the risk of further tooth loss in future.

Table 3. Oral health status of adults and non-institutionalised elderly from 1991 to 2011.

	1991[18]	2001[19]	2011[20]
Adults (35-44 years old)			
No. of teeth present	27.5	28.1	28.6
% with total tooth loss	0%	0%	0%
No. of teeth with untreated caries	1.0	0.7	0.7
% with untreated caries	#	32.0%	31.2%
% with periodontal pocket	#	46.0%	39.6%
Non-institutionalised elderly (65-74 years old)			
No. of teeth present	15.0	17.0	19.3
% with total tooth loss	12.0%	8.6%	5.6%
No. of teeth with untreated caries	1.4	1.3	1.3
% with untreated caries	#	52.9%	47.8%
% with periodontal pocket	66.0%	55.3%	59.2%

Data not available in original report

15. With the aim to provide financial incentives for elderly to choose private healthcare services that best suit their health needs, the Government launched the Elderly Healthcare Voucher Scheme (EHVS) as a pilot scheme in 2009. The amount claimed by dentists under EHVS was about $343.3 million dollars in 2022. The Working Group noted that the current mode of completely undesignated and unguided use of healthcare vouchers without monitoring of the healthcare services being provided is not particularly conducive and

[18] Oral health survey by Faculty of Dentistry, University of Hong Kong
[19] Oral Health Survey 2001, Department of Health
[20] Oral Health Survey 2011, Department of Health

effective to achieving the objective of enhancing primary healthcare for the elderly. The Working Group reviewed the claims made by dentists under the EHVS and found that more curative dental services were utilised than preventive dental services. In terms of the number of claims made, tooth extraction was most frequently used, followed by fitting of dentures. The Working Group understands that some elderly may tend to save the healthcare vouchers up for curative healthcare services, but the delayed management of dental diseases would only lead to deterioration and further to tooth loss. The Working Group considered it necessary to change the mindset of elderly, and provide guidance to encourage them to make use of the EHVS for prevention, early identification and timely intervention of dental diseases[21].

Persons with financial difficulties

16. For persons with financial difficulties, the Comprehensive Social Security Assistance (CSSA) Scheme provides a dental grant for its recipients to pay for dental treatment services[22]. Eligible CSSA recipients can approach the 77 dental clinics[23] designated by the Social Welfare Department (SWD) for dental examination and recommendation on necessary dental treatments. They may then choose to obtain relevant dental treatments from any registered dentists in Hong Kong, including those of the SWD designated dental clinics, according to the cost estimate made by the designated dental clinic. The amount of grant payable will be based on the actual fee charged by the clinic, the cost estimated by the designated clinic or the ceiling amount set by the SWD in respect of the dental treatment in question, whichever is the less.

17. The Working Group noted that the dental grant under the CSSA Scheme covers the cost of preventive treatment (e.g. scaling).

[21] To make better use of resources to promote primary healthcare, Department of Health launched the Elderly Healthcare Voucher Pilot Reward Scheme from November 13 this year for three years. For each year during this period, elderly persons only need to accumulate the use of vouchers of $1,000 or more on designated primary healthcare purposes such as disease prevention and health management services (including oral check-ups, scaling, filling, extraction, etc.) within the year (from January to December), and they will be automatically allotted a $500 reward into their voucher account by the eHealth System (Subsidies), which can be used on the same designated primary healthcare purposes, without the need for registration.

[22] Including tooth extraction, denture, bridge, post and core, scaling, filling and root canal therapy.

[23] As at November 2023.

18. The Elderly Dental Assistance Programme (EDAP) funded by the Community Care Fund ("CCF") was launched in September 2012. The EDAP aims to provide free removable dentures and related dental services (including dental check-ups, scaling, filling, extraction, radiographic examination, removal of crown/bridge and root canal therapy) to elderly with low income, now covering users of home-based long-term care services subvented by the SWD and all recipients of the Old Age Living Allowances (OALA) aged 65 or above (i.e. all OALA recipients). The Working Group reviewed the utilisation under the EDAP and found that the number of applicants was rather low, indicating that some eligible elderly had not benefited from the Programme. The Working Group also found that about 10% of the EDAP users had reported no improvement in chewing or eating after the denture treatment. Taking into consideration that the fitting of removable denture is a treatment category to address tooth loss and in accordance with the concept shown in Figure 1 (under para. 4), the Working Group opined that the priority of subsidising removable dentures should be reconsidered in order to make better use of limited resources. It may be more appropriate to put the emphasis on primary dental services such as dental check-ups and scaling.

Persons with intellectual disability

19. In order to improve the oral health of children with intellectual disability (ID), the DH set up a Special Oral Care Service (SOCS) in September 2019 in collaboration with the Hospital Authority at the Hong Kong Children's Hospital (HKCH). The programme targeted at preschool children under six years old with ID for early intervention and prevention of common oral diseases. The SOCS has also implemented an outreach dental service to provide free onsite dental check-ups and oral health education for the eligible children at Special Child Care Centres under the SWD. If necessary, children can be referred to the HKCH for follow-up dental treatment.

20. In light of the experience from the "Loving Smiles Service"[24], a programme named Healthy Teeth Collaboration (HTC) was launched by the DH in July 2018 to better cater

[24] Between August 2013 and July 2018, the former Food and Health Bureau had collaborated with the Hong Kong Dental Association, the Hong Kong Special Care Dentistry Association and the Evangel Hospital to launch a "Pilot Project on Dental Service for Patients with Intellectual Disability"(also known as "Loving Smiles Service"). Adult

for the dental service needs of adults with ID, provisionally up to July 2024. Five NGO dental clinics participating in the project provide free dental care services including dental check-ups, dental treatment and oral health education to adults with ID. If necessary, arrangements will be made for such persons to receive dental treatment under intra-venous sedation or general anaesthesia at a collaborating private hospital.

21. The Working Group considered that although the majority of persons receiving rehabilitation services under the SWD were persons with ID, there were persons with other types of disabilities who also had difficulties in obtaining dental services. The Working Group would like to see special care dental services like the SOCS and the HTC be extended to cover persons with disabilities and special needs other than ID.

Frail elderly

22. In 2011, the Government launched a three-year pilot project to provide free basic dental care (covering dental examination, scaling and emergency dental treatment) for elderly residing in residential care homes for the elderly ("RCHEs") or receiving services in day care centres through outreach dental teams set up by NGOs. These elderly are generally physically weak with frail conditions, hence making it difficult for them to receive dental services at dental clinics. The Government converted the pilot project into a regular programme entitled Outreach Dental Care Programme for the Elderly (ODCP) in October 2014.

23. The DH already pointed out in the OHS 2011 Report published in 2013 that dentists might have to offer no treatment to the dental diseases found in frail elderly, as the potential benefits of dental treatment must be weighed against potential risks indicated by their medical history and physical status. The poor oral health status seen in elderly in fact was a result of deteriorated self-care ability prior to using services of day care centre or moving into the RCHEs. The Working Group considered that it is necessary to strengthen the

patients with intellectual disability who had economic difficulties were subsidised to receive dental check-ups, dental treatment and oral health education in the dental clinics participating in the Pilot Project.

preventive dental service to groups with high risks to frailty, such as patients with dementia, stroke and Parkinson's Disease, in order to avoid dental diseases which cannot be treated.

Emergency dental service

24. The DH has long designated certain time slots through its 11 government dental clinics to provide free emergency dental service, generally referred to as General Public Sessions (GP Sessions) to the public. The scope of service includes treatment of acute dental diseases, prescription for pain relief, treatment of oral abscess and teeth extraction. Professional advice with regard to the individual needs of patients is also given at the GP Sessions.

25. The numbers of attendances to GP Sessions and the distribution by age group in 2018-19, 2019-20, 2020-21, 2021-22 and 2022-23 are set out in Table 4.

Table 4. No. of attendances (Percentage distribution of attendances by age group)

Age group	2018-19	2019-20	2020-21	2021-22	2022-23
0 to18	674 (1.8%)	1 345 (3.9%)	306 (1.3%)	312 (1.2%)	197 (1.0%)
19 to 42	5 636 (15.2%)	7 008 (20.4%)	3 893 (16.7%)	4 775 (17.6%)	3 288 (16.4%)
43 to 60	8 905 (24.1%)	6 870 (20.0%)	6 449 (27.7%)	7 559 (27.9%)	5 944 (29.7%)
61 or above	21 812 (58.9%)	19 090 (55.6%)	12 669 (54.3%)	14 421 (53.3%)	10 606 (52.9%)
Total	37 027 (100%)	34 313 (100%)	23 317 (100%)	27 067 (100%)	20 035 (100%)

26. The dental clinics under the DH are primarily for the Government to fulfil the terms of employment for provision of dental benefits to civil servants/pensioners and their dependents under the contracts of employment with civil servants. The dental services of these clinics are essentially provided for the above clients as employment benefits. The GP Sessions arrangement aims to provide limited supplementary assistance by utilising some service capacity of dental clinics. Due to manpower shortage and in response to the

COVID-19 outbreak, disc allocations under GP Sessions have been reduced by 25% or 50% since January 2020.

27. The Working Group noted the public demand for more disc quota in these GP Sessions. There were opinion that the insufficiency of disc quota had led to long queueing time for a disc. There was also demand for expansion of the scope of emergency dental service beyond pain relief and tooth extraction. Some expressed that the provision of dental services by queueing was not effective in targeting underprivileged groups in need. After reviewing the GP Sessions arrangement, the Working Group recognised the inability to increase disc quota due to the reduced manpower of Dental Officers in the Government. The expansion of tooth extraction service is also considered as not compatible with the goal of the Working Group to enhance the overall level of citizens' oral health through retention of natural teeth. To reduce the need for emergency dental treatment by promoting prevention, early identification and timely intervention of dental diseases would be a better strategy. A new service model should also be developed to enable targeted delivery of dental services to the underprivileged groups.

Chapter 3. Factors Considered by the Working Group

28. In the deliberation on dental services, the Working Group considered the following principles or factors were crucial ones that should be taken into account to ensure that the recommendations to be arrived at are relevant and appropriate to the local situation.

Prevention is better than cure

29. The OHS conducted by DH in 2001 found that 41% of the adults aged 35 to 44 and 63% of the elderly aged 65 to 74 agreed to the statement "tooth loss is part of ageing". However, evidence indicated that tooth loss can be prevented by preventive rather than by curative dental services. Curative dental services may repair the consequences of dental diseases (such as filling a decayed cavity by a dental restoration) but are unable to affect the disease processes (such as the mineral loss leading to the decayed cavity). Therefore such services are unable to resolve dental problems and dental diseases are likely to recur (such as the appearance of new decayed cavity). It is more likely for people to prevent tooth decay and gum diseases if they can adopt the lifestyle conducive to oral health (refer to Annex 2) and use preventive dental services such as topical fluoride or fissure sealant.

30. The success of the SDCS under the DH is a proof that preventive dental care can improve oral health. A study conducted by the University of Hong Kong several years after the implementation of the SDCS commented that "the programme has been effective in reducing the level of untreated caries, but was unable to affect the level of premature tooth loss". The study recommended a replacement of the SDCS's restorative policy with a preventive policy[25]. Following a series of recommendations from the Dental Sub-committee of the Medical Development Advisory Committee released in 1991, the policy and management approach of the SDCS were changed to a preventive approach. The level of tooth decay among primary school students then decreased further and had been sustained at a very low level in 2001 and 2011 (refer to Table 2).

[25] Evans RW & Lo ECM. Effects of School Dental Care Service in Hong Kong – primary teeth. Community Dentistry Oral Epidemiology 1992;20:193-195

Importance of primary dental care services

31. The Government's policy on dental care in the past sought to raise public awareness of oral hygiene and oral health and encourage proper oral health habits through promotion and education. As the early stages of dental diseases usually cause no discomfort, the chance of early management of dental diseases will be lost if the affected persons only seeks dental care when discomfort is perceived. For this reason, the DH has been encouraging citizens to seek regular dental check-ups for timely intervention of dental diseases that may be present even though they believe that their oral health status is good.

32. Regular dental check-ups are not only important in the prevention, early detection and timely intervention of oral problems, but allow the dentists and ancillary dental workers to assess individual risks of getting oral diseases and give specific advice on the appropriate oral self-care and lifestyle. Besides, oral self-care guidance is given to improve brushing techniques, clean interdental spaces effectively, and monitor the effectiveness of oral self-care. Preventive treatments such as topical fluoride application and fissure sealant are also provided. Furthermore, regular dental check-ups may help to avoid the suffering and economic burden associated with dental problems by early identification and timely intervention.

Table 5. Proportion of persons who received teeth check-ups in the 12 months prior to the Survey.

Age group							
<15	15-24	25-34	35-44	45-54	55-64	≥65	Overall
229.8 (26.6%)	69.2 (11.1%)	94.2 (10.2%)	118.2 (11.6%)	127.3 (12.0%)	142.2 (11.7%)	134.1 (10.0%)	914.9 (13.0%)

Number of persons in 1,000

33. The Thematic Household Survey Report released in 2021 by the Census and Statistics Department[26] showed that only 13% of the Hong Kong population had received dental check-ups in the 12-months prior to the Survey (Table 5). The proportion of citizens seeking dental check-ups was the lowest among the oldest age group of 65 years or above. The age group with the highest proportion was the youngest age group below 15 years

[26] Thematic Household Survey Report No. 74, Census and Statistics Department.

(26.6% only), which was likely due to the participation in the SDCS by primary school children mostly aged between 6 and 11. However, the habit of regular dental check-ups could not be sustained among secondary school students after leaving the SDCS. The Working Group considered that the Government should strengthen the primary dental services for prevention, early identification and timely intervention of dental diseases.

Ageing population

34. The number of Hong Kong citizens in the age group of 65 or above will increase from the current level of roughly 1.7 million to about 2.75 million in 2046. If the levels of dental diseases remain unchanged, the amount of close to $640 million currently spent on claims by dentists under the EHVS and the EDAP (Table 6) will increase to a level causing enormous financial pressure to the Government. The Working Group considered that the Government should make the best use of existing resources and promote primary dental care to prevent dental diseases, which should improve the oral health of the population and reduce the financial risks of the community in the long run.

Table 6. Expenditure in the past three financial years on dental programmes provided or subsidised by the Government.

	2020-21	2021-22	2022-23
School Dental Care Service (SDCS)	283.8	270.8	276.2
Dental grant under Comprehensive Social Security Assistance (CSSA) Scheme	78.8	98.9	111.6
Claim amount by dentists under the Elderly Healthcare Voucher Scheme (EHVS) (Hong Kong)	276.6 (2020)	355.4 (2021)	343.3 (2022)
Elderly Dental Assistance Programme (EDAP) under the Community Care Fund	202.3	250.0	292.4
Outreach Dental Care Programme for the Elderly (ODCP)	37.8	41.6	48.6
Healthy Teeth Collaboration (HTC)	6.4	11.1	22.8

Amount of spending in million dollars.

Financial sustainability

35. Treatment of oral diseases is costly to the community no matter it is settled by private out-of-pocket payment or by public money. In Hong Kong, the total expenditure on dental services was $6,952 million in 2020-21 and $9,082 million in 2021-22[27], the majority of which was private out-of-pocket payment. The Working Group advised that when considering the provision of government-funded comprehensive curative dental services, the long-term financial sustainability under the current taxation system and financial situation must be taken into account. It is more cost-effective to put the emphasis on preventive dental services.

Manpower of dental professionals

36. There must be complementary and sufficient manpower supply of dental professionals in planning the enhancement of dental services. The focus of people's mindset and the oral healthcare system of Hong Kong has been heavily skewed towards curative approach in the past, and dentists have been the major dental workforce. Over the years, Hong Kong has been facing a shortage of dentists. As at November 2023, there were 2 875 registered dentists in Hong Kong. This roughly translated into 0.37 dentists per 1 000 population, lagging behind many economies across the world.

37. Among the primary dental services recommended by the Working Group, oral health risk assessment and individualised advice on oral care and personal lifestyle, and preventive dental treatment such as application of fluoride on the tooth surfaces are technically simple that can be performed by ancillary dental workers. Under the current Ancillary Dental Workers (Dental Hygienists) Regulations (Cap. 156B), dental hygienists may perform dental work with lower technical complexity (please refer to Annex 3 for details). They must work in accordance with the directions of a registered dentist who is available in the premises at all times. For dental therapists, currently they are only allowed to work in the SDCS under the DH.

[27] https://www.healthbureau.gov.hk/statistics/en/dha.htm

38. As at November 2023, there were 586 enrolled dental hygienists and 237 dental therapists working under the DH in Hong Kong. The Working Group believed that ancillary dental workers are able to play an important role in the delivery of primary dental services, especially under the shortage of dentists in Hong Kong. It is essential to increase the supply of ancillary dental workers for the strengthening of primary dental care services.

Chapter 4. Strategic Directions Recommended by the Working Group

39. The Working Group considered that the Government should assist the citizens in managing their own oral health and put prevention, early identification and timely intervention of dental diseases into action. To achieve this, it is necessary to shift the focus of dental services from curative-oriented to preventive-oriented.

40. After a comprehensive review of the dental service programmes provided or subsidised by the Government, the Working Group arrived at a preliminary view that subsidising comprehensive dental care and curative dental services for the Hong Kong population or the elderly population is not financially sustainable, and thus should not be the priority in the development of dental services.

41. The Working Group summarised the following areas for service enhancement (not in order of priority):

(1) to tackle the tooth decay problem among preschool children;
(2) to assist adolescents in sustaining the habit of regular dental check-ups and developing this into a life-long habit upon leaving the SDCS;
(3) to consider making better use of resources already put on subsidising removable dentures by directing the emphasis on primary dental care services;
(4) to extend special care dental services to cover persons with disabilities and special needs other than ID; and
(5) to enhance the preventive care for patients of medical conditions at high oral health risk at the early stage of the medical conditions, such as elderly with debilitating conditions prior to the deterioration of oral health because of the loss of self-care ability, at a stage before the use of long-term care services.

Enhancing primary dental services for prevention of oral diseases

42. The Working Group recommended the Government to develop primary dental services appropriate for different age groups in line with the Primary Healthcare Blueprint,

by focusing on prevention of dental diseases. The Government should make use of the capacity of ancillary dental workers and strengthen the training arrangements as soon as possible to increase the supply of ancillary dental workers to complement the development of primary dental care. The existing primary healthcare facilities should also be made use of to ensure that primary dental care is accessible to all age groups, such as maternal and child health centres, child care centres and kindergartens, and District Health Centres.

Targeted dental services for underprivileged groups

43. The Working Group defined three categories of underprivileged groups for provision of more targeted dental services according to their specific needs. They are:

(1) Persons with financial difficulties
In addition to the inability to pay for dental services, some persons may have other personal barriers to obtain dental services and require special arrangements (e.g. homeless persons).

(2) Persons with disability and special needs
Some of these persons are residing in residential care homes, and some may also be behaviourally challenging requiring special arrangements such as outreach service or general anaesthesia. It is preferable if the dentists providing these dental services have received additional training in special care dentistry.

(3) High risk groups
This group includes patients with dementia, stroke, Parkinson's Disease, etc. as described in Chapter 2. The oral health of these patients may deteriorate due to the progressive loss of self-care ability. For some medical conditions (such as oral cancers requiring radiation therapy), the patients are also at high risk of developing oral diseases even if their self-care ability is not much affected. As the medical history of persons in this group is complicated, the attending dentists have to work closely with the attending physicians. Sometimes, the necessary dental treatment have to be performed in a hospital environment. Additional training in special care dentistry for the attending dentists is also an advantage.

44. The Working Group recommended the extension of dental services to cover underprivileged groups who are not yet covered by existing dental service programmes. Taking into consideration that the Government has already put in substantial financial resources through subsidies by the dental grant under the CSSA Scheme, the EHVS and the EDAP under CCF, the Working Group recommended the Government to make better use of the resources already invested in developing new dental service programmes.

45. Some of the underprivileged groups are already covered by existing dental service programmes provided or subsidised by the Government. However, it was pointed out in Chapter 2 that there are rooms for improvement in some of these programmes. The Working Group recommended the Government to adopt measures to designate and guide the use of dental services, and to monitor their utilisation and effectiveness.

Strengthening manpower supply of dental professionals

46. The Working Group recommended the Government to review the manpower supply and training arrangements of various dental professionals to complement the strategic needs of development of oral health and dental care. This may include providing new pathways for the admission of qualified non-locally trained dentists to alleviate the shortage of dentists, enhancing the training of ancillary dental workers, and enabling ancillary dental workers to perform more preventive dental services, such as exploring whether ancillary dental workers may be allowed to perform non-invasive preventive dental care without the presence of a dentist.

Utilisation of the service capacity of NGOs and private sector

47. The Working Group recommended the Government to make better use of the service capacity of the NGOs and the private sector. By increasing the use of strategic purchasing arrangements, the preferential use of Government subsidies on preventive dental services should be designated and specified to both service users and service providers. The Government should consider reducing the subsidies on expensive curative dental services, increasing the use of information technology and electronic dental health

records to monitor and assure effectiveness and to enable continuous improvement in service arrangements.

Enhancing emergency dental service

48. The Working Group noted that the disc allocation under the GP sessions arrangement cannot be increased in the near future due to the reduced manpower of Dental Officers in the Government. The Working Group also agreed that tooth extraction service under the GP sessions arrangement should not be expanded, as this is not in line with the goal to improve oral health by retaining natural teeth. However, the Government should consider the option to expand service capacity by collaborating with NGOs under a new service model to address the service demands of the underprivileged groups. The Working Group recommended the Government to reduce the need for emergency dental service among the underprivileged groups by strengthening prevention, early identification and timely intervention of dental diseases. NGOs can play a role in assisting with the definition of underprivileged groups and accessing these groups.

Government's response to the Interim Report of the Working Group

49. In light of the views of the Working Group, and taking into account of the factors like existing manpower of dental professionals, available resources and legislative regulations, the Government will implement the following measures in the coming two years:

(1) to launch the Primary Dental Co-care Pilot Scheme for Adolescents in 2025 as an interface with the School Dental Care Service for primary school students by providing partial subsidies for private dental check-ups services for adolescents aged between 13 and 17, as well as to foster the establishment of long-term partnership between adolescents and the dentists of NGOs or private sector so as to promote their life-long habit of regular dental check-ups for prevention of dental diseases;

(2) to collaborate with NGOs to increase the emergency dental services targeting at the underprivileged groups with financial difficulties in 2025, and to expand service

capacity, service points and service scope to promote early identification and timely intervention of dental diseases in all 18 districts. The target is to provide a service capacity of at least two times the current capacity of GP sessions arrangement;

(3) to strengthen the special care dental services currently provided by DH in the third quarter of 2024 by extending the HTC to March 2027, extending its scope to cover patients with Autistic Spectrum Disorder, and providing services to 900 new cases every year;

(4) to enhance the EDAP in the third quarter of 2024 to lift the essential requirement of fixing removable dentures, encouraging more eligible elderly to receive preventive dental services such as oral check-ups, scaling, extraction and filling without applying for removable dentures to early identification and timely intervention of dental diseases;

(5) to introduce the amendment bill to the Dentists Registration Ordinance into the Legislative Council by mid‑2024 to provide new pathways for admission of qualified non-locally trained dentists to practise in specified institutions under the premise that the professional standards and patients' welfare are maintained, and modernise the regulatory framework for dentists and ancillary dental workers; and

(6) to gradually increase the training places of ancillary dental workers and provide tuition sponsorship starting from this academic year.

Chapter 5. Future Work of the Working Group

50. In 2024, the Working Group will review factors such as the progress of amendment of the Dentists Registration Ordinance, the increase in manpower supply of dental professionals, and the community's feedback to this Interim Report. The Working Group will further study the areas mentioned in para. 41 and propose options suitable for the local situation according to the strategic directions set out and the assessed manpower and financial requirements. The Working Group will also examine the results of the Oral Health Survey Report that will be completed by DH next year, and the Oral Health Goals that will be proposed by the DH. The target of the Working Group is to issue the Final Report before the end of its tenure by late 2024.

Health Bureau
December 2023

Working Group on Oral Health and Dental Care

Annex 1

Terms of Reference

To advise the Government on the following aspects of the development of oral health and dental care in Hong Kong, especially as part of primary healthcare –

1. the scope, efficacy and cost-effectiveness of the existing oral health measures and dental care services undertaken by the Government, having regard to local circumstances and experience as well as overseas practices and evidence;
2. the long-term strategy for oral health and dental care in Hong Kong, especially as part of primary healthcare, including co-ordination of service programmes and manpower provision with a view to enhancing the oral health of the community; and
3. priority areas for enhancements to oral health measures and dental care services, including the level of essential primary dental care services at different life stages, the scope of publicly-provided or funded dental care services, and the mode(s) of delivery and financing.

Membership (31 December 2022 to 31 December 2024)

Chairman :	Permanent Secretary for Health
Non-official Members :	Representative nominated by the Faculty of Dentistry, The University of Hong Kong President (or representative nominated by the President) of the College of Dental Surgeons of Hong Kong Chairman (or representative nominated by the Chairman) of the Dental Council of Hong Kong President (or representative nominated by the President) of the Hong Kong Dental Association Chairman (or representative nominated by the Chairman) of the Board of Governors, The Prince Philip Dental Hospital Representative nominated by Loving Smiles Foundation Limited Representative nominated by Pok Oi Hospital Ms Maggie CHAN Mei-kit Mr CHUA Hoi-wai Dr Kevin LAU Chung-hang

	Dr Sigmund LEUNG Sai-man
	Mr Tim PANG Hung-cheong
	Professor Samuel WONG Yeung-shan
Ex-officio Members :	Deputy Secretary for Health
	Commissioner for Primary Healthcare
	Director of Health (or representative)
	Representative of the Education Bureau
	Representative of the Labour and Welfare Bureau

Lifestyle conducive to good oral health

Annex 2

Lifestyle conducive to optimal oral health includes:

- Brush teeth twice daily with fluoride toothpaste using proper toothbrushing technique
- Perform interdental cleaning daily with dental floss or interdental brush, according to individual needs
- Make use of oral health care service by seeking regular dental checkup
- Adopt good dietary habit by reducing the frequency of food or drinks intake, especially those with sugar
- Refrain from smoking

The purpose of toothbrushing is to remove dental plaque from the tooth surfaces. Building up of dental plaque causes gum disease and tooth decay. Mechanical cleaning is the only effective means to remove dental plaque. For young children (below the age of 7) to clean their teeth effectively, parental assistance should be provided during toothbrushing. Fluoride toothpaste should be used because fluoride has been proven to be effective in preventing tooth decay.

Properly performed toothbrushing can remove dental plaque from most tooth surfaces except the adjacent surfaces of teeth in the interdental area (surfaces in-between adjacent teeth). Therefore, proper interdental cleaning by either flossing and/or interdental brushing is necessary.

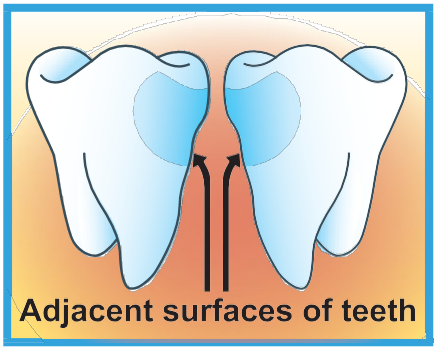


Diagram showing the adjacent surfaces of teeth in the interdental area

If the gap (interdental space) between neighbouring teeth is wide, an interdental brush may be used instead of dental floss. It requires less dexterity than dental floss to clean the adjacent surfaces. The basic steps are to choose an interdental brush that provides a snug interdental fit, insert it gently into interdental space as close to the gum margin as possible, and then move the interdental brush back and forth.

Cleaning skill is the key to effective toothbrushing and interdental cleaning. Therefore, it is important to have regular dental checkup so that the dentist can evaluate the oral health situation and provide personalised oral hygiene instruction to improve toothbrushing and interdental cleaning effectiveness.

Besides, regular dental checkup is important not only in the early detection and proper management of oral problems, it also allows the dentist to assess individual risks of getting oral diseases and give specific advice on the appropriate self-care behaviour. During regular checkup, dentists can give appropriate individualised advice on lifestyle and monitor the effectiveness of such self-care behaviour. The dentist can also provide preventive treatment such as fluoride application and fissure sealant.

Reduction in the frequency of food and drinks consumption can decrease the risk of tooth decay. Oral bacteria produce acids by metabolising the sugars present in the food or drinks, leading to tooth decay. Sugars are almost ubiquitous in our diets. They can be naturally occurring sugars such as fruit sugars, milk sugars or starch. Sugars are commonly added to food or drinks during the manufacturing process to enhance taste and texture. Therefore, whenever one eats or drinks, teeth are likely to be exposed to acid attack. In order to reduce the risk of tooth decay, the frequency of food or drinks intake other than normal meals should be reduced. In order to quench thirst, it is recommended to drink water instead of other beverages.

Smoking is known to be related to lung cancer and cardiovascular diseases. Furthermore, smoking is also a risk factor of destructive gum disease and oral cancer. The avoidance of tobacco use is an important factor in promoting general health and oral health.

Ancillary Dental Workers (Dental Hygienists) Regulations
Section 6

Annex 3

6. Scope of dental work that may be undertaken by dental hygienists

(1) Subject to this regulation, an enrolled dental hygienist may undertake dental work of the following kinds—
  (b) the cleaning and polishing of teeth;
  (c) the scaling of teeth (that is to say the removal of tartar deposits, accretions and stains from those parts of the surface of the teeth which are exposed or which are directly beneath the free margins of the gums, including the application of medicaments thereto);
  (d) the application to the teeth of solutions of sodium or stannous fluoride or such other similar prophylactic solutions as the Council may from time to time determine;
  (e) the exposure of x-ray films inter-orally or extra-orally for the investigation of lesions or suspected lesions of the mouth, jaws, teeth and associated structures; and
  (f) the giving of advice on matters relating to dental hygiene.

(2) A dental hygienist shall not undertake any form of dental work unless—
  (a) he is enrolled in accordance with regulation 4;
  (b) he is employed by a registered dentist or by any organisation or establishment that has employed at least one registered dentist; *(L.N. 299 of 1999)*
  (c) any patient upon whom he undertakes dental work has first been examined by a registered dentist who has then prescribed the treatment to be carried out by the dental hygienist;
  (d) such dental work is carried out—
    (i) in accordance with the directions of a registered dentist who is available in the premises at all times when such dental work is being carried out; and
    (e) (ii) in such premises and under such conditions as are suitable for such work.

(3) An enrolled dental hygienist who undertakes such kinds of dental work as are prescribed in paragraph (1) shall, if he complies at all times with the conditions prescribed in paragraph (2), be deemed not to be practising dentistry for the purposes of the Ordinance.

(4) For the purposes of this regulation, ***registered dentist*** (註冊牙醫) means a person registered under section 9 of the Ordinance other than a person entitled to registration under section 7(d) of the Registration of Dentists Ordinance 1940 (1 of 1940).