For discussion on
13 December 2024

Legislative Council Panel on Health Services

Final Report of the Working Group on Oral Health and Dental Care and Report of the Oral Health Survey 2021

PURPOSE

This paper briefs Members on the Final Report of the Working Group on Oral Health and Dental Care (Final Report) and the report of the Oral Health Survey 2021 (OHS 2021), and elaborates on the Oral health Action Plan developed by the Government in response to the Final Report.

BACKGROUND

2. In the 2022 Policy Address, the Chief Executive announced the establishment of the Working Group on Oral Health and Dental Care (the Working Group) to review the existing services and advise the government on enhancing the scope and mode of services. The Working Group is chaired by the Permanent Secretary for Health and comprises 13 non-official members and five ex-officio members. The non-official members include representatives from the dental profession, healthcare sector, social welfare sector, patient groups, non-governmental organisations (NGOs) collaborating in government-subsidised dental care programmes, and relevant community leaders. It held seven meetings during its tenure, published an Interim Report in December 2023 and briefed Members on it in March this year. On 6 December 2024, the Working Group published its Final Report which summarised the salient points of discussion and the strategic directions recommended to the Government. The Final Report is at **Annex I** and has been uploaded to the webpage of the Health Bureau (HHB)[1].

[1] Webpage of the HHB:
www.healthbureau.gov.hk/download/press_and_publications/otherinfo/241200_dental/e_final_report.pdf

SUMMARY OF THE FINAL REPORT

Approach of the review

3. The Working Group first set out the approach for reviewing the oral health and dental care system:

(a) It should be emphasised that oral health is an integral part of general health, and that preventive oral care should be a component of overall primary healthcare;
(b) Citizens who follow professional dental guidance and maintain good preventive oral care can retain their teeth to a considerable extent in old age; and
(c) The Government should establish a prevention-oriented primary oral healthcare system to reduce the demand for dental treatment, with the aims of elevating the efficiency of the oral health and dental care system, and enhancing oral health outcomes for citizens. This will allow resources continuously allocated by the Government to oral health and dental care to be utilised in a more cost-effective and sustainable manner, achieving the policy objective of promoting citizens' oral health and general health.

Citizen's oral health status

4. The Working Group analysed past and latest oral health survey findings, and concluded that:

(a) The various public health measures on oral health implemented by the Government have been effective in improving overall oral health of citizens. Tooth decay levels have generally decreased, and the number of teeth retained by the elderly has continuously increased;
(b) The level of tooth decay among 5-year and 12-year-old children and the proportion of elderly with complete tooth loss compare very favourably globally; and
(c) Citizens are still facing the risks of dental diseases and tooth loss. Preventive efforts should be strengthened.

Existing service scope and effectiveness

5. The Working Group reviewed the scope and effectiveness of existing oral health initiatives and dental services with the following findings:

(a) Over the years, the Government has substantially increased the resources allocated to directly providing or subsidising dental services. However, the use of these resources had been skewed towards curative treatment rather than prevention, and there lacked a holistic and comprehensive examination of the relative cost-effectiveness of resources allocated in different programmes;
(b) There were insufficient measures in subsidised dental services to incentivise users to utilise preventive dental care, and inadequate means to monitor the actual utilisation of dental services; and
(c) Higher priority should be accorded to primary oral healthcare, particularly preventive dental services, which still have considerable room for development.

Oral health policy

6. The Working Group has referenced the World Health Organization (WHO)'s 2021 Resolution, the *Global Strategy and Action Plan on Oral Health (2023-2030)*, as well as the National Health Commission's *China's Oral Health Action Plan (2019-2025)* published in 2019, and recommended Hong Kong adopt the following oral health policy:

(a) Oral health is an integral component of general health. The Government's oral health policy aims to enable all Hong Kong citizens to improve their oral hygiene and lifestyle conducive to both oral and overall health levels;
(b) Through publicity, education, promotion and development of primary oral health and dental care, the Government facilitates citizens to manage their oral health, and put prevention, early identification and timely intervention of dental diseases into action with the objective of tooth retention; and
(c) The Government provides appropriate oral health and dental care services targeting underprivileged groups with financial difficulties and special needs, ensuring these groups have access to essential dental care services.

Oral health and dental care system development strategies

7. The Working Group recommended that the Government should transform the current dental care system's tendency from being treatment-oriented to one that emphasises prevention, early identification, and timely intervention. In future, the Government should actively develop and focus resources on primary oral healthcare, guide citizens towards prevention-oriented oral health and dental care through appropriate service provision or

subsidy models, and focus on providing subsidised dental treatment services to underprivileged groups with financial difficulties and special needs.

8. The Working Group considered that providing or subsidising comprehensive curative dental services from public purse to all Hong Kong citizens regardless of their financial means does not align with the policy objectives of developing a prevention-oriented oral health and dental care system and encouraging citizens to take responsibility for their own oral health. This would exacerbate the current shortcomings of the treatment-oriented system, and would be neither cost-effective nor sustainable in terms of utilisation of public resources. It would be financially untenable for the Government and would thin out resources that could otherwise be used for other healthcare services.

9. Regarding the Government's future development of oral health, dental care systems and resource allocation, the Working Group recommended adopting the strategies of developing community-wide preventive primary oral health care, and providing essential dental services targeting underprivileged groups:

(a) Community-wide preventive primary oral health care: actively develop prevention-oriented primary oral healthcare, through community-wide promotion to support Hong Kong citizens across different age groups to manage their oral health, establish good oral hygiene habits and lifestyles, and seek regular oral check-ups and risk assessment of their own accord; and
(b) Essential dental services targeting underprivileged groups: focus the provision of essential dental services, including both preventive and curative oral health and dental care services, through public service or subsidised models to underprivileged groups who have difficulties in accessing dental care, including those with financial difficulties, persons with disabilities or special needs, and high-risk groups.

<u>Oral Health Action Plan</u>

10. Concurring with the recommendation directions of the Working Group, the Government developed a corresponding Oral Health Action Plan in response to various strategic recommendations of the Working Group. In accordance with the strategy of developing community-wide preventive primary oral healthcare, the action plan covers the following measures to be implemented next year:

(a) To pilot services at selected District Health Centres/Expresses to provide risk assessment;
(b) To introduce preventive dental services for pre-school children aged up to 6 years by providing regular oral check-ups and care guidance;
(c) To launch the Primary Dental Co-care Pilot Scheme for Adolescents to incentivise regular oral check-ups among adolescents aged between 13 and 17 by providing Government subsidies under co-payment arrangements;
(d) To encourage citizens to receive regular oral check-ups. For adults, promote employer-provided dental benefits schemes that encourage regular oral check-ups. The dental sector will also be motivated to formulate the essential items for oral check-up services for citizens of different age groups; and
(e) To encourage the elderly to make good use of Elderly Health Care Vouchers (EHCVs) for seeking oral check-ups. Through the Elderly Health Care Voucher Pilot Reward Scheme launched in 2023 and joint promotion efforts with the sector on the importance of oral check-ups, the elderly will be steered to better utilise the EHCVs for prevention dental services.

11. According to the strategy of providing essential dental services targeting underprivileged groups, the action plan will take forward the following measures:

(a) To launch the Community Dental Support Programme (CDSP) next year to provide dental services for underprivileged groups (including elderly persons with financial difficulties) with enhancement in capacity and service points and extension of service scope. The CDSP utilises NGO and social welfare organisation networks to provide services to persons with financial difficulties. In addition to tooth extraction, CDSP will also allow dental fillings where dentists consider appropriate to encourage tooth retention. This support programme will supplant the Community Care Fund Elderly Dental Assistance Programme by 2026;
(b) To continue streamlining the arrangements of dental services of the General Public Session of the Department of Health (DH). The DH will launch an Online Registration System for Dental General Public Session on 30 December this year and consider introducing eligibility criteria to put the service focus on helping those with financial difficulties; and
(c) To continue expanding special care dental services to further

cover groups with other disabilities or special needs, while strengthening relevant dental services in hospitals and providing additional training.

12. Regarding increasing and strengthening the supply of oral health and dental care personnel:

(a) The DH has launched recruitment of non-locally trained dentists, and the first batch is expected to provide services in the first quarter of 2025 through the newly introduced limited / special registration mechanism;
(b) The Government will continue to increase training quotas for dental hygienists and dental therapists, expand the dental care professional manpower, and enhance service capacity for oral healthcare including scaling, filling and extraction services; and
(c) The Government will continue to monitor demands of the community for oral health and dental care services and the profession's manpower situation, regularly conduct manpower projection planning for dentists and dental care professionals, and adjust training quotas and tuition subsidies accordingly.

13. Regarding the development of eHealth to encompass dental services:

(a) The upcoming "Primary Dental Co-Care Pilot Scheme for Adolescents" and CDSP, along with other strategic purchasing dental services to be implemented in the future, will require participating dentists to upload oral health records to eHealth using designated systems; and
(b) The Government will strengthen technical connectivity and develop dental record data standards to facilitate private dental sector uploading of patients' electronic health records to eHealth.

<u>Oral health steering and advisory framework</u>

14. After the completion of the work by the Working Group, the Government will establish a steering and advisory framework for oral health and dental care to continuously monitor the progress and effectiveness of various measures:

(a) The Primary Healthcare Committee will establish an Oral Health Group to oversee strategies for promoting oral health and development of dental care services; and
(b) The DH will establish a Special Care Dental Service Coordination

Committee to explore the long-term development of special care dental services with relevant stakeholders.

THE ORAL HEALTH SURVEY 2021 REPORT

15. The DH has undertaken community-wide oral health surveys every ten years to continuously monitor the oral health status of citizens since 2001. The DH commenced the OHS 2021 in November 2021 by adopting the criteria recommended by the WHO. This survey collected representative and up-to-date information on the oral health of local citizens, covering four target age groups: 5-year-old children, 12-year-old students, adults aged 35 to 44, and elderly aged 65 to 74. Following the 2011 survey, the latest oral health survey also includes elderly individuals aged 65 or above who are receiving long-term care services. Due to the impact of the COVID-19 pandemic, the entire survey was completed in December 2023.

16. The results of the Oral Health Survey 2021 indicate:

(a) The findings of the OHS 2021 indicate that the overall oral health level of Hong Kong people has continued to improve over the past two decades. Among the 65 to 74-year-old non-institutionalised older persons (NOPs), the average number of retained teeth increased from 19.3 (2011) to 22.8 (2021), and the percentage of elderly with complete tooth loss decreased significantly from 5.6% (2011) to 0.9% (2021). However, there are still some younger citizens suffering from tooth decay and gum disease;

(b) Regarding tooth decay, the proportion of 5-year old children and 12-year old students with tooth decay experience decreased from 50.7% and 22.6% in 2011 to 41.6% and 16.3% in 2021 respectively. Compared to other countries and regions, Hong Kong has a relatively low percentage of pre-school children with untreated decayed deciduous teeth and the number of decayed, missing, and filled permanent teeth among 12-year-old students are relatively low;

(c) The condition of 35 to 44-year-old adults and 65 to 74-year-old NOPs showed little change, with the proportion of 35 to 44-year-old adults having untreated tooth decay remaining at nearly one-third, and that of 65 to 74-year-old NOPs up to nearly half; and

(d) It is worth noting that the proportion of adults and older persons with bleeding gums and gum pockets (signs of gum disease) has been on the rise over the past two decades. The survey found that most bleeding gums and gum pockets were located at the molars (back

teeth) and the proportion of the population with deep gum pockets (a sign of severe gum disease) had more or less doubled when compared to 20 years ago, necessitating timely preventive actions.

17. The detailed findings of the OHS 2021 are set out in the DH's survey report at **Annex II**. The survey report has been uploaded to the webpage of the DH[2].

18. Based on the OHS 2021 results and the upcoming Government initiatives, the DH has established Oral Health Goals for Hong Kong by 2030, aligning with WHO's *Global Strategy and Action Plan on Oral Health (2023-2030)*[3]. In the interim, the Government will closely monitor the effectiveness of various measures through eHealth and make timely adjustments. Hong Kong's Oral Health Goals for 2030 mainly include:

Age Group	Goals	Target
5-year-old children	Untreated decay	≤ 1.4 teeth
12-year-old children	Untreated decay	≤ 0.1 teeth
35 to 44-year-old adults	Untreated decay	≤ 0.7 teeth
65 to 74-year-old elderly	Number of missing teeth	≤ 8 teeth

CONCLUSION

19. In concluding its review of dental services, the Working Group affirmed that the oral health of citizens has improved significantly and remains at a good level, resulting from the Government's preventive public health measures. Looking ahead, the Working Group confirmed that oral health is crucial to general health, and improvements in oral health are conducive to general health. Based on recommendations of the Working Group, the Government will develop preventive oral healthcare aimed at retention of natural teeth under the primary healthcare framework. We also hope for the active co-operation of stakeholders from the dental care sector, training institutions and NGOs, as well as the citizens' corresponding behavioural changes in relation to their oral health. It is through the concerted efforts of all in preventing dental diseases and retaining natural teeth that oral health and general health can be achieved.

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[2] Webpage of the DH: https://www.dh.gov.hk/english/index.html

[3] https://www.who.int/publications/i/item/9789240090538

ADVICE SOUGHT

20. Members are invited to note the content of this paper and offer views on the Final Report and the survey report.

Health Bureau
Department of Health
December 2024

Annex I

Working Group on Oral Health and Dental Care Final Report

December 2024

Prevent oral diseases, retain natural teeth for lasting health

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

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List of Abbreviations

CCF	Community Care Fund
CDSHK	College of Dental Surgeons of Hong Kong
CDSP	Community Dental Support Programme
CSSA	Comprehensive Social Security Assistance Scheme
DCHK	Dental Council of Hong Kong
DDMS	Department of Dentistry and Maxillofacial Surgery
DenCP	Dental Care Professional
DH	Department of Health
DHC	District Health Centre
DHCE	District Health Centre Express
DMFT	Decayed, Missing, and Filled Teeth
FoD	Faculty of Dentistry of The University of Hong Kong
EDAP	Elderly Dental Assistance Programme
EHCV	Elderly Health Care Vouchers
EHVS	Elderly Healthcare Voucher Scheme
GBA	Guangdong-Hong Kong-Macao Greater Bay Area
GBA Pilot Scheme	Elderly Health Care Voucher Greater Bay Area Pilot Scheme
GP Session	General Public Session
HA	Hospital Authority
HKDA	Hong Kong Dental Association
HTC	Healthy Teeth Collaboration
ID	Intellectual disability
MCHC	Maternal and Child Health Centre
NGO	Non-governmental organisation
OALA	Old Age Living Allowance
ODCP	Outreach Dental Care Programme for the Elderly
OHPD	Oral Health Promotion Division
OHS	Oral Health Survey
OMS&DC	Oral Maxillofacial Surgery and Dental Clinic
PDCC	Primary Dental Co-Care Pilot Scheme for Adolescents
SCD	Special Care Dentistry
SDCS	School Dental Care Service
SOCS	Special Oral Care Service
SWD	Social Welfare Department
VTC	Vocational Training Council
WHO	World Health Organisation

Foreword

The Chief Executive announced in the *2022 Policy Address* the establishment of a Working Group on Oral Health and Dental Care (Working Group) to review existing dental services and provide recommendations to the Government on enhancing service scope and delivery models. The term of the Working Group runs from 31 December 2022 to 31 December 2024. The Working Group, chaired by the Permanent Secretary for Health, comprises thirteen non-official members and five ex-officio members. The non-official members include representatives from the dental profession, healthcare sector, social welfare sector, patient groups, non-governmental organisations (NGOs) collaborating in government-subsidised dental care programmes, and community leaders. The terms of reference and membership list of the Working Group are set out in ***Annex 1***.

The Working Group has identified primary oral healthcare, focusing on tooth retention and prevention, as the goal of long-term strategic development to enhance oral health and dental care. The Working Group reviewed the scope and effectiveness of existing oral health measures and dental services to formulate future development strategies and recommendations. To align with overall strategic development objectives, the Working Group also examined the supporting arrangements for oral healthcare, including manpower supply and relevant training for various dental professionals, public or subsidised dental service models and financial arrangements, as well as the use of electronic health records in dental services.

The Working Group held a total of seven meetings during its tenure, and published an Interim Report in December 2023 and this Final Report in December 2024. The Final Report outlines the salient discussions on oral health and dental care, the directional recommendations proposed by the Working Group, and the corresponding action plan formulated by the Government. The recommendations align with the World Health Organisation's *Global Strategy and Action Plan on Oral Health (2023-2030)* and the *China's Oral Health Action Plan (2019-2025)* issued by the National Health Commission.

The Working Group has made significant contribution to the Government in formulating effective and sustainable strategies and action plans for the development of oral health and dental care. In this regard, the Health Bureau expresses its heartfelt gratitude to all members of the Working Group for their active participation and valuable insights.

Executive Summary

Approach of the review

1. The Working Group set out the approach for reviewing the oral health and dental care system:

1.1 It should be emphasised that oral health is an integral part of general health, and that preventive oral care should be a component of overall primary healthcare;

1.2 Citizens who follow professional dental guidance and maintain good preventive oral care can retain their teeth to a considerable extent in old age; and

1.3 The Government should establish a prevention-oriented primary oral healthcare system to reduce the demand for dental treatment, with the aims of elevating the efficiency of the oral health and dental care system, and enhancing oral health outcomes for citizens. This will allow resources continuously allocated by the Government to oral health and dental care to be utilised in a more cost-effective and sustainable manner, achieving the policy objective of promoting citizens' oral health and general health.

Citizens' oral health status

2. The Working Group analysed past and latest oral health survey findings, and concluded that:

2.1 The various public health measures on oral health implemented by the Government have been effective in improving overall oral health of citizens. The prevalence of tooth decay has generally decreased, and the number of teeth retained by the elderly has continuously increased;

2.2 The level of tooth decay among 5-year and 12-year old children and the proportion of elderly with complete tooth loss compare very favourably globally; and

2.3 Citizens are still facing the risks of dental diseases and tooth loss. Preventive efforts should be strengthened.

Existing service scope and effectiveness

3. The Working Group reviewed the scope and effectiveness of existing oral health initiatives and dental services with the following findings:

3.1 Over the years, the Government has substantially increased the resources allocated to directly providing or subsidising dental services. However, the use of these resources had been skewed towards curative treatment rather than prevention, and there lacked a holistic and comprehensive examination of the relative cost-effectiveness of resources allocated in different programmes;

3.2 There were insufficient measures in subsidised dental services to incentivise users to utilise preventive dental care, and inadequate means to monitor the actual utilisation of dental services; and

3.3 Higher priority should be accorded to primary oral healthcare, particularly preventive dental services, which still have considerable room for development.

Correct oral health concepts

4. The Working Group opined that it is essential to guide citizens in developing correct concepts of oral health, including changing their mindset and behaviour towards improving and maintaining oral health:

4.1 Recognition that oral health is an integral part of personal health;

4.2 Maintenance of good personal oral hygiene habits and lifestyles;

4.3 Understanding that most dental diseases and costly dental treatments can be avoided through preventive care;

4.4 Willingness to use primary oral healthcare services that focus on prevention; and

4.5 Seeking regular oral check-ups, risk assessment, and oral hygiene instructions.

5. The Working Group considered it imperative to enhance and correct citizen's understanding of oral health, causes of dental diseases, and dental services:

5.1 Tooth loss amongst the elderly is not inevitable, citizens can still retain their teeth in old age, and most dental diseases can be prevented through preventive care;

5.2 Tooth decay in children's deciduous teeth is related to oral hygiene and dietary habits. If these habits are not corrected early, permanent teeth are also likely to develop decay problems at a later stage;

5.3 Personal oral hygiene measures include cleaning teeth, gums and interdental spaces. Regular check-ups should be sought to ensure oral health is effectively maintained. Citizens should also learn how to improve oral hygiene measures;

5.4 Even when citizens think that their oral health and dental condition are satisfactory, they should still seek oral check-ups regularly from dental professionals; and

5.5 Receiving preventive dental services early is more effective in safeguarding oral health and more cost-effective than paying for curative dental services at a later stage (for example, it is better for the elderly to use Elderly Health Care Vouchers early for preventive dental services than saving them for curative services later).

Oral health policy

6. The Working Group has referenced the World Health Organisation's 2021 Resolution, the *Global Strategy and Action Plan on Oral Health (2023-2030)*, as well as the National Health Commission's *China's Oral Health Action Plan (2019-2025)* published in 2019, and recommended Hong Kong adopt the following oral health policy:

6.1 Oral health is an integral component of general health. The Government's oral health policy aims to enable all Hong Kong citizens to improve their oral hygiene and lifestyle conducive to both oral and overall health levels.

6.2 Through publicity, education, promotion and development of primary oral health and dental care, the Government facilitates citizens to manage their oral health, and put prevention, early identification and timely intervention of dental diseases into action with the objective of tooth retention.

6.3 The Government provides appropriate oral health and dental care services targeting underprivileged groups with financial difficulties and special needs, ensuring these groups have access to essential dental care services.

Oral health and dental care system development strategies

7. The Working Group recommends that the Government should transform the current dental care system's tendency from being treatment-oriented to one

that emphasises prevention, early identification, and timely intervention. In future, the Government should actively develop and focus resources on primary oral healthcare, guide citizens towards prevention-oriented oral health and dental care through appropriate service provision or subsidy models, and focus on providing subsidised dental treatment services to underprivileged groups with financial difficulties and special needs.

8. The Working Group considers that providing or subsidising comprehensive curative dental services from public purse to all Hong Kong citizens regardless of their financial means does not align with the policy objectives of developing a prevention-oriented oral health and dental care system and encouraging citizens to take responsibility for their own oral health. This would exacerbate the current shortcomings of the treatment-oriented system, and would be neither cost-effective nor sustainable in terms of utilisation of public resources. It would be financially untenable for the Government and would thin out resources that could otherwise be used for other healthcare services.

9. Regarding the Government's future development of oral health, dental care systems and resource allocation, the Working Group recommends adopting the strategies of developing community-wide preventive primary oral health care, and providing essential dental services targeting underprivileged groups:

9.1 Community-wide preventive primary oral health care: actively develop prevention-oriented primary oral healthcare, through community-wide promotion to support Hong Kong citizens across different age groups to manage their oral health, establish good oral hygiene habits and lifestyles, and seek regular oral check-ups and risk assessment of their own accord:

9.1.1 Extend regular oral check-ups and preventive dental services to all minors from infancy to adolescence to establish good habits early;

9.1.2 Strengthen oral health publicity, promotion and education, including helping adults and the elderly to correct misconceptions and habits, through the primary healthcare system;

9.1.3 Integrate oral health into citizens' life course preventive care plans to encourage citizens to maintain good oral health habits and seek regular oral check-ups;

9.1.4 Expand the role of dental care professionals (termed "dental ancillary workers" before the commencement of the relevant amendments to the Dentists Registration Ordinance) in strengthening community-based primary oral healthcare

services, including oral health education, oral hygiene instructions and risk assessment;

9.1.5 Encourage the dental profession to establish essential items for oral check-up services suitable for citizens of different age groups while increasing the transparency of fees for regular oral check-ups, encouraging citizens to seek regular oral check-ups, particularly encouraging elderly to use Elderly Health Care Vouchers for seeking oral check-ups; and

9.1.6 Allocate service subsidies according to citizens' level of financial difficulties, and implement a co-payment model to encourage public participation in bearing part of the service costs for managing their own health, and at the same time promote greater transparency of service fees in the dental sector to help citizens in choosing appropriate services.

9.2 Essential dental services targeting underprivileged groups: focus the provision of essential dental services, including both preventive and curative oral health and dental care services, through public service or subsidised models to underprivileged groups who have difficulties in accessing dental care, including those with financial difficulties, persons with disabilities or special needs, and high-risk groups:

9.2.1 The dental grants under the Social Welfare Department (SWD)'s Comprehensive Social Security Assistance (CSSA) Scheme currently provide a dental service safety net for those who are financially unable to be self-sufficient;

9.2.2 While some underprivileged groups currently qualify for government-subsidised or provided dental services, consideration should be given to extending subsidised dental treatment services to specific underprivileged groups not currently covered (such as the homeless);

9.2.3 Review the priorities, actual needs and subsidy levels of subsidised treatment services, including the cost-effectiveness of subsidising removable dentures, to ensure limited resources are used effectively to provide the most effective treatment services for underprivileged groups;

9.2.4 Review the eligibility for public emergency dental services (General Public (GP) Session) and establish eligibility criteria such as income levels for subsidised GP Session services provided through NGOs, to ensure resources are directed towards supporting underprivileged groups; and

9.2.5 Expand special care dental services such as the "Special Oral Care Service" and "Healthy Teeth Collaboration" to include persons with disabilities or special needs beyond the current coverage of persons with intellectual disabilities and autism spectrum disorder.

10. The Working Group also reviewed the supporting arrangements for the development of the oral health and dental care system and made recommendations:

10.1 Address citizens' dental service needs primarily through the local healthcare system. Resources should be allocated to promote the development of Hong Kong's dental profession, and the Government should work in close rapport with the sector to advance and strengthen the status and services of Hong Kong's dental profession;

10.2 Increase dental manpower, including continuing to review local training places for dentists, implement mechanisms for qualified non-locally trained dentists to practise in specified institutions, and increase training quotas for dental care professionals;

10.3 Collaborate with professional institutions and organisations including the Faculty of Dentistry of The University of Hong Kong, The College of Dental Surgeons of Hong Kong, Prince Philip Dental Hospital and The Hong Kong Dental Association to provide more training in Special Care Dentistry, General Dentistry and Community Dentistry for dentists, dental care professionals and students, to support the future development of primary oral healthcare and special care dental services;

10.4 Continuously review and optimise Government resources currently used for providing or subsidising dental services, streamline service processes and enhance service efficiency, ensure resources are used for target groups and effectively achieve expected outcomes, and compare the cost-effectiveness of various public and subsidised dental schemes to maximise the benefits from limited public funds; and

10.5 Utilise the electronic health record platform (eHealth) to collect healthcare and service data for analysis and effectiveness evaluation for better guidance of service improvements and resource allocation priorities, and consider providing subsidised dental services through strategic purchasing arrangements that link service provision with outcomes to ensure cost-effective resource deployment.

Oral Health Action Plan

11. Taking into account the Working Group's strategic recommendations, the Government has established a corresponding Oral Health Action Plan with the following objectives:

11.1 Strengthen the provision of primary oral healthcare services;

11.2 Reduce avoidable and costly curative dental treatment needs;

11.3 Lower the levels of dental diseases such as tooth decay and periodontal disease;

11.4 Increase the number of teeth that the elderly can retain; and

11.5 Promote both oral and general health among citizens.

12. In terms of developing community-wide preventive primary oral health care :

12.1 Pilot services at selected District Health Centres/Expresses to provide risk assessment and oral hygiene instructions, with a view to establishing local dental networks in the long term, and strengthen oral health components in overall primary healthcare services;

12.2 Continue and enhance the "Bright Smiles Baby" programme, providing regular oral check-ups and care guidance for pre-school children through Maternal and Child Health Centres, establishing good oral hygiene and dietary habits from an early age;

12.3 Provide oral health education, dental check-ups and fluoride application for all kindergarten children to control tooth decay, drawing on the experience of the Faculty of Dentistry of The University of Hong Kong's "Jockey Club Children Oral Health Project";

12.4 Launch the "Primary Dental Co-Care Pilot Scheme for Adolescents" to incentivise adolescents aged 13-17 to seek regular oral check-ups at private dental clinics, reinforcing good oral health awareness and habits;

12.5 Mobilise NGOs and private dentists to detemine essential items for oral check-up services for citizens of different age groups, and promote employer-provided dental benefits schemes that encourage regular oral check-ups; and

12.6 Encourage the elderly to make good use of the Elderly Health Care Vouchers for seeking oral check-ups. Through the Elderly Health Care Voucher Pilot Reward Scheme launched in 2023 and joint promotion efforts with the sector on the importance of oral check-ups, the elderly could be guided to better utilise the Elderly Health Care Vouchers for preventive dental services.

13. In terms of provision of essential dental care services targeting underprivileged groups:

13.1 Launch the "Community Dental Support Scheme", targeting underprivileged groups with financial difficulties, including elderly with financial hardships, that will increase GP Session services, expand service volume, add service points, and extend service scope, and will supplant the Community Care Fund Elderly Dental Assistance Programme;

13.2 Consider introducing eligibility criteria in the Department of Health's GP Session services, while subsidised GP Session services provided through NGOs will also set out conditions of use to ensure resources are effectively directed at persons with financial difficulties;

13.3 Encourage NGOs and private dentists to make good use of dental care professionals to increase service capacity for primary oral healthcare and dental care for citizens, including low-income groups, covering affordable scaling, filling and extraction services;

13.4 Expand the "Special Oral Care Service" and "Healthy Teeth Collaboration" to cover disability or special needs groups who are receiving rehabilitation services after assessment by social workers;

13.5 Strengthen special care dental services within hospital dental services; and

13.6 Encourage institutions such as the Faculty of Dentistry of The University of Hong Kong, The Hong Kong Dental Association and The College of Dental Surgeons of Hong Kong to provide more training in General Dentistry, Community Dentistry and special care dental services; recommend The College of Dental Surgeons of Hong Kong consider establishing Special Care Dentistry as a dental sub-specialty.

14. Regarding increasing and strengthening the supply of oral health and dental care personnel:

14.1 The Department of Health has launched recruitment of non-locally trained dentists, and the first batch is expected to provide services in the first quarter of 2025 through the newly introduced limited / special registration mechanism;

14.2 The Government will continue to increase training quotas for dental hygienists and dental therapists, expand the dental care professional manpower, and enhance service capacity for oral healthcare including scaling, filling and extraction services; and

14.3 The Government will continue to monitor demands of the community for oral health and dental care services and the profession's manpower situation, regularly conduct manpower projection planning for dentists and dental care professionals, and adjust training quotas and tuition subsidies accordingly.

15. Regarding the development of eHealth to encompass dental services:

15.1 The upcoming "Primary Dental Co-Care Pilot Scheme for Adolescents" and "Community Dental Support Programme", along with other strategic purchasing dental services to be implemented in the future, will require participating dentists to upload oral health records to eHealth using designated systems; and

15.2 The Government will strengthen technical connectivity and develop dental record data standards to facilitate private dental sector uploading of patients' electronic health records to eHealth.

<u>Oral health steering and advisory framework</u>

16. After the completion of the work by the Working Group, the Government will establish a steering and advisory framework for oral health and dental care to continuously monitor the progress and effectiveness of various measures:

16.1 The Primary Healthcare Committee will establish an Oral Health Group to oversee strategies for promoting oral health and development of dental care services; and

16.2 The Department of Health will establish a Special Care Dental Service Coordination Committee to explore the long-term development of special care dental services with relevant stakeholders.

Chapter 1

Positioning and Importance of Oral Health

Overview

The idea that "tooth loss amongst elderly is inevitable" is a misconception. In fact, people can retain their teeth to a considerable extent in old age by following dental professionals' guidance to prevent dental diseases. Dental diseases (primarily tooth decay and gum diseasess) are the major oral health threats to be tackled. The Working Group opined that the healthcare system and mindset need to be transformed to focus on "prevention, early identification, and timely intervention" of dental diseases in order to retain teeth and avoid potential functional and financial impacts. Maintaining effective oral hygiene habits and lifestyles conducive to oral health are essential in the improvement of oral health among citizens.

Prevention of dental diseases and retention of teeth

1.1 The idea that "tooth loss amongst elderly is inevitable" is a misconception. Many people lose their teeth at old age because of the cumulative damage from dental diseases, resulting from poor oral self-care habits in their youth. This created the public misconception that "tooth loss is an inevitable part of ageing". The Working Group performed a comprehensive analysis of data from the past three decades and revealed that the number of teeth retained by non-institutionalised elderly in Hong Kong aged 65-74 has continuously increased (see Table 1), and elderly with complete tooth loss among this age group has become uncommon. Therefore, the Working Group is confident that people can retain their teeth to a considerable extent in old age by following dental professional guidance to prevent dental diseases.

Table 1: Oral health status of non-institutionalised elderly aged 65-74 between 1991 to 2021

	1991[1]	2001[2]	2011[3]	2021[4]
Mean number of teeth present	15.0	17.0	19.3	22.8
Percentage of elderly with complete tooth loss	12.0%	8.6%	5.6%	0.9%

Oral health and general health

1.2 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 socialize and work without pain, discomfort and embarrassment*[5]. Oral health is crucial for personal health, well-being, and healthy ageing. However, many people have untreated oral diseases, leading to preventable oral pain, infections and decreased quality of life, and even loss of school time and productivity.

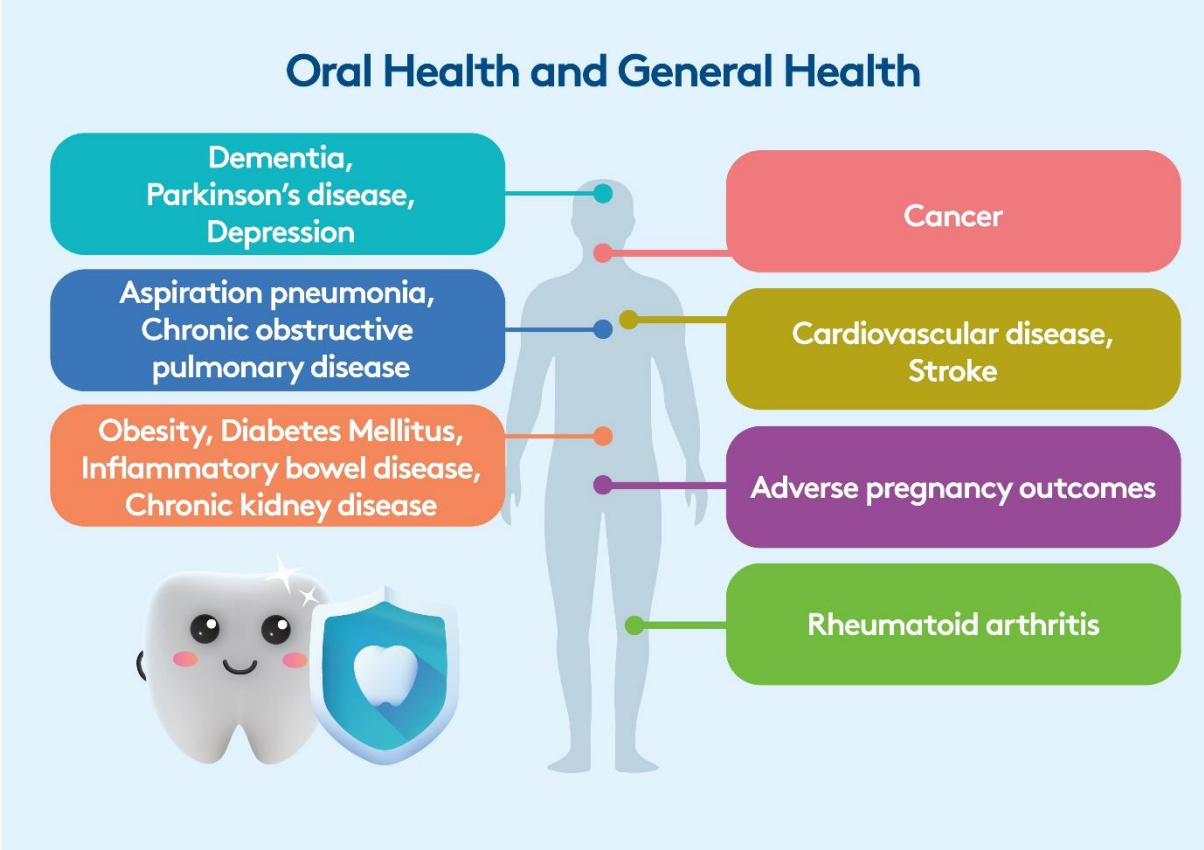
1.3 Globally, the oral problems that caused most of the negative functional impacts include complete tooth loss, tooth decay (dental caries) in both deciduous and permanent teeth, gum diseasess (periodontal diseases) and oral cancer. In Hong Kong, while oral cancer is relatively uncommon, 39% of 5-year old children and 32% of adults had untreated tooth decay, and 15% of adults and 26% of elderly suffered from severe gum diseasess[6]. The Working Group acknowledged that dental diseases (primarily tooth decay and gum diseasess), are the major oral health threats to be tackled.

1.4 An increasing amount of research is showing the intimate relationship between oral health and general health. The WHO considers poor oral health a major contributing factor to a number of general health conditions, noting its associations with cardiovascular disease, diabetes mellitus, cancer, pneumonia and premature birth[7]. In young children, tooth decay, pulp infections and dental abscess can affect the development of permanent teeth while also adversely affecting their general health and development. For elderly who lack self-care abilities, poor oral hygiene may lead to the accumulation of dental plaque and bacteria, potentially causing aspiration pneumonia which can be life-threatening. Recent studies suggest that retaining teeth and maintaining good oral functions in elderly may help

[1] Oral Health Survey Conducted by The University of Hong Kong Faculty of Dentistry.
[2] DH Oral Health Survey 2001.
[3] DH Oral Health Survey 2011.
[4] DH Oral Health Survey 2021.
[5] Global oral health status report: towards universal health coverage for oral health by 2030. Geneva: World Health Organisation; 2022.
[6] DH Oral Health Survey 2021.
[7] https://apps.who.int/gb/ebwha/pdf_files/WHA74/B148_REC1_EXT-en.pdf

to maintain their cognitive abilities and slows the progression of frailty. The Working Group acknowledged that the benefits of retaining teeth and maintaining oral health extend beyond the mouth, contributing to overall health and healthy life expectancy.

Figure 1: The associations of oral health and general health



Global trends in oral health and dental care systems

1.5 The WHO passed a resolution on oral health in 2021 noting that current oral health and dental care systems had largely failed to reduce the negative impact and inequity of oral diseases. Most countries / regions rely on a dentist-centred, high-technology model without adequately encouraging preventive oral healthcare. Oral diseases are caused by a series of modifiable risk factors, including sugar consumption, smoking habit, alcohol use and ineffective oral hygiene practices. The WHO explicitly stated that the most common oral diseases, including tooth decay, gum diseasess and tooth loss, are largely preventable. They therefore recommended member states to reorient their oral health and dental care systems from the traditional pathogenic curative approach towards a preventive promotional direction, including risk assessment to provide timely, comprehensive preventive care[7]. The subsequent *Global Strategy and Action Plan on Oral Health*

(2023-2030)[8], published in 2023, presents an implementation framework that repositions preventive oral healthcare as a patient-centred model, integrating it as a component of primary healthcare.

1.6 The country also announced the *China's Oral Health Action Plan (2019-2025)* in 2019, affirming oral health as an essential component of personal health. The action plan aimed to implement the *Healthy China 2030 Blueprint* and the *medium- to long-term plan (2017-2025) on the prevention and treatment of chronic diseases*, promoting the "Healthy Mouth" component among the *reduce salt intake, reduce oil intake, reduce sugar intake, healthy mouth, healthy body weight and healthy bones* actions. The action plan emphasises prevention as the priority, aiming at forming an oral health supportive social environment by 2025, improving public oral health awareness and health behaviours significantly, and extending oral health services to cover the entire life course of the whole population, with the goal of comprehensively improving oral health levels for the whole country[9].

Primary Healthcare Blueprint

1.7 The WHO's 2021 resolution, *Global Strategy and Action Plan on Oral Health (2023-2030)*, and the country's *China's Oral Health Action Plan (2019-2025)* all advocated prioritising prevention in oral health and dental care systems. The *Primary Healthcare Blueprint* released by the Hong Kong Government in 2022 also proposed the transformation of the healthcare system into a prevention-oriented, family-centred primary healthcare system as the overall healthcare strategy. This is to improve the efficiency and sustainability of the entire healthcare system and reduce avoidable and more costly secondary and tertiary healthcare demands. The Working Group considered that the primary healthcare strategy is also applicable to oral health and dental care system, transforming the current dental service system into a prevention-oriented primary oral healthcare system, thereby reducing the demand for avoidable and more costly curative dental services and improving the efficiency and sustainability of the entire oral health and dental care system.

Positioning of oral healthcare

1.8 The Working Group accepted that "prevention is better than cure" is crucial for maintaining oral health. Although historical data showed that some previous measures had successfully reduced the population's tooth decay levels, citizens still need to be aware that early prevention of tooth decay and gum diseasess is essential to reduce the risk of future tooth loss.

1.9 "Treat illness in its early stages"; as early identification of dental diseases can minimise the damage that may be caused, and the treatment required may be simpler and at lower costs, also favouring the retention of teeth. Conversely, if

[8] https://iris.who.int/bitstream/handle/10665/376865/9789240092327-chi.pdf?sequence=1
[9] http://big5.www.gov.cn/gate/big5/www.gov.cn/xinwen/2019-02/16/content_5366239.htm

treatment is delayed until dental diseases become severe, the damage caused would be much extensive, treatment costs could be higher, more likely for tooth loss to occur sooner, and very often accompanied by suffering of discomfort and pain.

1.10 Tooth loss affects both oral and overall function of individuals. While prosthetic dental treatment is an option, this is certainly not an ideal option. Prosthetic dental treatment is expensive, and dental prostheses may not fully restore normal dental functions. Different types of dental prostheses also pose certain risks to remaining teeth and oral tissues.

1.11 Based on the traditional wisdom that "prevention is better than cure" and "treating illness in its early stages", the Working Group considered it necessary to first establish the importance of different dental service categories in preventing dental diseases and retaining teeth for prioritising allocation of public funds before further discussing and making recommendations on oral health and dental care. This concept of "preventing dental diseases and retaining teeth" (Figure 2) aligns with the WHO's recommendations[10]. The current dental care system and public mindset focused on treatment more than prevention. The Working Group recommended the transformation of this system and public mindset to focus on "prevention, early identification, and timely intervention" of dental diseases. Preventing dental diseases and retaining teeth are also the most cost-effective strategies to avoid potential functional and financial impacts.

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

Figure 2: The relationship between various dental service categories and the prevention and retention of teeth

The importance of personal habits and lifestyles

1.12 Most tooth loss caused by tooth decay and gum diseasess is preventable. In 1960, 95% of children aged 9-11 had their permanent teeth affected by tooth decay. However, less children suffered from tooth decay after the fluoridation of water supplies in 1961. The Oral Health Survey (OHS) in 1968 found that the proportion of children aged 9-12 with their permanent teeth affected by tooth decay had fallen to 68.3%. Following the introduction of the School Dental Care Service (SDCS) in 1980, this proportion decreased to 38% in 2001, and further to 16% from the recently completed OHS 2021.

1.13 However, tooth decay still occurs between the ages of 12 and adulthood. From 1991 to 2021, the proportion of adults aged 35-44 with teeth affected by tooth decay has consistently remained above 95% (Table 2).

Table 2: Tooth decay status of adults aged 35-44 between 1991 and 2021

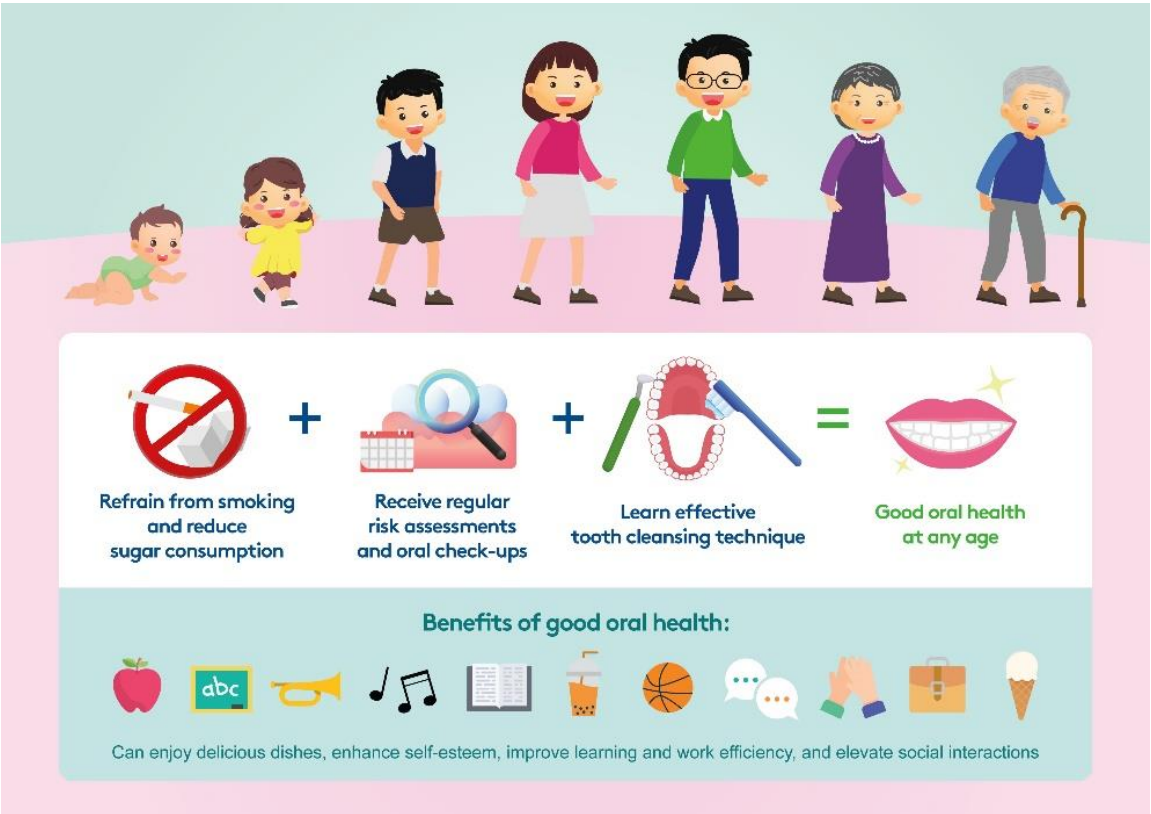
	1991[11]	2001[12]	2011[13]	2021[14]
Percentage of adults with decay experience	98%	97.5%	96.1%	95.9%
Mean number of teeth with untreated decay	1.0	0.7	0.7	0.7
Percentage of adults with untreated decay	#	32.0%	31.2%	31.7%

Data not included in original report

[11] OHS Conducted by The University of Hong Kong Faculty of Dentistry.
[12] DH OHS 2001.
[13] DH OHS 2011.
[14] DH OHS 2021.

1.14 The significant reduction in tooth decay among 12-year-olds can be attributed not only to water fluoridation and the widespread use of fluoride toothpaste but also to the preventive services provided by the SDCS (such as fissure sealants and topical fluoride applications). These preventive measures do not require sustained behavioural changes and are therefore relatively easy to be widely effective. However, after leaving the SDCS, adolescents and adults must rely on their own sustained oral health behaviours such as cleaning between teeth (interdental cleaning), maintaining good dietary habits, and seeking regular oral check-ups, in order to effectively prevent tooth decay and gum diseasess. The Working Group noted that while the number of retained teeth among non-institutionalised elderly in Hong Kong has increased, it is essential to encourage sustained behavioural changes to further reduce the risk of tooth loss among citizens. Maintaining effective oral hygiene habits and lifestyles conducive to oral health are essential elements in continuing to improve oral health.

Figure 3: The importance of oral health



Chapter 2

Development of Hong Kong Dental Services

Overview

The Government established the Government Dental Service in 1945, and continuously developed and expanded the provision of dental services provided through public service or subsidised models since then. The Working Group briefly reviewed the developmental history of dental services in Hong Kong. Early public health measures on oral health included the fluoridation of drinking water, the establishment of the SDCS, and the establishment of the Faculty of Dentistry of The University of Hong Kong (FoD). In recent years, various subsidised dental service programmes targeting underprivileged groups have been implemented.

Developmental history of dental services in Hong Kong

2.1 The Working Group comprehensively reviewed government-provided or subsidised dental services while also briefly reviewing the developmental trajectory of dental services to understand the origins of the layout of the current dental service system (Figure 4). Hong Kong's earliest dental regulatory framework can be traced back to the Dentistry Ordinance passed in 1914, as the first legislation specifying the qualifications required for dentists. It was replaced by the *Dentists Registration Ordinance* in 1940 and has since remained the legal framework regulating the practice of dentistry in Hong Kong.

2.2 According to the Department of Health (DH)'s literature on dental services[15], the Government Dental Service was established in 1945 primarily to provide comprehensive dental services for civil servants and their spouses / children. Although government dentists would occasionally be called to Queen Mary Hospital to provide dental services under general anaesthesia for inpatients, there was no dental department in public hospitals until 1955, when the then "Medical and Health Department" established the first formal Hospital Dental Department at Queen Mary Hospital. Later, the Medical and Health Department was split into the DH and Hospital Services Department, and then the Hospital Authority (HA) was subsequently established. There are now Oral Maxillofacial and Dental Clinics under the DH and the Department of Dentistry and Maxillofacial Surgery (DDMS) under the HA (details in paragraph 2.15 and 2.16).

[15] Government Dental Service in Hong Kong Commemorative Album 1945-2015.

2.3 The Government accepted the proposal from the Hong Kong Dental Association (HKDA) in 1957 and began the fluoridation of drinking water in March 1961. This measure effectively reduced tooth decay levels across Hong Kong's population, for example, reducing the proportion of children with their permanent tooth affected by decay from over 90% before water fluoridation to the recent 16% (details in paragraph 1.12). On the other hand, the Government amended the *Dentists Registration Ordinance* in 1959 to establish the Dental Council of Hong Kong (DCHK) to manage the registration of dentists and to maintain professional dental ethics, standards and discipline, further safeguarding the quality of dental services[16].

[16] This legal framework remained in use for over 60 years, until the Legislative Council passed the *Dentists Registration (Amendment) Bill 2024* on 10 July 2024, comprehensively reforming the regulatory framework for dental practice. The relevant amendments will be implemented in phases from 2025, including-
(a) Create new pathways for qualified non-locally trained dentists to practise at specified institutions, in addition to local dental graduates and dentists who have passed the DCHK's licensing examination;
(b) Introduce a provisional registration mechanism requiring local dental graduates to complete a one-year internship, and non-locally trained dentists who have passed the DCHK's licensing examination to undergo an assessment period;
(c) Introduce a statutory registration system for dental ancillary personnel (including dental hygienists and dental therapists) and formally rename them as dental care professionals (DenCPs), establishing their professional status;
(d) Require dentists and DenCPs to participate in mandatory continuing professional development to enhance their professional competence;
(e) Modify the composition and structure of the DCHK in light of its new functions; and
(f) Make other technical amendments to modernise the operation of the DCHK and the regulatory systems for various dental professions.

Figure 4: Milestones in Hong Kong dental services development

2.4 The Government's first oral health policy document appeared in Chapter 11 of a 1974 white paper[17]. This policy document made two important proposals that led to the launch of the SDCS in 1980 and the establishment of Faculty of Dentistry of the University of Hong Kong in 1982. The latter has been producing locally trained dentists in Hong Kong since 1985.

2.5 In 1989, the then Medical Development Advisory Committee established a Dental Sub-committee to review and make recommendations on Hong Kong's oral health services. The Dental Sub-committee submitted its report in 1991, recommending oral health policy objectives and a series of other recommendations to the Government, particularly highlighting that the Government should address the dental needs of persons with special needs, leading to the later introduction of programmes such as the "Outreach Dental Care Programme for the Elderly" (ODCP), the "Healthy Teeth Collaboration" (HTC) and the "Special Oral Care Service" (SOCS).

Oral health education and promotion

2.6 The Oral Health Promotion Division (OHPD) under the DH is responsible for implementing various oral health promotion activities targeting different age groups. Oral health information is disseminated through diverse channels to raise public awareness on oral hygiene and health, and to encourage citizens to develop good oral hygiene habits.

Pre-school children

2.7 The Government places special emphasis on cultivating good oral hygiene habits in children from an early age. The DH provided oral care information for children aged 0-6 through its website and Maternal and Child Health Centres (MCHCs). A series of booklets on infant oral care, such as *Oral Health Care for your Children*, *Children's Diet and Dental Health*, and *Brushing Teeth is What Children Can Do* were produced and distributed by healthcare professionals to parents during physical examination and developmental surveillance at MCHCs for education of parents on taking care of their infant's oral health as early as possible. The MCHCs covered approximately 94% of newborns and their parents.

2.8 The DH also administers the "Bright Smiles for the New Generation" school-family programme, targeting children under 6 years old in kindergartens and nurseries across Hong Kong. Through diverse learning materials, including cartoon animations and storybooks, teachers, parents and children receive clear guidance through activities at school and at home on tooth-cleaning and good dietary habits to prevent dental diseases. Additionally, the DH operates the "Bright Smiles Playland" specially designed for 4-year-olds, offering free visits to local

[17] The Further Development of Medical and Health Services in Hong Kong.

kindergartens and nurseries. Children can learn knowledge on dental self-care in an enjoyable way through interactive games and activities, such as singing nursery rhymes, practising tooth-brushing on dental models, taking turns using various dental instruments, and participating in role-play games, thereby developing good oral hygiene habits. The DH will continue to encourage more kindergartens and nurseries to actively participate in their oral health education activities and programmes. In the 2023/24 academic year, 671 kindergartens and nurseries enrolled, with approximately 110 000 students registered and about 93 000 students completed the programme.

2.9 In June 2023, the OHPD launched a pilot programme named "Bright Smiles Baby" Programme 2023-24 – Pilot Outreaching Oral Health Care and Promotion Programme for Pre-kindergarten Children targeting children aged 0-3 attending child care centres. The programme is being piloted in selected child care centres with the aim of increasing parents' oral health knowledge and improving their skills in cleaning their children's mouths, thereby helping children establish good oral care, dietary and oral check-ups habits early on. The two-year programme (2023/24 to 2024/25) is divided into education and assessment components, including providing free oral check-ups to assess tooth decay, applying topical fluoride based on children's age and needs to prevent tooth decay, conducting workshops for parents and caregivers, distributing relevant leaflet series, and providing telephone follow-up for children at high risk of tooth decay. As at 21 November 2024, 19 child care centres have agreed to participate in the pilot scheme. Of these, 17 centres have received services during 31 outreach visits, with clinical screenings and oral health instructions completed for 927 children. In addition, 246 children from 16 child care centres have received oral health instructions or participated in related oral health seminars.

Primary school students

2.10 The DH also operates the "Bright Smiles Mobile Classroom", promoting oral health to primary school students through outreach and game-based activities via an oral health education bus. During the 2023/24 academic year, 33 primary schools participated, with approximately 12 000 visits recorded to the mobile classroom.

Secondary school students

2.11 To build upon the work carried out at primary school level, the DH runs a school-based programme for secondary students called the "TEENS Teeth Award Scheme". Under this scheme, senior secondary students receive training and then promote and teach the importance of oral healthcare and hygiene to junior students through peer education (i.e. train the students as trainers). During the 2023/24 academic year, 33 secondary schools participated, with 2 343 secondary school students receiving oral health education related to the prevention of tooth decay and gum diseasess.

All Hong Kong citizens

2.12 The OHPD organises the "Love Teeth Campaign" annually, promoting citizens' awareness on oral health, improving personal oral care and encouraging the habit of regular oral check-ups to prevent dental diseases using various promotional channels with the themes of the World Dental Federation's "World Oral Health Day" and the National Health Commission's "National Love Teeth Day".

Government-provided dental services

General Public (GP) Session service

2.13 The Government Dental Service was established in 1945, primarily to fulfil contractual obligations to provide dental benefits to civil servants/retired civil servants and their eligible dependents[18]. The DH currently provides free GP Session services to the citizens during designated periods at its 11 government dental clinics. The scope of GP Session services includes treating acute dental conditions, prescribing pain relief medication, treating oral abscesses, and performing tooth extractions. Dentists also provide professional advice to patients based on their individual needs. In 2023, the number of attendances for the GP Session was about 19 300.

[18] The government dental clinics under the DH currently provide dental services primarily to civil servants / retired civil servants and their eligible dependents. The expenditure comes from resources allocated by the Government for civil servants' medical and dental benefits and does not constitute part of the public dental services available to the general public. The GP Session offered to the public only utilise a small portion of the dental clinics' service capacity to provide supplementary emergency services.

SDCS

2.14 Since 1980, the DH has been providing dental care and treatment services to all primary school students in Hong Kong, as well as students under the age of 18 attending special schools with intellectual and/or physical disabilities (such as cerebral palsy). Participating students are scheduled annually to visit designated school dental clinics for oral check-ups, as well as basic preventive and curative dental services. In the 2023-24 service year, the number of participants was about 313 700.

Hospital dental service

2.15 The first dental clinic in public hospital was established by the then "Medical and Health Department" at Queen Mary Hospital in 1955, and subsequently at Queen Elizabeth Hospital, Princess Margaret Hospital, Prince of Wales Hospital, Tuen Mun Hospital and Pamela Youde Nethersole Eastern Hospital. In 1989, the Medical and Health Department was split into the DH and Hospital Services Department, with the above six hospital dental clinics coming under direct management of the DH. To more accurately reflect the scope of dental services provided, hospital dental clinics were renamed as Oral Maxillofacial Surgery and Dental Clinics (OMS&DCs) in 1996. In 1998, the DH established its seventh OMS&DC at North District Hospital. The DH's OMS&DCs primarily provide oral maxillofacial surgery and specialist dental treatment for inpatients, patients requiring special oral care, and dental emergency patients. These specialist services are available through referrals from the HA or private doctors. The OMS&DCs arrange appointments for referred individuals based on the urgency of their conditions, with immediate consultation and treatment arranged for urgent cases such as dental trauma. The attendances to OMS&DCs of DH were about 52 900 including 7 400 patients with special needs in 2022.

2.16 After the establishment of HA in 1991, the general dental services provided by its dental departments were transformed to more specialised services as service expansion. The dental department at United Christian Hospital gradually developed into a specialist oral maxillofacial surgery department, named the DDMS. In 2019, United Christian Hospital's DDMS services expanded beyond the Kowloon East Cluster through a cross-cluster service network comprising six hospitals: United Christian Hospital, Tseung Kwan O Hospital, Hong Kong Children's Hospital, Kwong Wah Hospital, Caritas Medical Centre, and Alice Ho Miu Ling Nethersole Hospital, enabling patient referrals from other clusters to United Christian Hospital for dental treatment and/or maxillofacial surgery. Besides routine dental support and perioperative management, the network also assists in allocating all small and medium-scale surgery cases to Tseung Kwan O Hospital's ambulatory care centre, while more complex adult and paediatric cases are handled by United Christian Hospital and Hong Kong Children's Hospital

respectively. The HA's specialist dental services primarily provide oral maxillofacial surgery specialist services for inpatients, patients requiring special oral care, and emergency dental cases (such as trauma, tumours, and cleft lip deformities). Patients are mainly referred internally by specialist doctors from various clinical departments (such as Ear Nose and Throat, Surgery, Medicine, Paediatrics, and Oncology) to provide cross-specialty treatment.

Special Oral Care Service

2.17 To improve the oral health of children with intellectual disabilities (ID), the DH collaborates with the HA to establish the SOCS at Hong Kong Children's Hospital in September 2019 for pre-school children under 6 years old with ID, to prevent and treat common oral diseases early. The service also includes a dental outreach team providing free on-site dental check-ups and oral health education for eligible children at special child care centres under the Social Welfare Department (SWD). Children are referred to Hong Kong Children's Hospital for necessary dental treatment when required. As of the end of October 2024, approximately 6 400 cases had received SOCS services, with around 1 100 cases referred to Hong Kong Children's Hospital for follow-up treatment.

Government-subsidised dental services

ODCP

2.18 Elderly residing in residential care homes for the elderly or receiving day care centre services are generally frail and have difficulties in accessing dental clinics. In 2011, the Government launched a three-year pilot programme subsidising non-governmental organisations (NGOs) to establish dental outreach teams providing free basic dental services (including oral check-ups, scaling and emergency dental treatment) for these elderly.

2.19 In October 2014, the Government regularised the pilot programme (named ODCP) providing free on-site oral check-ups services for elderly residing in residential care homes for the elderly or using day care centres and similar facilities across all 18 districts of Hong Kong. The dental outreach teams also design oral care plans based on elderly' oral care needs and self-care abilities, and provide oral care training for their caregivers. If elderly are suitable for further treatment, the dental outreach teams provide free dental treatment either on-site or at dental clinics. At the end of October 2024, the total attendances were approximately 416 000. In 2023/24, the expenditure of ODCP was approximately $49 million and served around 48 000 frail elderly.

HTC

2.20 To better serve the dental needs of adults with ID and building on the experience of the "Loving Smiles Service"[19], the DH launched the HTC in July 2018. Through five participating NGOs' dental clinics, the programme provides free dental services including oral check-ups, dental treatment and oral health education for adults with ID. When necessary, patients are arranged to receive required dental treatment under intravenous sedation or general anaesthesia at collaborating private hospitals. From July 2018 to mid-July 2024, approximately 5 400 adults with ID registered for the service. The programme, originally scheduled to end in July 2024, has been extended to March 2027, with the number of participating NGOs increasing to eight, and coverage expanded to include patients aged 18 or above with Autistic Spectrum Disorder. As at October 2024, approximately 2 390 adults with ID, Autism Spectrum Disorder, or both conditions registered for the extended HTC.

Elderly Health Care Voucher Scheme

2.21 The Government launched the "Elderly Health Care Voucher Scheme" (EHVS) in 2009 to provide financial incentives for elderly to choose private primary healthcare services that best suit their health needs. There is no means test to join EHVS, and eligible Hong Kong residents aged 65 or above currently receive Elderly Health Care Vouchers (EHCVs) amount to $2,000 annually, which can be used to pay for primary healthcare services provided by 14 categories of registered healthcare service providers in Hong Kong (including dentists). Since 2019, the accumulation ceiling for EHCVs has been raised to $8,000. To effectively achieve the goal of promoting primary healthcare, EHCVs cannot be used solely for purchasing medicine or buying/renting medical equipment and supplies.

2.22 In 2023, the Government further enhanced the EHVS with measures including allowing elderly to share EHCVs with their spouses from July and implementing electronic consent forms. In November of the same year, the Government launched a three-year "Elderly Health Care Voucher Pilot Reward Scheme" [20] (Pilot Reward Scheme) to encourage elderly to use EHCVs for preventive primary healthcare services, including regular dental check-ups. In

[19] From August 2013 to July 2018, the former Food and Health Bureau collaborated with the Hong Kong Dental Association, Hong Kong Society for the Disabled and Evangel Hospital to implement the 'Pilot Project on Dental Service for Patients with Intellectual Disability' (also known as 'Loving Smiles Service'), which subsidised financially disadvantaged adults with intellectual disabilities to seek oral check-ups, dental treatment and oral health education at participating dental clinics.

[20] To better utilise resources in promoting primary healthcare, the DH launched a three-year 'Elderly Health Care Voucher Reward Pilot Scheme' on 13 November. Under the scheme, elderly who spend a cumulative total of $1,000 or more in EHCVs within the same calendar year (January to December) on specific primary healthcare services for disease prevention and health management (including dental check-ups, scaling, extractions, fillings, etc.) will automatically receive a $500 reward through the eHealth (Subsidies) system into their healthcare voucher account. This reward can likewise be used for specific primary healthcare purposes, with no separate registration required.

2023, out of approximately 5 million claims under the EHVS, around 331 000 were claims for dental services, amounting to $413.22 million.

2.23 Moreover, the *2023 Policy Address* announced the implementation of the "Elderly Health Care Voucher Greater Bay Area Pilot Scheme" (GBA Pilot Scheme) to extend EHCV coverage to suitable medical institutions in the Greater Bay Area. Currently, EHCVs can be used at nine service points in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA), including the University of Hong Kong-Shenzhen Hospital and its off-site Huawei Li Zhi Yuan Community Health Service Centre, as well as seven[21] medical institutions under the GBA Pilot Scheme, all providing dental services, covering Guangzhou, Zhongshan, Dongguan and Shenzhen, offering eligible Hong Kong elderly greater convenience and flexibility to make better use of primary healthcare services. The *2024 Policy Address* announced the expansion of the GBA Pilot Scheme to nine Mainland cities in the GBA.

Comprehensive Social Security Assistance (CSSA) Scheme "Dental Grants"

2.24 For persons with financial difficulties, the CSSA Scheme provides a dental grant for its recipients to pay for dental treatment services[22]. Eligible CSSA recipients can approach the 80 dental clinics[23] designated by the SWD for dental check-ups 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.

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

[21] Five of these provide comprehensive services (including dental services): The First Affiliated Hospital, Sun Yat-sen University in Guangzhou, Nansha Division of the First Affiliated Hospital, Sun Yat-sen University in Nansha, Zhongshan Chenxinghai Hospital of Integrated Traditional Chinese and Western Medicine in Zhongshan, Dongguan Tungwah Hospital in Dongguan, and Shenzhen New Frontier United Family Hospital in Shenzhen. Additionally, two facilities provide dental services only: Shenzhen C.K.J. Stomatological Hospital in Luohu District of Shenzhen, and Dental Bauhinia Specialty Service Centre (Shenzhen)/Dental Bauhinia General Care Center (Shenzhen) in Futian District of Shenzhen.

[22] Including tooth extractions, dentures, crowns, bridges, dental posts, dental implants, scaling, fillings and root canal treatment.

[23] As at September 2024.

Community Care Fund (CCF) "Elderly Dental Assistance Programme" (EDAP)

2.26 The EDAP funded by the CCF was launched in September 2012. It currently provides free removable dentures and related dental services (including oral check-ups, scaling, fillings, extractions, X-rays, removal of bridges or crowns, and root canal treatment) to low-income elderly receiving SWD-subsidised home care services and elderly aged 65 or above receiving Old Age Living Allowance (OALA, i.e. covering all OALA recipients). Following the recommendation of the Working Group, the EDAP was enhanced in July 2024, removing the essential requirement for removable dentures so that eligible elderly can receive dental check-ups, scaling, extractions and fillings even unfit for denture fitting, encouraging early identification and intervention of dental diseases. From September 2012 to October 2024, nearly 160 000 cases have completed the service, while around 30 000 applicants are currently receiving treatment at various stages.

Other dental services

Dental benefits provided to employees by employers / institutions

2.27 According to the 2022/23 *Hong Kong's Domestic Health Accounts*[24], among the $8.561 billion spent on private dental services, around $822 million (approximately 9.3%) was financed through employer-provided insurance schemes. Currently, no data is available on the dental services utilised under this spending.

Use of private dental services

2.28 The Census and Statistics Department periodically conducts thematic household surveys to collect information about Hong Kong residents' use of medical services, including dental consultations. The most recent survey, conducted between December 2022 and April 2023, found that approximately 2 000 800 people had received dental check-ups or treatment in the 12 months preceding the survey, representing 28.8% of the total population covered by this survey. Nearly three-quarters of citizens who received dental treatment in the year before the survey received services at private dental clinics (including dental clinics operated by charitable organisations, non-profit organisations or tertiary institutions in Hong Kong). About 24% received services at government dental clinics (including those under the DH and HA), primarily civil servants / retired civil servants and their eligible dependents under the Civil Service dental benefits. Regarding the types of dental services used, measured by the proportion of service users, "scaling and polishing" was the most commonly used service (66.3%), followed by "teeth check-up" (64.8%), "filling" (12.2%), "extraction of teeth" (8.9%), and "prosthesis treatment" (2.1%)[25].

[24] https://www.healthbureau.gov.hk/statistics/en/dha.htm
[25] Thematic Household Survey Report No. 78.

Manpower of dental professionals

2.29 According to the DCHK and DH records, as at October 2024, there were 615 registered dental hygienists and 224 dental therapists employed by the Government. During the same period, Hong Kong had 2 617 registered dentists resident in Hong Kong, with the majority working in private practice or NGOs. Currently, the registration system does not have information about how many of these dental professionals are actively practising or their practice locations, therefore there are no statistical figures on the actual practice situation.

Chapter 3

Oral Health Status and Risks Among the Population

Overview

After reviewing results of the past and the latest OHS, the Working Group concluded that various public health measures on oral health implemented by the Government over the years, including the fluoridation of drinking water, establishment of the FoD, and launch of the SDCS, had effectively improved the population's oral health, with a decline in the prevalence of tooth decay and a continued increase in the number of teeth retained by elderly. On the other hand, the citizens still face oral health risks, and the Working Group considered it necessary to remind citizens to timely correct some commonly held misconceptions at an early stage, and to enhance awareness about oral health, causes of dental diseases, and dental services.

OHS's of DH

3.1 The Working Group found that the earliest territory-wide representative OHS could be traced back to 1960. The Government conducted surveys around 1961 to evaluate the effectiveness of water fluoridation. Further surveys were conducted in 1984 and 1991 by the FoD after its establishment. By 2001, the DH committed to conducting territory-wide OHS every ten years thereafter, which was in line with the WHO's recommendations at that time. The latest OHS report was only completed recently due to delays in survey work caused by the COVID-19 pandemic.

Overview of oral health status among Hong Kong citizens

Pre-school children

3.2 The main oral health problem at the childhood stage is tooth decay. The deciduous dentition is affected among pre-school children and the newly erupted permanent teeth are affected among primary school children. Table 3 showed the tooth decay situation in deciduous teeth among 5-year-old pre-school children. The continuous decrease in tooth decay among 5-year-olds following water fluoridation in 1961 can be observed, though improvements had slowed down since 1987. Overall, the percentage of 5-year-old children with tooth decay in deciduous teeth had decreased from 89.0% in 1960 to 41.6% in 2021. Notably, most 5-year-olds with decayed, missing, or filled[26] deciduous teeth have had untreated tooth decay, and most of the affected deciduous teeth were untreated decayed teeth (Table 3).

[26] The number of dmft, which is the sum of untreated tooth decay, filled teeth, and missing teeth for deciduous teeth.

Table 3: Tooth decay status in deciduous teeth among pre-school children between 1960 to 2021

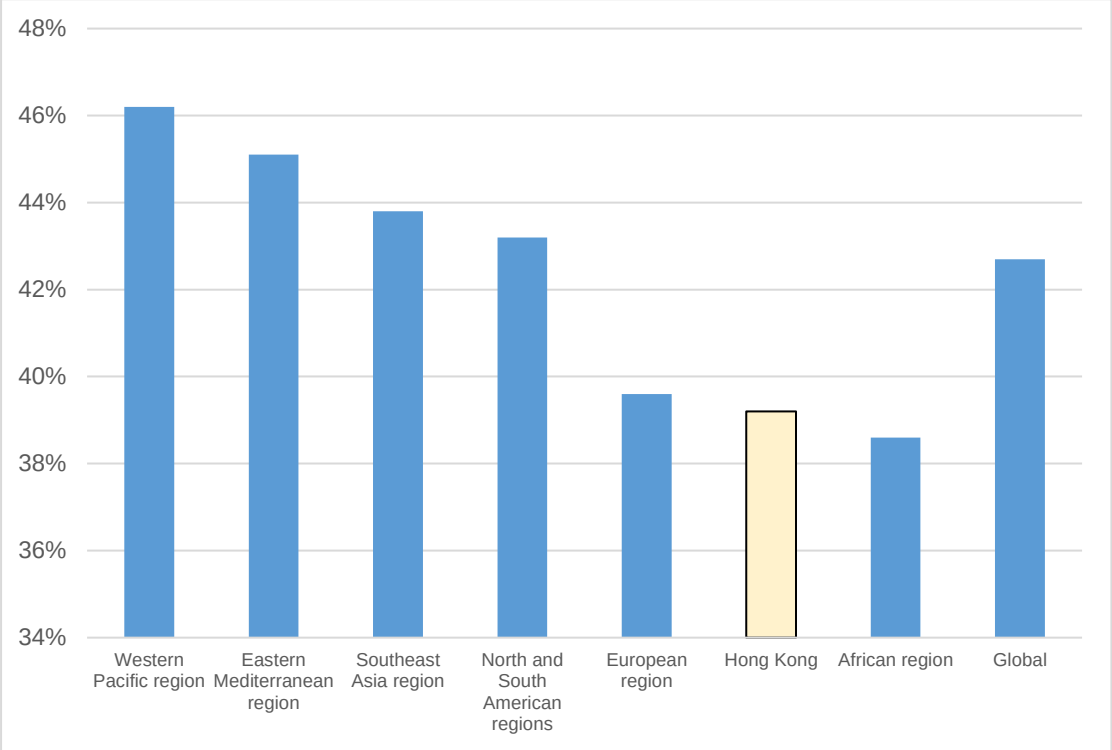
Survey year	Percentage of pre-school children		Mean number of deciduous teeth	
	Children with decayed, missing, or filled deciduous teeth	Children with untreated decayed deciduous teeth	Decayed, missing, and filled deciduous teeth	Decayed deciduous teeth
1960[27]	89.0%	#	9.2	8.0
Water fluoridation implemented in 1961				
1968[28]	85.1%	#	5.3	5.2
1980[29]	75.4%	#	4.3	4.0
1987[30]	63.3%	#	3.0	2.3
2001[31]	51.0%	49.4%	2.3	2.1
2011[32]	50.7%	49.4%	2.5	2.3
2021[33]	41.6%	39.2%	1.8	1.6

Data not included in original report

3.3 Compared to other countries / regions, Hong Kong has a relatively low percentage of pre-school children with untreated decayed deciduous teeth (Figure 5). However, as most tooth decay in deciduous teeth are actually preventable, the Working Group opined that it is necessary to explore ways to further reduce tooth decay in deciduous teeth among Hong Kong children.

[27] Children aged 6-8, from Report of the 1st (pre-fluoridation) dental survey of school children in Hong Kong.
[28] Children aged 5-6, from Dental Disease Pattern – Hong Kong WHO 1968 Survey.
[29] Children aged 6, from Report on the fluoridation dental survey of primary school children in Hong Kong.
[30] Children aged 6, from A report on a dental survey on primary school children in Hong Kong.
[31] Children aged 5, from DH OHS 2001.
[32] Children aged 5, from DH OHS 2011.
[33] Children aged 5, from DH OHS 2021.

Figure 5: Percentage of untreated decay in deciduous teeth among pre-school children



Source: WHO *Global Oral Health Status Report: Towards Universal Health Coverage for Oral Health by 2030.*

3.4 The OHS 2021 found that while the vast majority of 5-year old children had daily tooth-brushing habit, only about 30% regularly received parental assistance with tooth-brushing, and over 30% snacked twice or more daily. Lack of parental assistance with tooth-brushing and frequent eating and drinking are risk factors for tooth decay among pre-school children (Table 4).

Table 4: Risk factors for tooth decay among 5-year old pre-school children

	2001[34]	2011[35]	2021[36]
Tooth-brushing frequency reported by parents			
Less than once daily	9.1%	4.7%	3.3%
Once daily	36.5%	20.7%	18.8%
Twice daily	53.0%	70.6%	76.8%
Three times or more daily	1.4%	3.9%	1.1%

[34] DH OHS 2001.
[35] DH OHS 2011.
[36] DH OHS 2021.

	2001	2011	2021
Frequency of parental assistance with tooth-brushing			
Never	30.8%	9.8%	9.6%
Sometimes	52.7%	62.3%	59.7%
Often	16.5%	27.9%	30.7%
Frequency of snacking reported by parents			
No daily snacking habit	#	#	32.6%
Once daily	#	#	33.1%
Twice daily	#	#	24.4%
Three times or more daily	#	#	9.9%

Data not included in original report

3.5 To address the tooth decay problem among pre-school children, the FoD 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 more effectively convey oral health messages to students. According to the data collected by the FoD, the Project was effective in slowing down tooth decay among pre-school children[37]. It is the opinion of the Working Group that similar project should be continued.

3.6 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 lifestyles of some children had been at high risk of tooth decay at the stage before 3 years old. Some parents might have the belief that decayed deciduous teeth are acceptable as they will be replaced. However, children with tooth decay in deciduous teeth may face a high risk of developing caries in their permanent teeth later if poor oral hygiene, dietary habits, and lifestyle patterns established at an early age persist. The Working Group considered that it is still necessary to reinforce the establishment of appropriate lifestyles 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.

[37] 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.

Primary school students

3.7 Similar to the tooth decay level of pre-school children, the percentage of students with tooth decay in permanent teeth dropped after water fluoridation in 1961 as shown in Table 5. Starting from 1980, the DH has been providing dental care and treatment services for primary school students in Hong Kong [38]. Participating students were arranged to visit designated school dental clinics annually for oral check-ups and basic preventive and curative dental services. However, at the early stage of SDCS following its establishment in 1980, there was no significant improvement in students' tooth decay situation. 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[39]. Following a series of recommendations from the Dental Sub-committee of the Medical Development Advisory Committee released in 1991, the SDCS has strengthened the preventive dental services including the wider use of fissure sealant and topical fluoride. Subsequent OHSs showed a continuous decrease in the percentage of 12-year old students with tooth decay in permanent teeth, and the Working Group's review found that this percentage had dropped from 94.9% in 1960 to 16.3% in 2021.

Table 5: Tooth decay status in permanent teeth among school students between 1960 to 2021

Survey year	Percentage of students		Mean number of permanent teeth	
	Children with decayed, missing, or filled permanent teeth	Children with untreated decayed permanent teeth	Decayed, missing, and filled permanent teeth	Decayed permanent teeth
1960[40]	94.9%	#	4.4	4.1
Water fluoridation implemented in 1961				
1968[41]	68.3%	64.2%	2.0	1.7
1980[42]	57.3%	#	1.5	1.4
SDCS launched in 1980				
1987[43]	54.0%	#	1.2	0.3

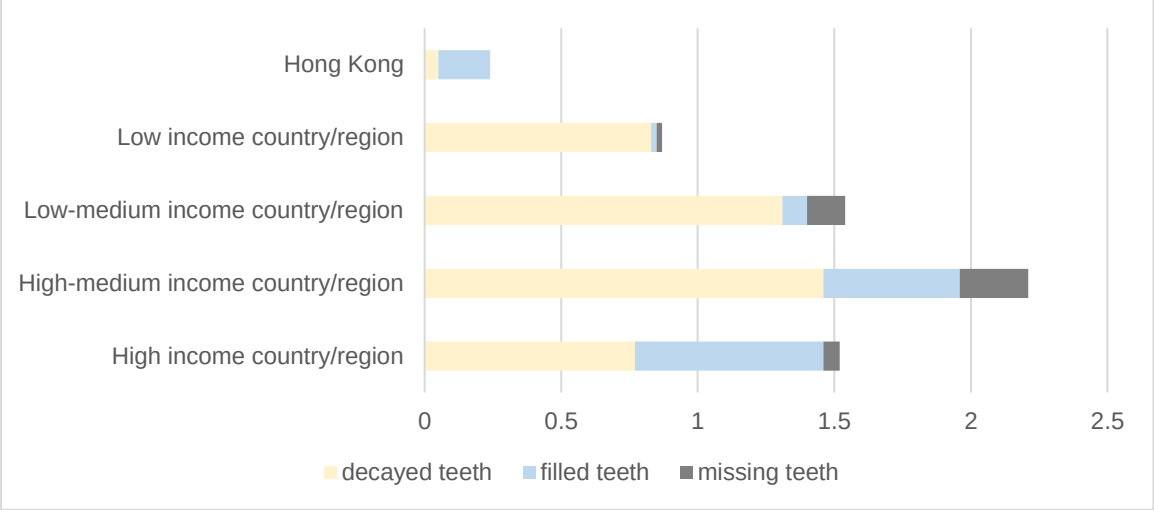
[38] Also provides SDCS to students under 18 years of age with intellectual disabilities and/or physical disabilities (such as cerebral palsy) attending special schools.
[39] Evans RW & Lo ECM. Effects of SDCS in Hong Kong – primary teeth. Community Dentistry Oral Epidemiology 1992;20:193-195.
[40] Children aged 9-11, from Report of the 1st (pre-fluoridation) dental survey of school children in Hong Kong.
[41] Children aged 11, from Dental Disease Pattern – Hong Kong WHO 1968 Survey.
[42] Children aged 11, from Report on the fluoridation dental survey of primary school children in Hong Kong.
[43] Children aged 11, from A report on a dental survey on primary school children in Hong Kong.

Preventive policy adopted by SDCS after 1991				
2001[44]	37.8%	6.9%	0.8	0.1
2011[45]	22.6%	5.4%	0.4	0.1
2021[46]	16.3%	4.2%	0.24	0.05

Data not included in original report

3.8 Compared to other countries / regions, the number of decayed, missing, and filled permanent teeth (DMFT) among 12-year old students in Hong Kong was very low, with also very low proportion of untreated tooth decay and almost no missing teeth (Figure 6). This demonstrated that the SDCS had achieved prevention, early identification, and timely intervention of tooth decay.

Figure 6: Mean number of DMFT among 12-year-old students



Source: FDI World Dental Federation *The Challenge of Oral Disease - A Call For Global Action*

3.9 Most of the 12-year old students who participated in OHSs had entered secondary school for not long. The survey questionnaire included a question to parents asking about their intention for taking their children to oral check-ups. In the OHS 2021, nearly 40% of parents indicated that they had no plan to take their children to oral check-ups (Table 6), resulting in the possibility of missing the valuable opportunities for early identification and timely intervention of dental diseases.

[44] Children aged 12, from DH OHS 2001.
[45] Children aged 12, from DH OHS 2011.
[46] Children aged 12, from DH OHS 2021.

Table 6: Parents' intention to take 12-year-old students for regular oral check-ups

12-year old students			
	2001[47]	2011[48]	2021[49]
No intention to take child to oral check-ups	58.3%	35.9%	37.5%
Intend to take child to oral check-ups	41.7%	64.1%	62.5%

Adults and elderly

3.10 Regarding the oral health of Hong Kong's adults and elderly, there was approximately thirty years of historical data available for reference (Table 7). During this period, adults had retained most of their teeth, with almost no adults with complete tooth loss. The proportion of adults with untreated tooth decay had consistently remained at around 30%, and the number of untreated decayed teeth was very low. The prevalence of severe gum diseasess among adults showed an upward trend.

Table 7: Oral health status of adults aged 35-44 between 1991 to 2021

	1991[50]	2001[51]	2011[52]	2021[53]
Mean number of teeth	27.5	28.1	28.6	28.9
Percentage with complete tooth loss	0%	0%	0%	0%
Tooth decay				
Mean number of untreated decayed teeth	1.0	0.7	0.7	0.7
Percentage with untreated tooth decay	#	32.0%	31.2%	31.7%
Gum diseasess				
Percentage with severe gum diseasess (with deep periodontal pockets)	#	7.1%	9.8%	14.8%

Data not included in original report

3.11 Regarding elderly aged 65-74, the number of retained teeth had been increasing over the past thirty years, from an average of 15 teeth per elderly in 1991

[47] DH OHS 2001.
[48] DH OHS 2011.
[49] DH OHS 2021.
[50] OHS conducted by the FoD at The University of Hong Kong.
[51] DH OHS 2001.
[52] DH OHS 2011.
[53] DH OHS 2021.

to nearly 23 teeth in 2021. On the other hand, the percentage of elderly with complete tooth loss had steadily decreased, from 12.0% in 1991 to 0.9% in 2021. The proportion of elderly with untreated tooth decay had remained at nearly half, and the mean number of untreated decayed teeth had also remained relatively unchanged. However, as the total number of retained teeth had been increasing, the rate of untreated tooth decay had in fact dropped from 9.3% (1.4/15) in 1991 to 5.3% (1.2/22.8) in 2021. Similar to adults, the prevalence of severe gum diseasess among elderly also showed an upward trend (Table 8).

Table 8: Oral health status of non-institutionalised elderly aged 65-74 between 1991 to 2021

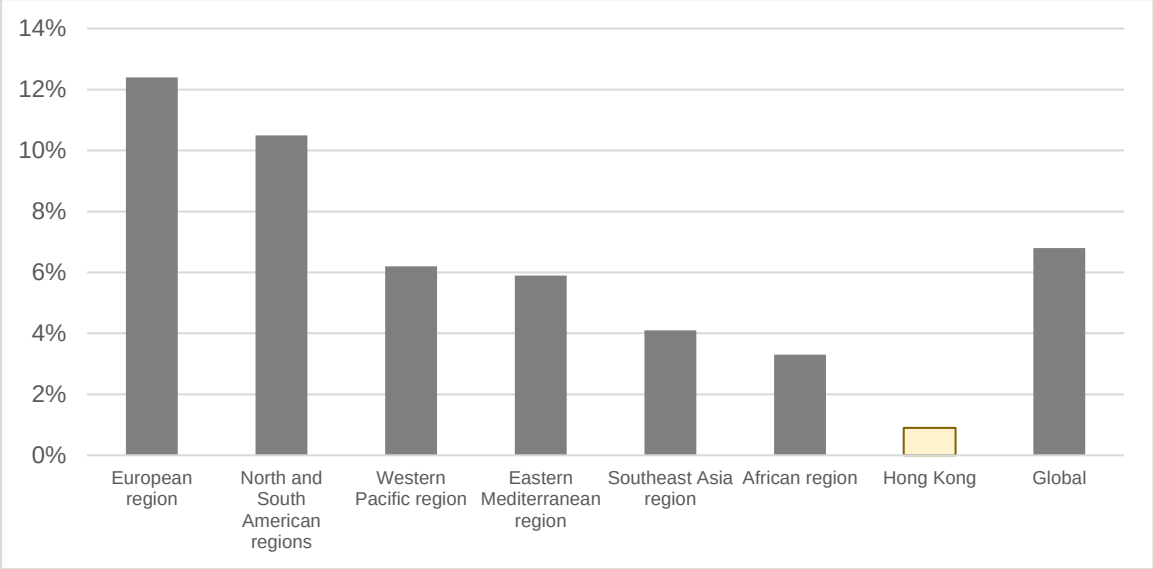
	1991[54]	2001[55]	2011[56]	2021[57]
Number of teeth	15.0	17.0	19.3	22.8
Percentage with complete tooth loss	12.0%	8.6%	5.6%	0.9%
Tooth decay				
Mean number of untreated decayed teeth	1.4	1.3	1.3	1.2
Percentage with untreated tooth decay	#	52.9%	47.8%	47.1%
Gum diseasess				
Percentage with severe gum diseasess (with deep periodontal pockets)	15.0%	11.0%	20.4%	25.8%

Data not included in original report

3.12 Compared to other countries / regions, the percentage of elderly aged 65-74 with complete tooth loss in Hong Kong was extremely low (Figure 7).

[54] Oral health survey conducted by the FOD.
[55] DH OHS 2001.
[56] DH OHS 2011.
[57] DH OHS 2021.

Figure 7: Global comparison of complete tooth loss rates among elderly



Source: *World Health Organisation Global Oral Health Status Report: Towards Universal Health Coverage for Oral Health by 2030.*

3.13 The results of OHS 2021 showed that non-institutionalised elderly had a higher rate of missing molar teeth (back teeth) compared to other teeth (Table 9). Therefore, the Working Group also attempted to identify risk factors for tooth loss among adults.

Table 9: Distribution of missing teeth among non-institutionalised elderly aged 65-74

	Molars (back teeth)	Premolars	Incisors and canines
Missing teeth			
Upper teeth	33.8%	23.8%	14.3%
Lower teeth	42.3%	17.6%	11.5%

Source: DH OHS 2021

3.14 Daily tooth-brushing had become a habit for almost all adults. In addition, the proportion of adults who performed cleaning between their teeth (interdental cleaning) daily had nearly doubled compared to ten years ago (Table 10). There was significant decrease in the number of adults with visible dental plaque and calculus accumulation. These data seemed to indicate that citizens have developed satisfactory oral hygiene habits.

Table 10: Oral hygiene habits among adults aged 35-44

Adults aged 35-44			
	2001[58]	2011[59]	2021[60]
Tooth-brushing frequency			
Occasionally	#	1.1%	0.2%
Once daily	#	21.7%	13.8%
Twice or more daily	#	77.2%	86.0%
Interdental cleaning habits			
No interdental cleaning	#	56.0%	35.6%
Occasional interdental cleaning	#	28.7%	36.8%
Daily interdental cleaning	#	15.4%	27.6%

Data not included in original report

3.15 However, OHS 2021 also found that the proportion of adults with gum pockets (including shallow pockets of 4-5mm depth and deep pockets of 6mm or more) had increased from 39.6% in 2011 to 57.4% in 2021. Further analysis revealed that most gingival bleeding and periodontal pockets among adults were located around molar teeth (Table 11). The more common occurrence of gingival bleeding and gum pockets around molar teeth among adults also indicated a higher likelihood of losing molar teeth as compared to other teeth in the future.

Table 11: Distribution of gingival bleeding and periodontal pockets among adults aged 35-44

	Molar teeth (back teeth)	Premolars	Incisors and canines
Shallow periodontal pockets (4-5mm depth)			
Upper teeth	24.0% *	13.7%	8.4%
Lower teeth	15.2% *	8.1% *	6.2%
Deep periodontal pockets (6mm or more)			
Upper teeth	3.4%	1.1% **	1.0%
Lower teeth	3.3% **	0.4% **	0.4%

Source: DH OHS 2021

* Over 80% of teeth in this category showed bleeding during check-ups

** Over 90% of teeth in this category showed bleeding during check-ups

[58] DH OHS 2001.
[59] DH OHS 2011.
[60] DH OHS 2021.

3.16 Gingival bleeding and gum pockets are symptoms of gum diseases, primarily caused by inefficient daily oral hygiene. Tooth-brushing alone is not sufficient to thoroughly remove dental plaque and interdental cleaning following dental professionals' guidance is also necessary. Although the proportion of adults who performed cleaning between their teeth daily has nearly doubled, only 27.6% of adults practised daily interdental cleaning, which was unfavourable for preventing oral diseases, particularly gum diseasess. The Working Group proposed to arouse citizens' awareness that the habit of daily tooth-brushing alone is insufficient to reduce the risk of future tooth loss. As the oral condition of each individual is different, everyone should receive personalised guidance from dental professionals in selecting the cleaning tools and mastering the correct techniques for using different tools, especially for molar areas which have a higher risk of gum diseases and so require more demanding cleaning techniques. Therefore, citizens should clearly understand that current oral hygiene habits are still insufficient to prevent gum diseases and tooth loss, especially that the risk of losing molar teeth is particularly high.

Future oral health of Hong Kong's citizens

3.17 After reviewing the results of past and the latest OHS, the Working Group concluded that various public health measures on oral health implemented by the Government over the years, including water fluoridation, establishment of the FoD, and launch of the SDCS, had effectively improved citizens' oral health, with decline in the prevalence of tooth decay and a continued increase in the number of teeth retained by elderly.

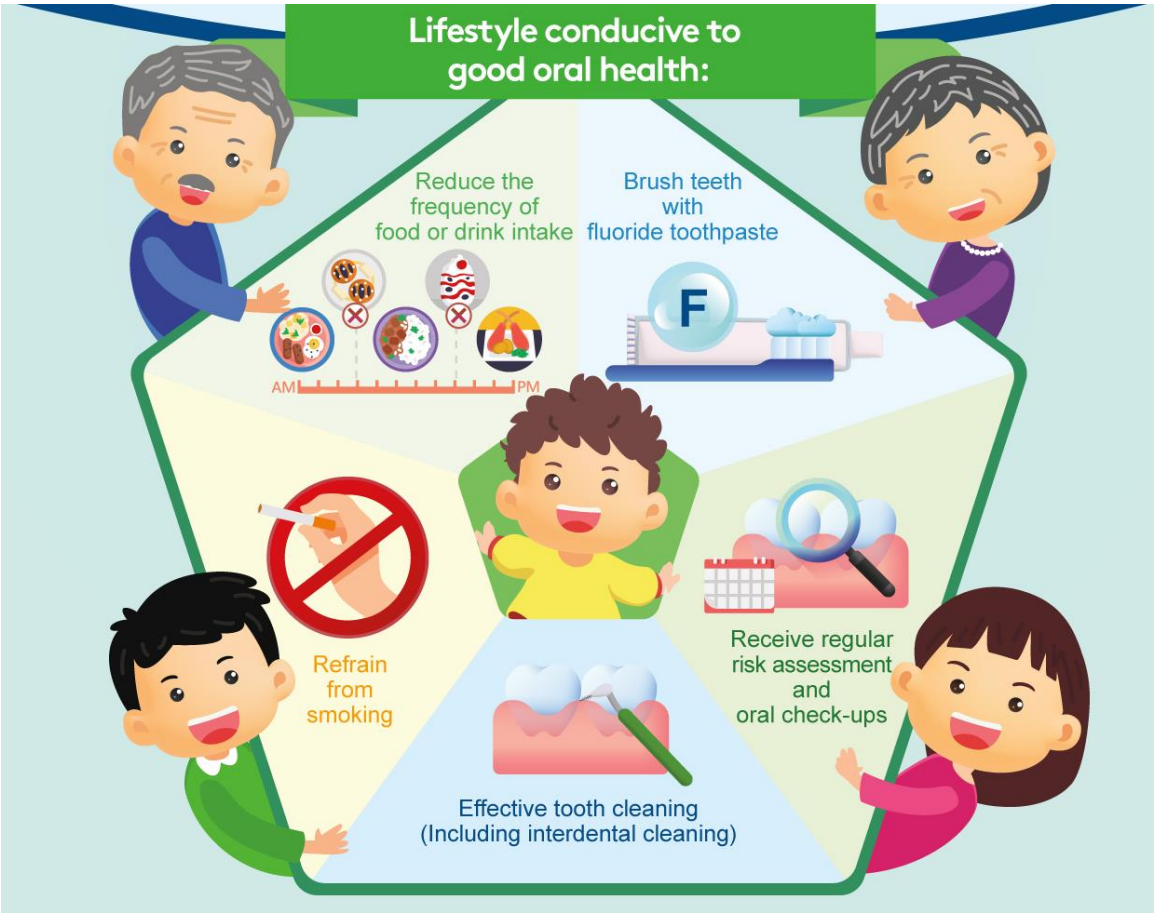
3.18 Although citizens appeared to have satisfactory tooth-brushing habits, the Working Group considered that the rate of regular oral check-ups and risk assessment was generally low. Citizens might believe that their lifestyles are sufficient to prevent dental diseases. Against this, the Working Group found it necessary to remind citizens to timely correct some commonly held misconceptions at an early stages, and to enhance awareness about oral health, causes of dental diseases, and dental services.

Misconception 1: Deciduous teeth will be replaced, so tooth decay in them is not a serious problem!
Correct understanding 1: Tooth decay in children's deciduous teeth is related to oral hygiene and dietary habits. While decayed deciduous teeth will indeed be replaced, permanent teeth are still likely to develop tooth decay if habits are not corrected early.

Misconception 2: Daily tooth-brushing is sufficient to prevent dental diseases!
Correct understanding 2: Personal oral hygiene measures should include cleaning teeth, gums, and between teeth. Tooth-brushing alone may not effectively clean the surfaces of back teeth and is insufficient for cleaning between teeth. Citizens should regularly consult dental professionals to select appropriate tools and use them properly based on their individual oral conditions to ensure thorough cleaning of teeth.

Misconception 3: Having no oral discomfort means teeth are healthy, so oral check-ups are unnecessary!
Correct understanding 3: As early-stages of dental diseases usually cause no obvious symptoms, sufferers may miss the valuable opportunities for timely intervention in case they defer seeking consultation until experiencing discomfort. Citizens should seek regular oral check-ups even if they think that their oral health status is satisfactory!

Figure 8: Lifestyle conducive to good oral health



Chapter 4

Strategic Development of Oral Health and Dental Care System

Overview

Upon the review of the existing subsidised dental services, the Working Group concluded that the Government has substantially increased the resources allocated to directly providing or subsidising dental services over the years, but the use of resources has been skewed towards curative treatment rather than prevention, resulting in overall low cost-effectiveness.

The Working Group recommended the Government to develop a prevention-oriented primary oral healthcare system for citizens, enhance public awareness, and implement prevention, early identification, and timely intervention to reduce the demand for curative dental treatment. On the other hand, the Government should focus the provision of appropriate dental services for underprivileged groups with financial difficulties and special needs, ensuring these groups have access to essential dental care services.

The Working Group also recommended the Government to continuously monitor demands of the community for oral health and dental care services and the profession's manpower situation, review the development and training strategies for healthcare professionals in Hong Kong, and ensure that the supply of dentists and dental care professionals and their training content can meet the overall needs in strategic development of oral health and dental care.

The Working Group recommended the Government to allocate subsidies according to citizens' financial ability and encourage the public to bear part of the service costs in managing their own health, by adopting the co-payment model in financing oral healthcare. The Government should also efficiently utilise electronic health records to monitor related healthcare services, ensure service effectiveness, and continuously improve service arrangements.

4.1 The Working Group indicated in Chapter 1 that the goal of developing the oral health and dental care system is to promote citizens' general health through prevention of dental diseases and retention of teeth. The Government has been investing resources to promote oral health education and develop dental services, benefiting citizens of all ages and needy groups (please refer to Chapter 2). The Working Group noted that the oral health of Hong Kong's population has been improving and was at very favourable levels by global comparison. However, citizens still faced risks of dental diseases and tooth loss (please refer to Chapter 3). The Working Group then discussed on how to use resources more effectively

to develop a comprehensive oral health and dental care system for improving citizens' oral health.

Oral health policy

4.2 Before making further recommendations on the strategic development on oral health and dental care, the Working Group considered it essential for the Government to first establish the oral health policy for the future. This policy must reflect the feasibility of preventing dental diseases and the importance of oral health to general health, thereby explaining to citizens the need to transform the oral health and dental care system to prevention-oriented. Drawing from past experience, the Working Group recommended the Government to create an environment conducive to good oral hygiene habits through primary oral healthcare, in addition to promoting public understanding of oral health, for effective prevention of dental diseases.

4.3 The effectiveness of dental disease prevention can be evaluated by the number of teeth retained by citizens. For example, Japan proposed the 80/20[61] target in 1989, while *China's Oral Health Action Plan (2019-2025)*[62] set a working target of 24 retained teeth for elderly aged 65-74 by 2025. Both targets raise crucial awareness that tooth loss in old age is preventable. The Working Group urged the public to change their mindset such that oral health and dental care should focus on protecting the remaining teeth even after losing some teeth.

4.4 The Working Group recommended the Government to adopt the following oral health policy:

- Oral health is an integral part of general health. The objective of the Government's oral health policy is to enable citizens to improve their habits to retain teeth, thereby further enhancing both oral and general health.
- Through publicity, education, promotion and development of primary oral health and dental care, the Government should assist citizens to manage their oral health, and put prevention, early identification and timely intervention of dental diseases into action for retention of teeth.
- The Government focuses the provision of appropriate dental services for underprivileged groups with financial difficulties and special needs, ensuring these groups have access to essential dental care services.

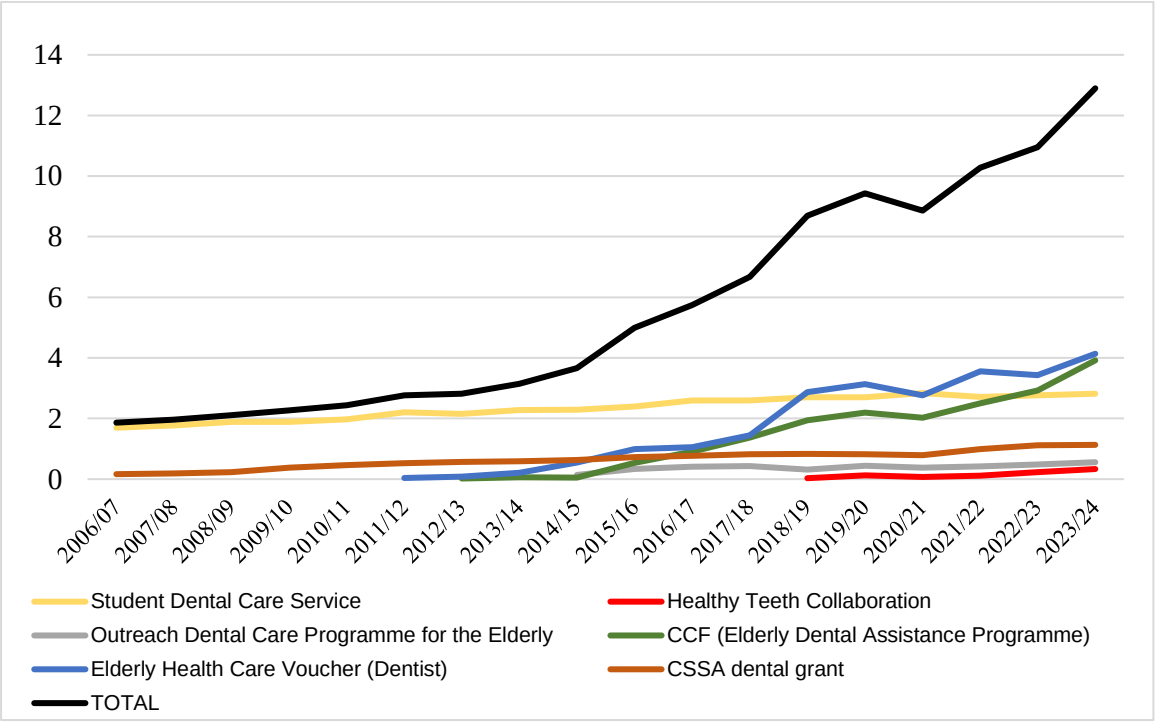
The Working Group considered that this recommended policy will increase the use of primary oral healthcare, which in the long run should reduce the demand for avoidable, complex, and costly curative dental treatment, while also reducing citizens' need for GP Session services.

[61] That is, elderly aged 80 still retain at least 20 teeth.
[62] http://www.nhc.gov.cn/jkj/s5878/201902/b049d0f3c9b44ee48ac4c936f41cbb0e.shtml

Government expenditure on providing or subsidising dental services

4.5 The Working Group noted that Government resources allocated to directly provided or subsidised dental services have been increasing over the past decade (see Figure 9). The increase had been particularly significant in the past ten years, rising from $366.60 million in 2014/15 to $1,289.60 million in 2023/24, representing a 2.5-fold increase over ten years, with an average annual increase of approximately 15.6%.

Figure 9: Government expenditure on providing or subsidising dental services between 2006/07 to 2023/24 ($100 million)



Source: Data from relevant Government departments
The Expenditure on SOCS, Hospital Dental Service, and GP Session service is covered by the DH's overall allocation. As there are no separate figures available, these expenditure's are not included in the chart.

4.6 Hong Kong is facing the challenge of population ageing, with the population aged 65 and above expected to increase from the current approximately 1.7 million to 2.75 million by 2046. Population ageing and rising occurrence of chronic diseases are expected to place a heavy burden on secondary/tertiary healthcare. Similarly, if the levels of dental diseases among elderly remain unchanged, the oral health and dental care system will face tremendous pressure. Considering the expenditure on the two programmes targeting elderly, dentists' claims under the EHVS and the EDAP funded by the CCF, the spending increased from $152.8 million in 2015/16 to $805.7 million in 2023/24, representing more than a fourfold increase over eight years. The Working Group concluded that the more cost-effective use of public funds and the sustainability of the oral health and dental care

system can only be ensured through early community-wide prevention of dental diseases and reducing the demand for curative dental services.

Table 12: Overview of Government expenditure on public or subsidised dental services in the past four financial years (million dollars)

	2020-21	2021-22	2022-23	2023-24
Special Oral Care Service	The expenditure for these 3 services is covered by the Department of Health's overall allocation, thus separate figures cannot be provided.			
Hospital Dental Service				
Emergency Dental Service				
School Dental Care Service	283.8 M	270.8 M	276.2 M	281.6 M
Healthy Teeth Collaboration	6.8 M	11.1 M	22.8 M	33.4 M
Outreach Dental Care Program for the Elderly	37.8 M	41.6 M	48.6 M	55.8 M
Elderly Dental Assistance Programme under the Community Care Fund	202.3 M	250.0 M	292.4 M	392.0 M
Claim amount by dentists under the Elderly Health Care Voucher Scheme (Hong Kong)	276.9 M	355.7 M	343.5 M	413.7 M
Dental grant under Comprehensive Social Security Assistance Scheme	78.8 M	98.9 M	111.6 M	113.1 M
Total expenditure	886.4 M	1,0281 M	1,0951 M	1,2896 M

Source: Data from relevant Government departments

EHVS

4.7 The Government's initial policy intention in launching the EHVS was to provide financial incentives for elderly to choose private primary healthcare services that best suit their health needs, including regular oral check-ups, scaling, and other preventive dental services. The Working Group found that the related service utilisation had skewed towards curative treatment rather than prevention. Based on the reasons of use reported by dentists in making claims, the proportion of curative dental services (i.e. fillings, extractions, removable dentures, and other treatments) had consistently been higher than that of preventive dental services (i.e., oral and X-ray examinations, scaling, and preventive services), although this gap was gradually reducing (Table 13). Except for 2018 and 2019, tooth extraction was the most frequently used service, which was not in line with the Working

Group's goal of tooth retention in dental care development. The Working Group opined that the Government should step up the promotion to elderly to use their EHCVs for primary healthcare services and to retain their teeth as far as possible. Meanwhile, there was a significant decline in the use of EHCV on fitting removable denture.

Table 13: The dental services used and reported in dentists' claims under EHVS between 2013 to 2022

Year	Total services	Oral check-ups	X-ray Examinations	Scaling and preventive services	Fillings	Extractions	Removable dentures	Other Treatment Services[63]
2013	43 100	11.5%	8.4%	12.4%	11.7%	24.9%	15.1%	16.1%
2014	89 000	12.8%	9.5%	13.0%	11.7%	22.6%	14.9%	15.5%
2015	134 500	13.5%	9.8%	13.7%	11.8%	20.6%	15.0%	15.6%
2016	150 300	14.4%	11.4%	14.4%	11.5%	19.7%	13.5%	15.1%
2017	216 500	14.1%	12.4%	17.4%	12.1%	18.9%	10.6%	14.5%
2018	384 200	13.6%	13.1%	19.0%	12.9%	17.0%	9.5%	15.0%
2019	408 400	13.5%	13.6%	19.3%	13.0%	16.2%	9.0%	15.4%
2020	329 200	13.7%	15.4%	13.1%	11.5%	19.8%	9.1%	17.4%
2021	410 800	14.2%	15.2%	16.6%	11.7%	18.4%	8.4%	15.5%
2022	385 300	14.1%	15.2%	17.7%	11.5%	18.5%	7.9%	15.2%

Source: DH – Health Care Voucher Division

4.8 The Working Group also noted that the current mode of insufficiently designated and guided use of EHCV for preventive dental services, and the inadequate monitoring of dental service utilisation is not conducive to promoting the oral health of elderly. The Working Group acknowledged that some elderly may tend to save their EHCVs up for curative dental service expenses. However, delaying treatment of dental diseases would only lead to deterioration and further to tooth loss. Therefore, the Working Group suggested the Government to strengthen publicity and education for improving the understanding among elderly that using EHCVs early for preventive dental services is preferable to saving them for later curative services. In 2023, Hong Kong dentists' claims under the EHVS amounted to approximately $413.2 million. The Government also launched a Pilot Reward Scheme in the same year, intending to incentivise elderly to use EHCVs for primary healthcare services, including regular oral check-ups.

[63] Including dental treatments such as periodontal treatment, root canal therapy, crowns, bridges and other dental services.

CCF EDAP

4.9 The EDAP funded by the CCF was launched in September 2012. Starting from September 2015, EDAP gradually expanded its service coverage to include all OALA recipients. The total expenditure has reached approximately $2 billion so far. The annual number of completed cases had increased from around 1 600 in the early period (September 2012 to August 2015), to approximately 4 800 in 2015/16 (September 2015 to March 2016) and about 25 800 in 2023/24. Over twelve years, the EDAP has served nearly 160 000 cases. As at October 2024, nearly 30 000 applicants were receiving treatment at various stages. Expenditure had risen from $52.95 million in 2015/16 to $400 million in 2023/24, representing more than a six-fold increase.

4.10 The EDAP aimed to help elderly who have lost all or some of their teeth, have dental diseases, and have difficulties in eating or chewing by providing removable dentures to improve their eating and chewing abilities. However, the Working Group found that approximately 13% of EDAP users had reported no improvement in chewing or eating after the denture treatment, indicating that the denture subsidy had not achieved its intended effect. Based on 25 800 cases served in 2023/24, the average subsidy per case reached $15,000, significantly higher than other Government dental programmes. For instance, the ODCP spent approximately $49 million in 2023/24 serving 48 000 frail elderly, averaging about $1,000 per person.

4.11 The Working Group also found that the number of teeth retained by elderly has increased, benefiting from the effectiveness of work over the past. The DH's OHS 2021 found that the average number of teeth among non-institutionalised elderly increased from 19.3 ten years ago to 22.8, while the proportion of elderly who had complete tooth loss decreased from 5.6% to 0.9%. Therefore, the Working Group considered it appropriate time to shift the strategy towards encouraging and guiding elderly to early identification and timely management of dental diseases for tooth retention, avoiding tooth extraction and dentures where possible. Moreover, directly subsidising or indirectly encouraging elderly to extract teeth and fit denture are not in line with the goal of the Working Group to improve public oral health through retention of teeth (see paragraph 4.4).

4.12 In the opinion of the Working Group, EDAP's previous focus on providing removable dentures might have misled the public that tooth extraction and denture fitting were encouraged. In response to the Working Group's recommendation, the EDAP was enhanced in July 2024 to allow eligible elderly to apply for subsidies and receive other specified dental services including oral check-ups, scaling, and fillings, even if they are not suitable for removable dentures. This enhancement aimed to encourage eligible elderly to choose other preventive and curative dental services for timely management of dental diseases, retain teeth as much as possible, and avoid tooth extraction and denture fitting.

Overall service effectiveness and priorities

4.13 After reviewing the existing subsidised dental services, the Working Group concluded that although the Government had continuously increased resources allocated to directly providing or subsidising dental services over the years, the use of resources had skewed towards curative treatment rather than prevention, generally speaking with low cost-effectiveness. This may be attributable to the fact that existing programmes were launched at different times and were implemented according to the prevailing circumstances, lacked a holistic and comprehensive examination of the relative cost-effectiveness of resources allocated in different programmes. There was also no prioritisation on subsidisation according to the direction of dental disease prevention and tooth retention. Some existing subsidised dental services had insufficient measures to incentivise users to utilise preventive dental care and inadequate means to monitor the actual utilization of dental services, both not favouring tooth retention.

4.14 The Working Group was aware that some members of society were demanding for more curative dental services from the Government, especially for higher-cost items such as removable dentures or even dental implants. Although curative dental services can address the consequences of dental diseases, they cannot alter the disease processes causing dental diseases and therefore cannot provide a fundamental cure, leaving a high likelihood of recurrence. Take tooth decay as an example, fillings can repair cavities and restore normal chewing function, but cannot alter the mineral loss causing decay, and new cavities may appear again. The mineral loss leading to decay is closely related to lifestyle habits such as frequent eating and drinking and regular snacking between meals. To prevent new cavities from forming, improvements in personal behaviour are essential.

4.15 The Working Group opined that it is necessary to improve public awareness that modifications in oral health behaviour are required in addition to government-provided dental services to improve oral health, in order to fundamentally re-orientate the current emphasis on curative treatment to focus on prevention. After the review, the Working Group concluded that providing or subsidising comprehensive curative dental services from public purse to all Hong Kong citizens regardless of their financial means, does not align with the policy objectives of developing a prevention-oriented oral health and dental care system and encouraging citizens to take responsibility for their own oral health. This would exacerbate the current shortcomings of being skewed towards curative treatment rather than prevention, and would be neither cost-effective nor sustainable in terms of utilisation of public resources. It would be financially untenable for the Government and would thin out resources that could otherwise be used for other healthcare services.

4.16 After thorough analysis and discussion, the Working Group considered that there is significant room for development of primary oral healthcare which should

be accorded higher priority. The Government should establish a prevention-oriented primary oral healthcare system for citizens, aligning with recommendations from the World Health Organisation *Global Strategy and Action Plan on Oral Health (2023-2030)* and the country's *China's Oral Health Action Plan (2019-2025)*, as well as the strategy of the *Primary Healthcare Blueprint* that focus on preventive primary healthcare. The aims are to reduce demand for dental treatment, improve the efficiency of the oral health and dental care system, enhance public oral health outcomes, ensuring that Government resources continuously invested in oral health and dental care are used more cost-effectively and sustainably to achieve the policy objective of promoting public oral and general health. Additionally, the Government should focus the provision of appropriate dental services for underprivileged groups with financial difficulties and special needs, ensuring these groups have access to essential dental care services.

Primary oral healthcare

Risk assessment and personalised oral hygiene instructions

4.17 After reviewing the OHS 2021, the Working Group pointed out that all citizens, regardless of age, should periodically learn and review how to effectively clean their teeth. The Working Group opined that the increased use of dental care professionals (termed "dental ancillary workers" before the commencement of the relevant amendments to the *Dentists Registration Ordinance*, hereinafter referred to as "DenCPs"), with the adjusted scope of practice, in providing preventive oral healthcare within the existing primary healthcare system will help to promote healthy lifestyle practices conducive to oral health for prevention of oral diseases across all age groups.

4.18 The *Primary Healthcare Blueprint* published by the Government in 2022 put forward a community-based, family-centred primary healthcare strategy. The Working Group recommended that preventive oral healthcare should similarly adopt a community-based strategy. Misconceptions and inappropriate habits among adults and elderly should be rectified by strengthening oral health publicity, promotion, and education through the primary healthcare system, making oral health part of citizens' life course preventive care plans by maintaining good oral health habits and seeking regular oral check-ups.

4.19 In its Interim Report, the Working Group suggested that DenCPs could play an important role in primary oral healthcare. The *Dentists Registration (Amendment) Ordinance* has established their professional status, allowing dental hygienists to perform low-risk preventive dental services without the presence of a dentist, such as oral hygiene instructions, cleaning and polishing the surface of the teeth not covered by the gums, and the application of topical fluoride, fissure sealants or similar preventive agent. It will also allow dental therapists to provide services in private dental clinics, offering filling or extraction services under a dentist's prescription and with the presence of a dentist on the premises at all times when the service is provided, enabling dentists to focus more complex dental

treatments. A favourable environment for the Government to develop more comprehensive and effective primary oral healthcare has been created by the amended Ordinance. The scope of dental work that can be undertaken by DenCPs is listed in ***Annex 2***.

4.20 The Working Group's recommendations regarding increasing the supply of DenCPs will be supplemented in paragraphs 4.51 and 4.52.

Regular oral check-ups

4.21 Although the Government has been encouraging citizens to seek regular oral check-ups for early identification and timely intervention of dental diseases, it was found that this habit had not been widely practiced.

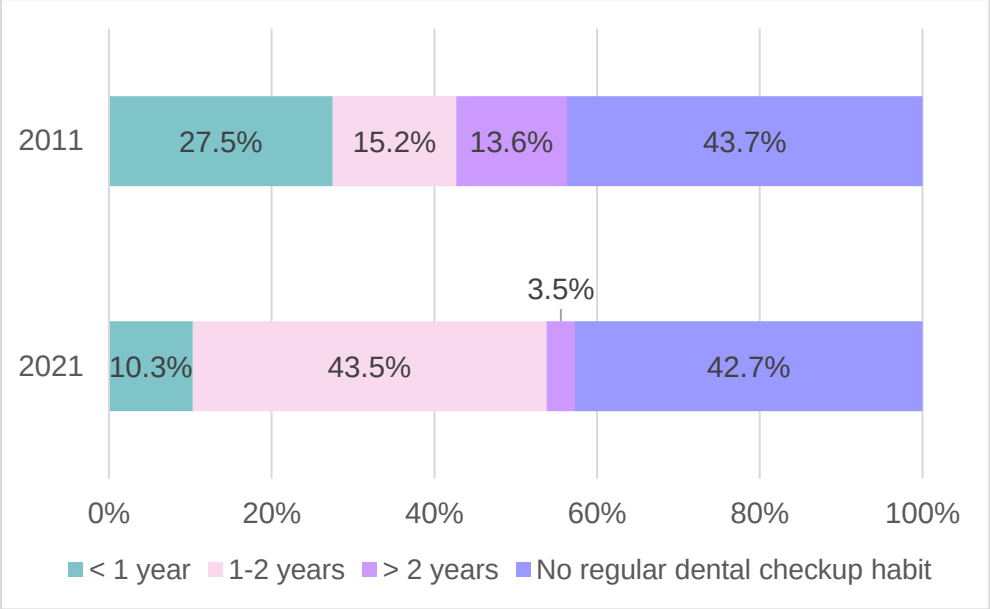
4.22 The DH's OHS 2021 found that only 26% of 5-year-old children had been taken to see a dentist by their parents. Only about 40% of these visits being for oral check-ups (approximately 10% of all 5-year-olds) and nearly half (46.5%) visited dentists due to dental problems. There was little change in this pattern over the past 20 years. The Working Group acknowledged that using silver diamine fluoride treatment for kindergarten children aged 3-6 is effective in slowing the progression of tooth decay among these children. However, the presence of tooth decay in these children indicated that there had been tooth decay risks in the lifestyle during infancy before age 3. The Working Group considered it more important to strengthen education for parents to help their children establish appropriate habits before age 3, and recommended the Government to utilise networks such as MCHCs and nurseries to enhance connections with and education of parents, caregivers, and kindergarten teachers.

4.23 The 12-year-old students covered in the 2021 OHS had just entered secondary school, and majority of them had received oral healthcare not long ago through the SDCS during their primary school years. When their parents were asked about their intention to take their 12-year-old children for regular oral check-ups, approximately 62.5% reported such intention, similar to the 2011 OHS results. However, only 24.5% reported having visited a dentist, lower than 31.8% in 2011. The OHS 2021 found that the proportion of adults with the habit of regular oral check-ups or scaling remained similar to ten years ago, while the proportion of those with check-up intervals of one to two years increased compared to a decade ago, but the proportion with intervals within one year decreased (Figure 10), suggesting that compared to 2011, the intervals between adults' oral check-ups have lengthened (i.e. decreased frequency of check-ups).

4.24 Taking reference from the recommendations in the Interim Report of the Working Group, the Government announced in the *2023 Policy Address* the launch of "Primary Dental Co-Care Pilot Scheme for Adolescents" (PDCC) in 2025, aiming at guiding adolescents to maintain the lifelong habit of regular oral check-ups to prevent dental diseases. The Working Group agreed that this is the right direction, capable of guiding adolescents to establish the habit of regular oral

check-up after leaving the SDCS. The partnership and cooperation of individuals with dental professionals are essential in maintaining personal oral and general health, and this understanding should also be promoted.

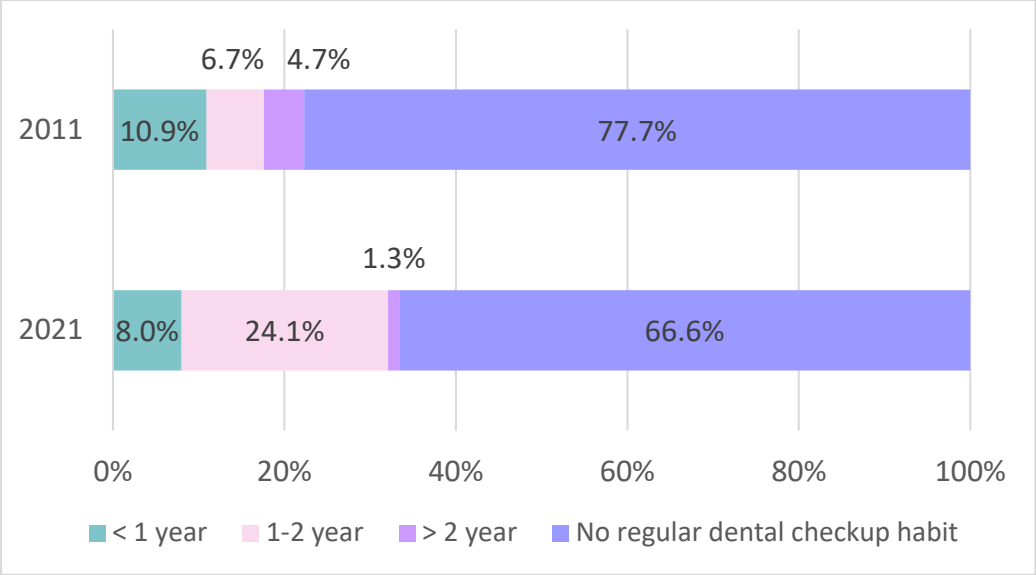
Figure 10: Percentage distribution of adults by oral check-up habits



Source: DH OHS (2011, 2021)

4.25 Regarding non-institutionalised elderly, the OHS 2021 found that the proportion with regular oral check-up habit was 33.4%, showing an increasing trend compared to 22.3% in 2011. However, more of them had check-up intervals of one to two years (increasing from 6.7% in 2011 to 24.1% in 2021), while those with intervals of less than one year decreased (from 10.9% in 2011 to 8.0% in 2021) (Figure 11), indicating that, similar to the adults age group, the intervals between oral check-ups have lengthened compared to 2011.

Figure 11: Percentage distribution of non-institutionalised elderly by oral check-up habits



Source: DH OHS (2011, 2021)

4.26 According to the OHS 2021, adults and elderly who did not seek regular oral check-ups generally believed their oral hygiene measures were sufficient to prevent dental diseases. However, the OHS clearly showed that the cleanliness of their teeth was insufficient, especially in the molar areas.

4.27 Adults and elderly who did not seek regular oral check-ups also cited uncertainty about check-up costs as a reason for their reluctance to seek oral check-ups (Table 14). The Working Group recommended that the dental profession to coordinate and to determine the essential items for oral check-up services suitable for different age groups. The transparency of regular oral check-up fees should also be increased in order to encourage citizens to seek regular oral check-ups, particularly for elderly in using their EHCVs for oral check-ups.

Table 14: Views on regular oral check-ups among those without regular check-ups

View	Percentage of respondents agreeing	
	Adults	Non-institutionalised elderly
Practising good oral hygiene at home can replace regular scaling.	51.8%	64.0%
Dare not visit a dentist because the total cost of dental treatments at the end is often unpredictable	60.6%	58.3%

Source: DH OHS 2021

Dental treatment services

4.28 The Working Group considered that curative dental services provided through public service or subsidised models should continue to be targeted at those with special dental needs or who have difficulty accessing ordinary dental services. In its Interim Report, the Working Group defined three main categories of underprivileged groups, including:

(1) Persons with financial difficulties;

(2) Persons with disabilities or special needs; and

(3) High-risk groups.

Subsidised dental services for persons with financial difficulties

4.29 The Working Group acknowledged the basic principle of Government healthcare policy that "no one will be denied adequate medical treatment due to lack of means". Although some underprivileged groups currently qualify for government-subsidised or provided dental services, the Working Group suggested the Government to consider increasing the coverage of subsidised dental services for specific underprivileged groups not currently covered (such as the homeless persons). On the other hand, the number of teeth retained by non-institutionalised elderly in Hong Kong had increased from 19.3 in the OHS 2011 to 22.8 in the OHS 2021, while the proportion of elderly who had complete tooth loss had decreased from 5.6% in 2011 to 0.9% in 2021 (Table 1), indicating that elderly's need for dentures has decreased.

4.30 The Government has invested considerable resources in subsidising dental services, including dental grants under the CSSA Scheme, EHVS, and the CCF EDAP. The Working Group recognised this and recommended the Government to review and enhance resources currently allocated to providing or subsidising dental services, to review priorities, actual needs, and subsidy levels for subsidising curative dental services, including the cost-effectiveness of subsidising removable dentures. It is also necessary to streamline service processes and improve service efficiency, so as to ensure resources are used for target groups and effectively achieve expected outcomes. The Working Group also recommended the comparison of cost-effectiveness across public and subsidised dental programmes in order to maximise the benefits from limited public funds.

4.31 Through the CSSA Scheme, the Government provides a safety net for those who cannot support themselves financially, due to old age, illness, disability, single parenthood, unemployment, low income or other reasons, to meet their basic needs. The CSSA Scheme currently provides dental grants for recipients to cover dental treatment expenses (for dental grants details, see paragraph 2.24). The Working Group accepted that dental grants under the CSSA Scheme already provide a dental service safety net for those who cannot support themselves financially.

4.32 Subsidies under Government-subsidised dental treatment services targeting at persons with financial difficulties should be allocated according to the level of financial difficulties of service users. The Working Group recommended that when verifying the eligibility for subsidies, existing means test mechanisms should be utilised as much as possible, and also making better use of NGO and their social service networks serving underprivileged groups to provide more targeted services to those in need.

Special care dental services for persons with disabilities or special needs

4.33 Special Care Dentistry (SCD) is a branch of dental practice for persons with special care needs. The essence of SCD is to provide dental services that meet service users' special care needs, rather than merely considering their disability type.

4.34 Persons with special care needs generally cannot access ordinary healthcare due to physical or cognitive impairments. Take persons with ID as example, a survey on dental treatment services for adults with ID conducted by the Hong Kong Joint Council of Parents of the Mentally Handicapped (Parents' Council) in 2011 reported the difficulties faced by persons with ID in seeking dental services, which were not limited to financial reasons. Some parents and their ID children were refused by private dental clinics, possibly due to the lack of relevant SCD training among general dentists and care staff on the knowledge and skills for communicating with and managing the behaviour of persons with ID. Another survey by the Parents' Council in 2018 found relatively low proportions of dentists who were providing services to, had served, or willing to serve persons with ID. The Parents' Council recommended the Government and HKDA to strengthen training for dentists to equip them in providing SCD services to persons with ID.

4.35 The medical history, physical condition, and cognitive ability of persons with special care needs may pose challenges to the attending dentists. Dentists need to make adjustments during care, such as providing special equipment and modifying treatment methods and care plans in order to enable persons with special needs to receive similar standard of healthcare as the general public. The British Dental Association has developed an assessment tool[64] on the criteria that dentists need to make adjustments when treating persons with special care needs. The tool also assess the degree of difficulty in each criterion, thereby reflecting the additional resources needed. The relevant criteria are briefly described below:

- **Ability to communicate** reflects issues of communication between the dental team and persons with special care needs and / or caregivers, to identify whether communication limitations exist and if additional support is needed.

[64] Case Mix tool. https://www.bda.org/about-us/our-structure/representative-committees/community-and-public-dental-service-committee/case-mix/

- **Ability to co-operate** reflects circumstances affecting the delivery of dental care by the dental team, to determine which behavioural management techniques (including sedation and general anaesthesia) should be used for dental care delivery.

- Different degrees of adjustment to dental services based on the **medical status** of persons with special care needs, possibly requiring cross-discipline collaboration.

- **Oral risk factors** reflect the specific risk factors which require a higher than average resource be allocated to their care, such as additional guidance for caregivers to reduce risks, or special oral/dental conditions making treatment more difficult.

- **Access to oral care** reflects complexities surrounding patient access to care at any point during the course of treatment.

- **Legal and ethical barrier** to care reflects the difficulties the dental team may face in obtaining consent from persons with special care needs or their caregivers, including issues related to mental incapacity of persons with special care needs.

"Persons with disabilities or special needs" and "high-risk groups"

4.36 Although special care dental programmes such as the ODCP, HTC, and SOCS have been implemented, the Working Group opined that there is still room for improvement in special care dental services. The Working Group suggested to expand the coverage of SOCS and HTC beyond persons with ID to cover other disability groups. Special care dental services should also be provided based on individual special care needs (rather than type of disability). For example, the presence of ID does not necessarily indicate special care needs, as those with mild ID may have little special care needs and do not need special care dental service. Currently, persons with disabilities applying for day care and residential services have to be assessed by social workers under the Central Referral System for Rehabilitation Services. The Working Group suggested that reference to this assessment may be taken in future when defining the eligibility to special care dental services.

4.37 The DH had indicated in the OHS 2011 report that while frail elderly using SWD's long-term care services had dental diseases requiring treatment, dentists sometimes have to withhold treatment in the best interest of the elderly after balancing the benefits against risks related to their medical history and physical condition. These elderly had gradually lost self-care ability leading to deteriorated oral condition before receiving long-term care services. To avoid untreatable dental diseases, oral healthcare must be strengthened in the early stages of frailty. The Working Group considered it necessary to strengthen early and continuous risk

assessment and preventive dental services for high-risk groups to frailty (such as persons with dementia, stroke, and Parkinson's disease).

4.38 Persons with impaired self-care ability due to medical conditions are also at high risk of dental diseases. Some patients also have higher risks of complications when receiving routine dental services. The Working Group collectively referred to these patients as high-risk groups. As high-risk groups are mainly identified within the hospital system, the Working Group recommended the Government to develop special care dental services within hospitals. Hospital special care dental services can also handle complex cases with high risk of complications, serving as referral and training centres.

4.39 Currently, both ODCP and HTC provide free dental services, but service users may not have financial difficulties. The Working Group opined that the subsidisation of special care dental services should similarly be based on a co-payment model, allocating subsidies according the level of financial difficulties of service users, allowing the Government to target resources to the more needy underprivileged groups.

Optimising DH's GP Session service arrangements

4.40 Dental services provided by dental clinics under the DH are primarily for civil servants/retired civil servants and their eligible dependants, while GP Session aim to utilise a small portion of the dental clinics' service capacity to provide limited supplementary services such as tooth extraction and pain relief for the general public. Due to the COVID-19 pandemic and staff shortages, the number of GP Session disc allocations has been reduced by 25% to 50% since January 2020. The shortage of Dental Officers have persisted since the onset of the pandemic onset, and the consultation time per patient has also extended with updates to routine service procedures[65], rendering DH unable to restore number of disc allocation to pre-pandemic levels.

4.41 In its Interim Report, the Working Group noted that the disc allocation under the GP Session 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 Session arrangement should not be expanded, as this is not in line with the goal to improve oral health by retaining teeth. However, the Government should consider the expansion of service capacity by collaborating with NGOs under a new service model to address

[65] During the pandemic, to prevent COVID-19 transmission, dental clinics needed to allocate adequate time for implementing various infection control measures, including: enhanced environmental disinfection procedures (for dental chairs, spittoons, work surfaces, etc.), infection control measures during oral X-ray examinations, detailed patient medical history checks, and requiring patients to rinse with antiseptic mouthwash before oral check-ups. To comply with enhanced infectious disease prevention and control, these measures have been incorporated into routine service procedures.

the service demands of the underprivileged groups, as well as to review the need for eligibility criteria for GP Session. Income level requirement should be established for the NGO-provided subsidised emergency dental services to be launched so as to ensure resources are more focused on supporting underprivileged groups.

Dental service support arrangements

4.42 The Working Group recognised the suggestions in the community on purchasing dental services from the Mainland or providing subsidies to citizens to access such services. The Working Group considered that the Government should bear the responsibility of protecting Hong Kong citizens' health by providing quality local healthcare services, rather than simply transferring the responsibility to the Mainland healthcare system. Hong Kong's private sector and NGOs should remain the most accessible service channels for citizens. The Working Group recommended the Government to focus on meeting citizens' dental service needs through the local healthcare system, by investing resources in promoting dental professional development, and work in close rapport with the sector to advance and strengthen the status and services of the local dental profession. Meanwhile, the Working Group welcomed the Government's Elderly Health Care Voucher Greater Bay Area Pilot Scheme which allowed elderly living in the GBA additional choices of Mainland healthcare institutions through the designated EHCVs service points.

4.43 Besides comprehensively reviewing the policy directions, service scope and delivery models in providing dental services through public service or subsidised model, the Working Group's review scope also included the supply of various dental professional manpower and the related training, as well as dental service support arrangements, including service models and financial arrangements, and the use of electronic health records.

4.44 Among the primary dental services recommended by the Working Group, oral health risk assessment and individualised advice on oral care and personal lifestyles, and preventive dental treatment such as application of fluoride on the tooth surfaces are technically simple that can be performed by DenCPs. The Working Group recommended in the Interim Report that the Government should review various dental professional manpower resources and related training arrangements The Government should also allow DenCPs to shoulder more responsibility in preventive primary oral healthcare to support the overall needs in strategic development of oral health and dental care.

<u>Increasing dental professional manpower resources - legislative regulation</u>

4.45 The Working Group noted that the Government had submitted the *Dentists Registration (Amendment) Bill 2024* to the Legislative Council in April 2024, undertaking the most comprehensive amendments to the *Dentists Registration Ordinance* after over 60 years, which was passed by the Legislative Council in July this year. The amended Ordinance will be implemented in phases, establishing

new pathways to allow qualified non-locally trained dentists to practise in Hong Kong (effective from 1 January 2025), and introducing internship and period of assessment arrangements to enhance clinical experience for local dental graduates and non-locally trained dentists (expected to commence in the second quarter of 2025).

4.46 The amended Ordinance will incorporate both dental hygienists and dental therapists into a statutory registration system regulated by the DCHK, establishing the professional status of DenCPs and ensuring patient safety and service quality. The roles that dental care professionals can play in primary oral healthcare under the amended Ordinance have been mentioned in paragraph 4.19.

Increasing dental professional manpower resources - training arrangements

4.47 Regarding manpower resources of dental professionals, the Working Group opined that there must be complementary DenCP supply to meet the long-term oral health and dental care needs. In addition to ensuring the manpower supply, the training content of DenCPs should also be strengthened to align with the policy of preventing dental diseases and retaining teeth as recommended by the Working Group.

4.48 Given that oral health is part of general health, the Working Group considered dentists and DenCPs are actually part of the professional healthcare system. Besides being skilled in handling oral health issues, they should also be capable of participating in primary healthcare services, such as advising diabetes screening among patients with severe gum diseases and providing smoking cessation guidance. The Working Group suggested that institutions including the FoD, the HKDA, and the College of Dental Surgeons of Hong Kong (CDSHK) should strengthen training in General Dentistry and Community Dentistry across all levels including undergraduate training, internship and period of assessment, continuing professional development and postgraduate programmes, so that dentists may be better prepared for future primary healthcare, including primary oral healthcare development. In addition, training institutions should also provide corresponding training to DenCPs.

4.49 On the other hand, the Working Group noted that NGOs participating in the ODCP and HTC had faced significant difficulties in recruiting dentists for these services. As there were occasional instances of persons with special needs being refused at dental clinics, the Working Group opined that the FoD should strengthen training in SCD for dental students, ensuring basic capability in caring for persons with special needs among graduates. The aforementioned institutions should also provide more continuing professional development or postgraduate training to equip dentists with interest in providing special care dental services. In the long run, the Working Group suggested the CDSHK to consider listing SCD as a dental sub-specialty.

Dental professional manpower projection

4.50 In increasing dentist manpower, the Working Group noted that the Government had increased the number of University Grants Committee-funded first-year-first-degree places of the Bachelor of Dental Surgery programme on four occasions. The number increased from 50 in the 2009/10 academic year to 90 in the 2024/25 academic year, representing an increase of 80%. The Working Group recommended the Government to review local dental training quotas continuously. The *Dentists Registration (Amendment) Ordinance* will allow qualified non-locally trained dentists to practise at specified institutions. The Working Group urged the Government and DCHK to implement this provision promptly to increase dental manpower supply and to improve public oral health services.

4.51 The amended Ordinance has appropriately adjusted the scope of work of DenCPs based on a risk-based approach, allowing DenCPs to undertake more important roles in primary oral healthcare. The Working Group opined that the next step should be increasing training places for DenCPs to strengthen primary oral healthcare.

4.52 In increasing the number of DenCPs, the Working Group also noted that the Government has nearly doubled the training places of dental hygienists and dental therapists from 95 in 2023/24 to 185 in 2024/25. It is the view of the Working Group that training places for DenCPs should still be increased to meet the needs in the development of primary oral healthcare.

4.53 The Working Group recommended the Government to continue to monitor the community's demand for oral health and dental care services and the profession's manpower situation, review the development and training strategies for healthcare professionals in Hong Kong, and include DenCPs in regular healthcare manpower projections to ensure adequate supply of dentists and DenCPs.

Use of strategic purchasing

4.54 The Working Group recommended in the Interim Report to make better use of the service capacity of the NGOs and the private sector by increasing the use of strategic purchasing. Electronic oral health records should also be appropriately used to monitor related healthcare services, to ensure service effectiveness and continuous service improvements.

4.55 Strategic purchasing aims to maximise healthcare system benefits through an active, evidence-based process that defines who the health service providers are, what health services are procured, how they should be paid for, the ideal payment levels, and the payment and incentive mechanisms. The Health Bureau will adopt a purchaser-provider split service delivery model to introduce competition among providers and improve service delivery in terms of greater organisational flexibility and responsiveness of services to patient needs. The Working Group recommended the increased use of strategic purchasing in subsidising oral

healthcare services, and to ensure cost-effective allocation of resources by linking service provision with outcome achievement.

Use of eHealth for monitoring dental service use and quality

4.56 The Working Group recommended that oral healthcare services in future, either directly provided by the Government or subsidised through strategic purchasing from NGOs and the private sector, an electronic health record platform (eHealth) must be used to collect healthcare and service data for analysis and effectiveness evaluation. The data can also be used for guiding service improvements, prioritising resource allocation and enhancing service arrangements. The data may also enable service users to understand the progress of their treatment and the changes in their oral health risk through the eHealth mobile application, facilitating self-management of oral health.

4.57 As at November 2024, over 1 100 dentists across Hong Kong (approximately 40%) have registered and can access electronic health records on eHealth. However, very few electronic oral health records have been uploaded by private dental healthcare institutions, with almost all electronic oral health records in eHealth coming from public healthcare providers (i.e. DH and HA). The Working Group recommended the Government to promote the upload of electronic oral health records to eHealth by the private dental sector, so as to prevent a break in continuity of care for patients due to the low participation rate of private dental healthcare institutions.

Financial arrangements

4.58 The Working Group agreed that the co-payment model should be adopted in financing oral health and dental care, and recommended the Government to allocate subsidies according to citizens' financial ability, and encourage the public to bear part of the service cost and manage their own health. The Government should allow service providers the freedom to determine the co-payment amounts payable by the beneficiaries in order to promote market competition and to improve cost-effectiveness, but transparency of service fees must also be ensured so that citizens can make their own informed choices. The Working Group also recommended the Government to review the cost-effectiveness of existing dental services and make appropriate adjustments to make better use of the resources currently allocated to support dental disease prevention and retention of teeth.

Establishment of oral health steering and advisory framework

4.59 The Working Group considered that their recommendations represent a starting point for improving oral health and dental care. The Government should

modelled on the Working Group and establish advisory bodies to follow up on the Working Group's recommendations, as well as to continue to advise the Government on the future development of the oral health and dental care system. These advisory bodies may also perform surveillance on the progress, utilisation, and effectiveness of various enhancement measures.

Chapter 5

Oral Health Action Plan

Overview

Taking into account the Strategic Recommendations of the Working Group on the development of oral health and dental care system, the Government has established a corresponding Oral Health Action Plan:

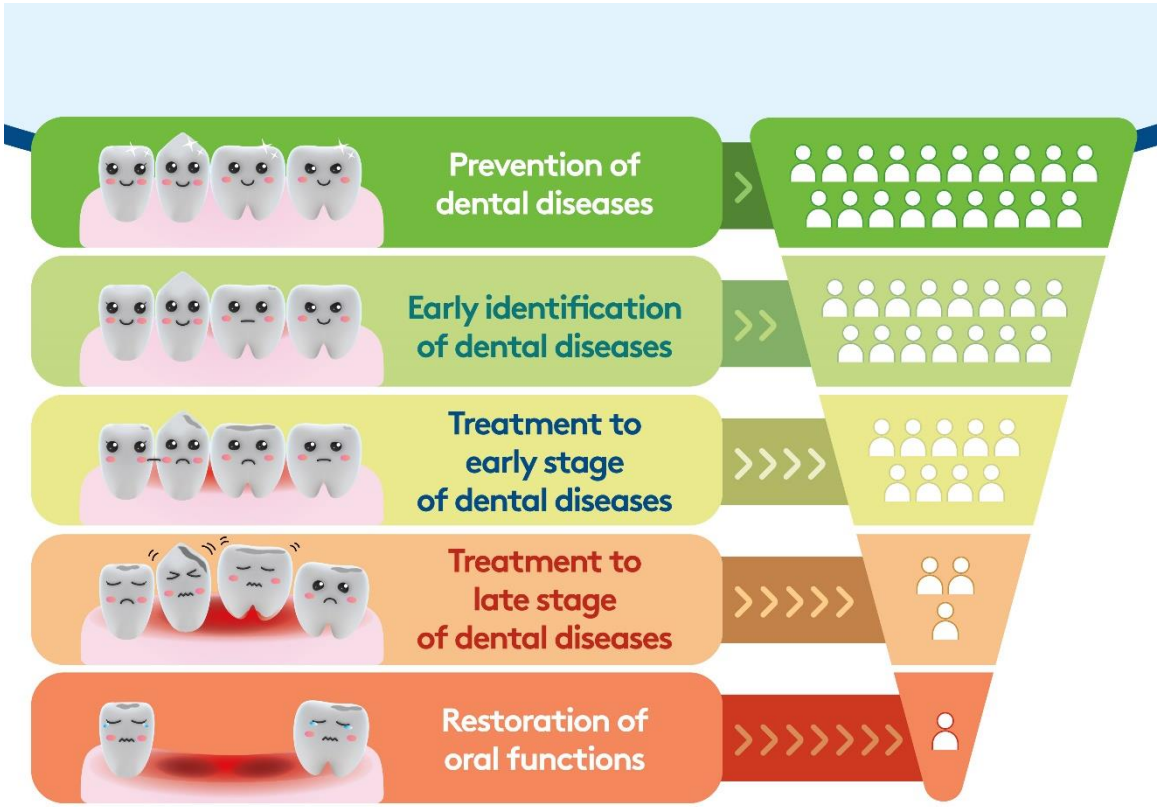
- Actively develop prevention-oriented primary oral healthcare, through community-wide promotion to support Hong Kong citizens across different age groups to manage their oral health, establish good oral hygiene habits and lifestyles, and seek regular oral check-ups and risk assessment of their own accord;
- Focus the provision of essential dental services, including both preventive and curative oral health and dental care services, through public service or subsidised models to underprivileged groups who have difficulties in accessing dental care, including those with financial difficulties, persons with disabilities or special needs, and high-risk groups;
- Increase the manpower supply of dental professionals to support primary oral healthcare;
- Develop eHealth to include dental services and support strategic purchasing; and
- Establish steering and advisory framework for surveillance of the progress and effectiveness of various measures.

Investing resources to achieve tooth retention

5.1 The Government has been attaching great importance to citizens' oral health, and has been investing resources for dental services. The Government will adopt the oral health policy recommended by the Working Group (see paragraph 4.4) and continue to invest in oral health and dental care. The objectives are to strengthen the provision of primary oral healthcare, to reduce the needs for avoidable and costly curative dental treatment, to lower the levels of dental diseases such as tooth decay and gum diseases, to increase the number of teeth retained among the elderly population, and ultimately to promote citizens' oral and overall health.

Figure 12: Community-wide preventive primary oral healthcare

Essential dental care services targeting underprivileged groups.



Preventive primary oral healthcare

5.2 The Government accepted the recommendation of the Working Group to actively develop prevention-oriented primary oral healthcare, through community-wide promotion to support Hong Kong citizens across different age groups to manage their oral health, establish good oral hygiene habits and lifestyles, and seek regular oral check-ups and risk assessment.

Providing oral healthcare through District Health Centres

5.3 Due to the survey finding that the teeth cleaning measures of Hong Kong adults were not entirely effective and required enhanced oral hygiene instructions, the Primary Healthcare Commission will deploy dental hygienists to selected District Health Centres / District Health Centre Expresses (DHCs/DHCEs) in 2025 to support the provision of oral hygiene instructions and preventive oral healthcare to citizens of all age groups at these DHCs/DHCEs as a pilot service. Citizens may receive oral health risk assessment at designated DHCs/DHCEs even if they think that their oral health is good. They will also receive personalised oral hygiene instructions according to their risk level. When indicated, citizens will also be

referred to dental clinic for comprehensive oral check-ups and follow-up by dentists.

5.4 With more dental hygienists completed their training, the Government expects to expand similar services DHCs/DHCEs across all 18 districts of Hong Kong. Local dental networks will also be developed to strengthen the oral health component within primary healthcare.

Training institutions enhance oral healthcare provision

5.5 Currently, dental hygienist training is provided by The Hong Kong University School of Professional and Continuing Education and Prince Philip Dental Hospital. The Vocational Training Council (VTC) will also launch its first Professional Diploma in Dental Hygiene Care in the first quarter of 2025, establishing a dental care training centre for students' clinical training and oral health education promotion activities. While providing training, both programmes will increase citizens' access to primary oral healthcare by offering citizens oral care information and opportunities to receive scaling services provided by students, in line with the direction of primary oral healthcare development.

Strengthening regular oral check-ups for pre-school children

5.6 The "*China's Oral Health Action Plan (2019-2025)*" clearly emphasised the importance of oral health services during the first 1 000 days of life. The concept that "parents should take the primary responsibility for their children's oral health" has to be strengthened, and the knowledge and skills in feeding infants among healthcare providers and children's caregivers have to be enhanced, in order to reduce or prevent the occurrence of tooth decay in deciduous teeth. The Government considered oral healthcare during the earliest life stage extremely important. The establishment of appropriate lifestyles during this period may help children in maintaining lifelong oral and general health.

5.7 The OHPD of the DH will gradually extend the pilot "Bright Smiles Baby Programme" from child care centres to all MCHCs targeting children aged 0-3 in 2025. The Programme will provide regular oral check-ups for pre-school children and home care guidance to encourage parents to establish good oral hygiene and dietary habits for their children early on.

5.8 The "Jockey Club Children Oral Health Project", implemented by the FoD, provides free dental check-ups and silver diamine fluoride treatment for kindergarten children aged 3-6 across Hong Kong. The project is sponsored by The Hong Kong Jockey Club Charities Trust until the 2025/26 academic year. The DH will begin participating in this Project in 2025 to monitor its effectiveness, and continue the regular oral check-up services for kindergarten children beyond the 2025/26 academic year based on the outcomes.

Guiding adolescents to receive regular oral check-ups

5.9 The Chief Executive announced in the *2023 Policy Address* to launch the PDCC in 2025. Interfacing with the SDCS and by subsidising part of the cost of oral check-ups, the PDCC aims to guide adolescents aged between 13 and 17 to foster long-term partnership with private dentists or dentists of NGOs in developing the lifelong habit of regular oral check-ups for prevention of dental diseases. The PDCC intends to solidify good oral health awareness and habits among about 370 000 adolescents per year.

5.10 The PDCC specifies the content of oral check-ups to include items of risk assessment, scaling, and personalised oral hygiene instructions and fluoride application based on risk level. The PDCC will be implemented in the form of strategic purchasing, with participation open to both private dentists and dentists working in NGOs. Following the co-payment model, the Government will provide subsidies to dentists per service user, while service users will pay a co-payment for oral check-ups to dentists. Participating dentists can determine their own co-payment fee, with the Government establishing a recommended level. Dentists are required to increase transparency of service fees by publishing the oral check-up co-payment fee information. Adolescents' oral health status, oral hygiene instructions provided by the dentist, and dental services rendered must be uploaded to eHealth, allowing adolescents to view instructions and manage their oral health through the eHealth mobile application, making oral health records part of their lifelong electronic health records.

5.11 If adolescents require dental services beyond the listed oral check-up items, they must pay the fees set by participating dentists themselves. Participating dentists are also required by the Government to publish fee information for three non-subsidised items: X-ray examinations, fillings, and extractions, to increase transparency of fees to help adolescents and their parents in choosing suitable dentists and services.

Encouraging regular oral check-ups for adults

5.12 Through the aforementioned "Bright Smiles Baby Programme", SDCS, and PDCC, the Government is committed to promoting primary oral healthcare from birth up to the age of 18. The funding model transitions from highly subsidised government services for young children to a co-payment system for adolescents.

5.13 The Government will work with NGOs and the HKDA to encourage the dental care sector to adopt the Working Group's recommendations and determine the essential items for oral check-ups services suitable for different age groups following the example of the PDCC. With the increase in transparency of service fees, citizens' concerns about fee uncertainty should be relieved and early identification and timely intervention of dental diseases be encouraged.

5.14 Both dental hygienists and dental therapists will be included in the statutory registration system, regulated by the DCHK. Registered dental therapists will also be permitted to practise in private service settings. The Government will collaborate with NGOs and the HKDA to utilise DenCPs effectively in increasing service capacity for primary oral health and dental care for citizens, including low-income groups, by providing affordable scaling, filling, and extraction services. This will put the strategies of focusing on prevention, early identification and timely intervention into action.

5.15 Furthermore, approximately 9.6% of private dental service expenditure is financed through employer-provided insurance schemes (refer to paragraph 2.27). The Government considered it worthwhile to promote employers and organisations providing dental benefits to encourage regular oral check-ups within their dental benefit schemes to enhance the use of preventive dental services.

Targeted dental care services

5.16 The Government agreed with the Working Group to focus the provision of essential dental services, including both preventive and curative oral health and dental care services, through public service or subsidised models to underprivileged groups who have difficulties in accessing dental care, including those with financial difficulties, persons with disabilities or special needs, and high-risk groups. Currently, the dental grants under the CSSA Scheme provides a dental service safety net for those who cannot support themselves financially. The Government will provide subsidised dental services to other persons with financial difficulties, allocating service subsidies based on the level of financial difficulties. When verifying the eligibility of applicants, the Government will utilise existing means-testing mechanisms such as the OALA and HA medical fee waivers to reduce administrative procedures and costs. The social service network of NGOs serving underprivileged groups will also be utilised to more effectively target at underprivileged groups with difficulties in accessing services.

5.17 In future, the Government will prioritise subsidisation in the direction of prevention and tooth retention in subsidising curative dental services so as to guide service users towards preventive dental services.

<u>Launching Community Dental Support Programme</u>

5.18 As announced in the *2023 Policy Address*, the DH will launch the "Community Dental Support Programme" (CDSP) in 2025, in collaboration with NGOs to increase dental services for financially disadvantaged underprivileged groups by expanding service capacity, service points and service scope. The CDSP primarily utilises NGO and social welfare organisation networks to provide services to persons with financial difficulties. In addition to tooth extraction, CDSP will also allow dental fillings where dentists consider appropriate to encourage tooth retention.

5.19 The Government plans to replace the CCF EDAP with CDSP in 2026 for provision of dental services to elderly with financial difficulties. Prioritisation and subsidy level will be determined based on the direction of dental disease prevention and tooth retention under CDSP, to better utilise limited resources.

Optimising GP Session service arrangements by the DH

5.20 Given the limited resources for emergency dental services, the Government should focus service provision to underprivileged groups in need. The Government will review the cost-effectiveness and arrangements of the current non-means tested GP Session services of the DH. Consideration will be given to introducing eligibility criteria to ensure proper utilisation of public healthcare resources.

5.21 The DH has implemented recommendations from the Director of Audit's Report No. 82, including adjusting the time of preliminary registration times for GP Session since 11 June 2024 from midnight on the day of service to 8 pm the evening before at all nine dental clinics with this arrangement. The change aims to prevent elderly from having to queue until midnight, and has been running smoothly thus far. The DH will continue to monitor the situation closely.

5.22 Furthermore, the DH will launch an online booking system for GP Session services in December 2024, eliminating the need for in-person queuing. The DH will liaise with DHCs/DHCEs and other relevant centres/organisations to assist in promotion of the new arrangement.

5.23 As mentioned in para 5.18 above, the DH will launch CDSP to increase dental services for financially disadvantaged underprivileged groups in addition to GP Session service of DH.

Expansion of special care dental services

5.24 The Government's existing SOCS, SDCS and HTC are already providing oral health and dental care services for people with ID throughout their life course. The special child care centres covered by the SOCS and the special schools covered by the SDCS also serve people with disabilities other than ID. The Government will enhance the SOCS and the HTC in future to extend special care dental services to disability groups or those with special needs who have been assessed by social workers and are receiving rehabilitation services.

5.25 The Government agreed that there is a need to enhance special care dental services for high-risk groups within hospital dental services (see paragraphs 4.36 and 4.37). As mentioned in paragraphs 2.15 and 2.16, the DH currently operates OMS&DCs, while the HA operates dental and oral maxillofacial surgery departments. The hospital dental services of both organisations are discussing a merger, after which the enhancement of special care dental services will be explored. Details will be announced in due course.

5.26 Both the ODCP and the HTC are currently providing free dental services, though the beneficiaries may not have financial difficulties. Based on the model of co-payment, future subsidy level for special care dental services should be determined according to the level of financial difficulty of service users, allowing the Government to focus resources to the underprivileged groups.

5.27 The Government noted that NGOs had faced significant difficulties in recruiting dentists for special care dental services. Due to the limited number of participating dentists, there is room for improvement in service capacity across various programmes. The Government agreed with the Working Group that institutions such as the FoD, the HKDA, and the CDSHK should provide more training in SCD, General Dentistry, and Community Dentistry to support future development of primary oral healthcare and special care dental services. The Government also suggested the CDSHK to establish SCD as a dental sub-specialty.

Layout of oral health and dental care system

5.28 Prior to the review by the Working Group, the layout of the oral health and dental care system in Hong Kong was shown in Figure 13. Upon consideration on the recommendations of the Working Group, the Government aims to strengthen various types of services with focus on different population groups through the aforementioned oral health action plan. Following the implementation of these measures, the layout of the oral health and dental care system in Hong Kong will be as shown in Figure 14.

Figure 13: Current layout of Hong Kong's oral health and dental care system

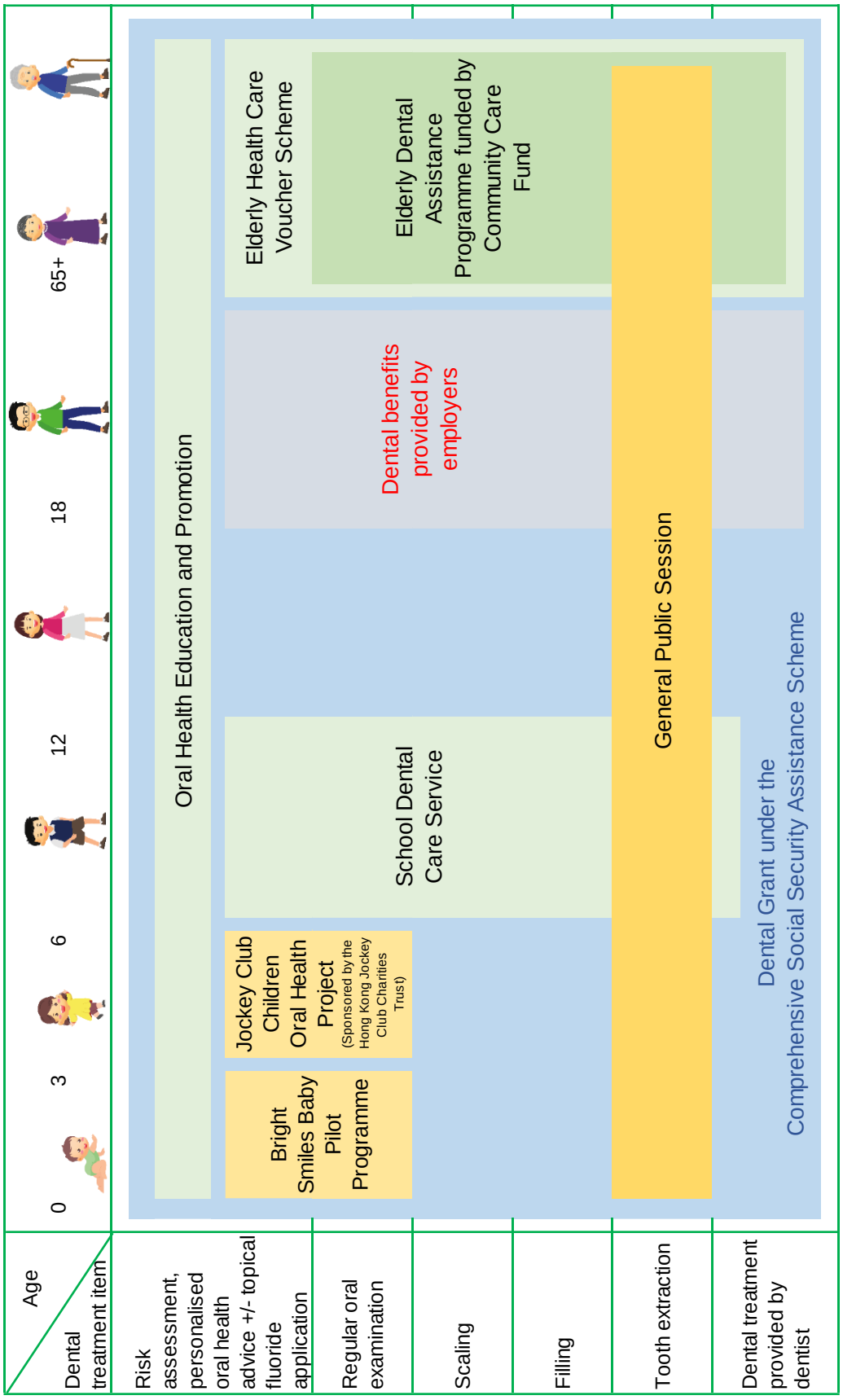
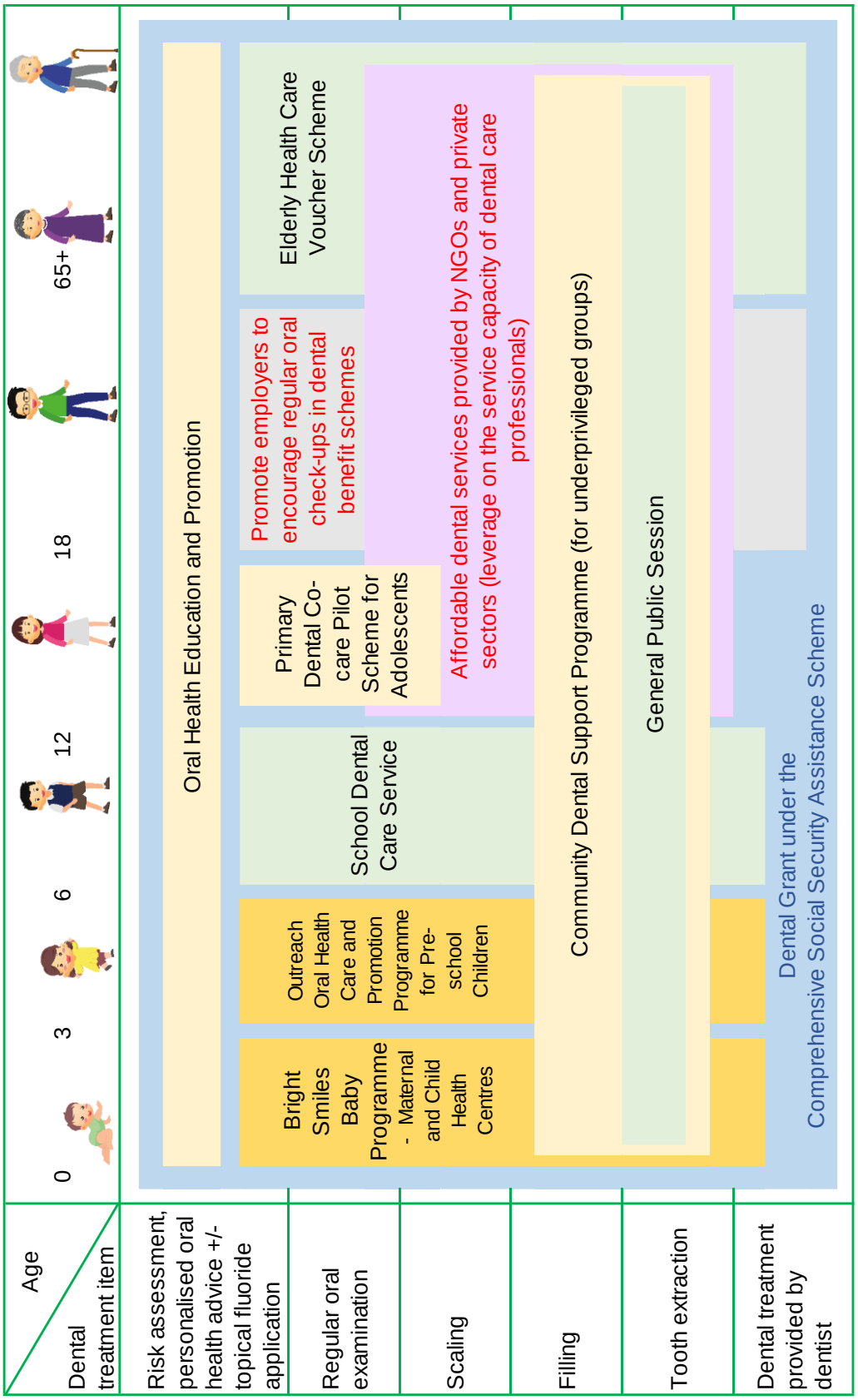


Figure 14: Layout of Hong Kong's oral health and dental care system following implementation of various measures



Increase of dental professional manpower

5.29 As mentioned in paragraph 4.45, the *Dentists Registration (Amendment) Bill 2024* was passed by the Legislative Council in July this year. The amended Ordinance will be implemented in phases. The provisions allowing qualified non-locally trained dentists to practise in specified institutions in Hong Kong through limited and special registration will commence in 1 January 2025, thereby increasing dental manpower to support public and subsidised dental services. The DH had started the recruitment of non-locally trained dentists in July 2024 and is working closely with the DCHK to admit the first batch of non-locally trained dentists to Hong Kong through this mechanism by the first quarter of 2025. The Government will also add NGOs participating in publicly funded dental programmes and institutions training DenCPs to the list of specified institutions under limited/special registration, allowing them to recruit non-locally trained dentists when needed to better meet service and training demands.

5.30 According to data from the DCHK and DH, as at October 2024, there were 615 enrolled dental hygienists and 224 dental therapists working in Government. However, as enrolment of dental hygienists has been a one-off exercise historically without annual renewal requirement, the current number of practising dental hygienists cannot be ascertained but the estimated number is lower than the enrolment number of 615. Once the DCHK establishes the DenCPs registration system under the amended Ordinance, existing dental hygienists will be required to register, enabling more accurate tracking of numbers. The DCHK has begun preparations and will communicate with the profession about potentially implementing DenCPs registration earlier in 2026. Additionally, the amended Ordinance will introduce mandatory continuing professional development requirements for dentists and DenCPs to enhance overall professional standards and better protect service users.

5.31 From the 2023/24 academic year, the DH has been providing full tuition sponsorship to successful applicants studying dental hygiene and dental therapy courses to attract more people to the profession. The Government will continue to increase training places for DenCPs, with the VTC introducing a Professional Diploma in Dental Hygiene Care as mentioned in paragraph 5.5. The Government expected the increased supply of DenCPs will enhance the capacity of affordable oral health and dental care services, including scaling, filling, and extraction.

5.32 The Government will continue to monitor demands of the community for oral health and dental care services and the profession's manpower situation, regularly conduct manpower projection planning for dentists and dental care professionals, and adjust training quotas and tuition subsidies accordingly.

Development of eHealth to include dental services

5.33 A number of private healthcare providers (including dentists) are currently using commercial or internally developed clinic management systems to store

healthcare records. We will enhance technical connectivity between eHealth and existing electronic medical record systems to facilitate data upload to eHealth, including (i) lowering technical barriers by providing compatibility components and round-the-clock testing platforms to establish integration with eHealth; (ii) collaborating with clinical record system vendors and/or medical professional bodies to enhance their systems for seamless electronic health record upload to eHealth; and (iii) simplifying the processes for patients on providing sharing consent to individual healthcare providers. The Government will enhance technical connectivity and expand data standards for dental records to promote the uploading of patients' electronic dental records to eHealth by the private dental sector.

5.34 In addition to technical improvements measures, it is necessary for the Government to provide incentives for private healthcare providers (including dentists) to upload health records. The upcoming PDCC and CDSP, along with future dental programmes implemented in the form of strategic purchasing, will require participating dentists to upload oral health records to eHealth using designated systems.

Oral Health Goals

5.35 Based on the OHS 2021 results and the upcoming Government initiatives, the DH has established Oral Health Goals for Hong Kong by 2030, aligning with World Health Organisation's *Global Strategy and Action Plan on Oral Health (2023-2030)*. In the interim, the Government will closely monitor the effectiveness of various measures through eHealth and make timely adjustments. Hong Kong's Oral Health Goals for 2030 are listed in ***Annex 3***.

5.36 As the Government will strengthen regular oral check-ups for pre-school children (see paragraphs 5.7 and 5.8), more ambitious 2030 goals can be set for tooth decay in deciduous teeth for the 5-year-old group. By contrast, tooth decay in permanent teeth in the 12-year-old group is already at very favourable level in global comparison, warranting stable 2030 goals. Changes in levels of tooth decay and gum diseases in adults and elderly are dependent on changes in oral health behaviour and practices. Considering that it may take longer for significant behavioural changes to occur, the 2030 goals for these two age groups should not be overly aggressive.

Oral health steering and advisory framework

5.37 Oral health is an integral part of general health, and preventive oral care will become part of primary healthcare. The Primary Healthcare Commission will establish an Oral Health Group under the Primary Healthcare Committee to monitor the progress and effectiveness of various measures.

5.38 Regarding the development of special care dental services, the DH will establish a Special Care Dental Services Coordination Committee to explore the long-term development of these services with relevant stake-holders.

Epilogue

Concluding the review on dental services, the Working Group recognised the significant improvement in citizens' oral health levels resulting from preventive public health measures on oral health and the collaborations between different parties. Looking ahead, the Working Group confirmed that oral health is crucial to general health, and improvements in oral health are conducive to general health. Based on the recommendations of the Working Group, the Government will develop preventive oral healthcare aimed at retention of teeth under the primary healthcare framework. The Government will also collaborate with the dental care sector, training institutions, NGOs, and the public to prevent oral diseases, retain teeth for lasting health.

Health Bureau

December 2024

Annex 1: Terms of Reference and Membership List of the Working Group on Oral Health and Dental Care

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

Annex 2: *Dentists Registration (Amendment) Ordinance* 2024 Classes of Dental Care Professionals and Scope of Practice

Extracted from *Dentists Registration (Amendment) Ordinance 2024* Schedule 3

Matters relating to Dental Care Professionals

Part 1 Classes of Dental Care Professionals and Scope of Practice

Column 1	Column 2	Column 3	Column 4
Class	Category	Service	Conditions
Dental hygienist	1	(a) The cleaning and polishing of those parts of the surface of the teeth of another person that are not covered by the gums	Nil
		(b) The application to the teeth of another person of any topical fluoride, fissure sealant, or other similar preventive agent	Nil
		(c) The taking of a radiograph intra-orally or extra-orally for the examination of the mouth, teeth or jaws of another person, or their associated structures	The condition set out in section 1 of Part 2 of this Schedule

		(d)	The scaling of the teeth of another person (that is to say the removal of calculus deposits and stains from those parts of the surface of the teeth that are exposed or that are beneath the free margins of the gums, including the application of medicaments)	The conditions set out in sections 1 and 2 of Part 2 of this Schedule
Dental therapist	1	(a)	The cleaning and polishing of those parts of the surface of the teeth of another person that are not covered by the gums	Nil
		(b)	The application to the teeth of another person of any topical fluoride, fissure sealant, or other similar preventive agent	Nil
		(c)	The taking of a radiograph intra-orally or extra-orally for the examination of the mouth, teeth or jaws of another person, or their associated structures	The condition set out in section 1 of Part 2 of this Schedule

(d)	The scaling of the teeth of another person (that is to say the removal of calculus deposits and stains from those parts of the surface of the teeth that are exposed or that are beneath the free margins of the gums, including the application of medicaments)	The conditions set out in sections 1 and 2 of Part 2 of this Schedule
(e)	The filling of a tooth set out below of another person (that is to say the carrying out of cavity preparation and the subsequent insertion of any lining, base, dressing or permanent filling)— (i) a decayed tooth; or (ii) a tooth with a dental anomaly	The conditions set out in sections 1, 2 and 3 of Part 2 of this Schedule
(f)	The carrying out of an indirect pulp capping on a tooth of another person	The conditions set out in sections 1, 2 and 3 of Part 2 of this Schedule

(g)	The direct restoration of an incisor of another person that is fractured due to a trauma	The conditions set out in sections 1, 2 and 3 of Part 2 of this Schedule
(h)	The carrying out of primary tooth pulpotomy on another person	The conditions set out in sections 1 and 2 of Part 2 of this Schedule
(i)	The extraction of a tooth set out below of another person using dental forceps (that is to say the extraction of a tooth without incision)— (i) a primary tooth; (ii) a decayed tooth; or (iii) a mobile permanent tooth	The conditions set out in sections 1, 2 and 3 of Part 2 of this Schedule
(j)	The extraction of an erupted permanent tooth of another person using dental forceps (that is to say the extraction of a tooth without incision)—	The conditions set out in sections 1, 2 and 3 of Part 2 of this Schedule

(i) for orthodontic purpose; or

(ii) for management of a dental anomaly

Part 2

Conditions

1. Before the service is provided by the registered dental care professional concerned to another person (***patient***), a registered dentist or a person with provisional registration—

   (a) has assessed the medical history of, and examined, the patient; and

   (b) has, based on the assessment and examination, prescribed that the service is to be provided to the patient.

2. The service is provided on any premises by the registered dental care professional concerned in accordance with the directions of a registered dentist or a person with provisional registration who is present on the premises at all times when the service is provided.

3. Either—

   (a) the patient is under the age of 18 years; or

   (b) if the patient has attained the age of 18 years—

(i) the registered dental care professional concerned has completed a training programme recognized by the Council for the purposes of this section; or

(ii) a consultant dental surgeon appointed by the Director of Health for this purpose has certified that the registered dental care professional concerned is capable of providing the service on the ground that the registered dental care professional has acquired adequate relevant knowledge and experience, and is competent, in the provision of dental services.

Annex 3: Hong Kong Oral Health Goals to be achieved by 2030

Oral Health Goals		
Group	**2030 Oral Health Goals**	**Hong Kong oral health status (2021 Oral Health Survey)**
5-year-olds	Caries-free experience ≥ 64%	Caries-free experience = 58%
	Untreated decay ≤ 1.4 teeth	Untreated decay = 1.6 teeth
12-year-olds	Caries-free experience ≥ 85%	Caries-free experience = 84%
	Untreated decay ≤ 0.1 teeth	Untreated decay = 0.05 teeth
Adults aged 35-44	Untreated decay ≤ 0.7 teeth	Untreated decay = 0.7 teeth
	No untreated decay ≥ 70%	No untreated decay = 68%
	Deep periodontal pockets ≤ 14%	Deep periodontal pockets = 15%
	Less than half of the teeth with bleeding gums ≥ 50%	Less than half of the teeth with bleeding gums = 55%
	20 or more teeth present ≥ 99%	20 or more teeth present = 99.9%
Non-institutionalised elderly aged 65-74	Untreated decay ≤ 1 tooth	Untreated decay = 1.2 teeth
	No untreated decay ≥ 55%	No untreated decay = 53%
	No untreated root decay ≥ 80%	No untreated root decay = 77%
	Deep periodontal pockets ≤ 25%	Deep periodontal pockets = 26%
	More than 20 teeth present ≥ 80%	More than 20 teeth present = 77%
	Number of missing teeth ≤ 8 teeth	Number of missing teeth = 9 teeth
	Complete tooth loss ≤ 1%	Complete tooth loss = 0.9%

Annex II

衞生署
Department of Health

HIGHLIGHTS

ORAL HEALTH SURVEY

2021

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INTRODUCTION

Oral health is integral to general health and 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. In response to the recommendation of the World Health Organization (WHO), surveillance of oral health on community level thus has to be done at regular intervals.

Since 2001, the Department of Health (DH) has committed to conduct a territory wide Oral Health Survey (OHS) in Hong Kong every 10 years, the purposes of which are to collect up-to-date information on the oral health status of citizens and provide a useful database for planning and development of public dental services that suit the needs of the population.

The Oral Health Survey (OHS) 2021 was conducted 10 years after the second territory-wide survey in 2011. The objectives of the OHS 2021 were to obtain relevant information on i) the oral health condition of the people of Hong Kong; ii) the oral health related behaviours of the population; and iii) the factors that facilitate behaviours conducive to good oral health and barriers which prevent people from adopting positive behaviours. The survey methodology followed the basic principles of the WHO recommendation. Same as the two previous OHSs 2001 and 2011, the OHS 2021 report also focuses on two most common but preventable oral diseases, tooth decay (dental caries) and gum disease (periodontal disease), which affect many people. In OHS 2021, the following index age and age groups were selected: (a) 5-year old children to evaluate the status of primary teeth; (b) 12-year old students, representing the complete change from primary dentition to permanent dentition stage, to monitor the diseases trends of permanent teeth; (c) 35 to 44-year old adults to evaluate the oral health condition of the adult population; (d) 65 to 74-year old non-institutionalized older persons (NOP) to obtain information on the oral health condition of this age group which is becoming more important as the Hong Kong population is aging; and (e) the aged 65 and above Social Welfare Department long term care services (LTC) users to assess the oral health condition and needs of functionally dependent older persons receiving long term care services. These LTC users may have difficulties in daily oral hygiene and access to professional care, and they require our special attention.

Measurement of tooth decay experience (DMFT/dmft index)

In this survey, tooth decay was defined as the occurrence of cavity extended into dentine. The number of permanent teeth with untreated decay (cavity) is referred to as DT (decayed teeth, and dt for decayed primary teeth). The number of permanent teeth with decay in the past but have already been repaired by restorative procedures is referred to as FT (filled teeth, ft for filled primary teeth). The number of permanent teeth that were removed (extracted) due to decay is referred to as MT (missing teeth, mt for missing primary teeth). The sum of DT, MT and FT is referred to as the DMFT score or value, which reflects the total number of permanent teeth that has been affected by tooth decay in the past and at present. DMFT score or value is used for decay experience of permanent teeth, and dmft for decay experience of primary teeth. The level of tooth decay experience in a population can be represented by the mean values of DT, MT, FT and DMFT, as well as by the proportion of population affected by each type of decay experience.

Measurement of gum disease (index teeth, half mouth and full mouth)

Traditionally, gum health is assessed by dividing all teeth in the mouth into six segments called sextants according to the WHO recommendation. Not all teeth in a sextant are examined, but only an index tooth or index teeth as specified by the WHO are examined. A sextant would be excluded from examination if less than two teeth are remaining, and a person would be excluded if all 6 sextants are excluded from examination.

Similar to tooth decay, gum disease may affect only some of the teeth present in a mouth. The measurement of the level of gum disease ideally should include all the teeth present. The current international trend is to examine at least all teeth on one side of the mouth (called half-mouth examination) or preferably to examine all teeth present (called full-mouth examination). The use of only index teeth in each of the six sextants may under-estimate the level of gum disease. However, the choice of examination method is dependent on the health status of the subjects in general as well as the environment in conducting the oral examination.

In this Oral Health Survey, there was time constraint in examining large groups of 5- and 12-year old students with minimal interruption of their daily routines, thus half-mouth examination was performed so as to get sufficient amount of information without causing too much disturbance to the students and schools.

For the adults and NOP groups, full mouth examination was performed although it is more time-consuming and could be more stressful to the individuals being examined. The investigators carrying out oral examination were experienced in doing this kind of oral health survey. They could perform the examination orderly within a reasonable time. In this way, the information collected will be more closer to the actual status of the individual.

For the long-term care service (LTC) users groups, they had difficulties in tolerating lengthy oral examination. Therefore, the examination of index teeth by sextants was adopted.

This highlight version contains key results of the Survey only. For detailed descriptions and findings of the OHS 2021, please refer to the full report. The full report can be viewed or downloaded from the website https://www.toothclub.gov.hk/ of the Department of Health Oral Health Promotion Division.

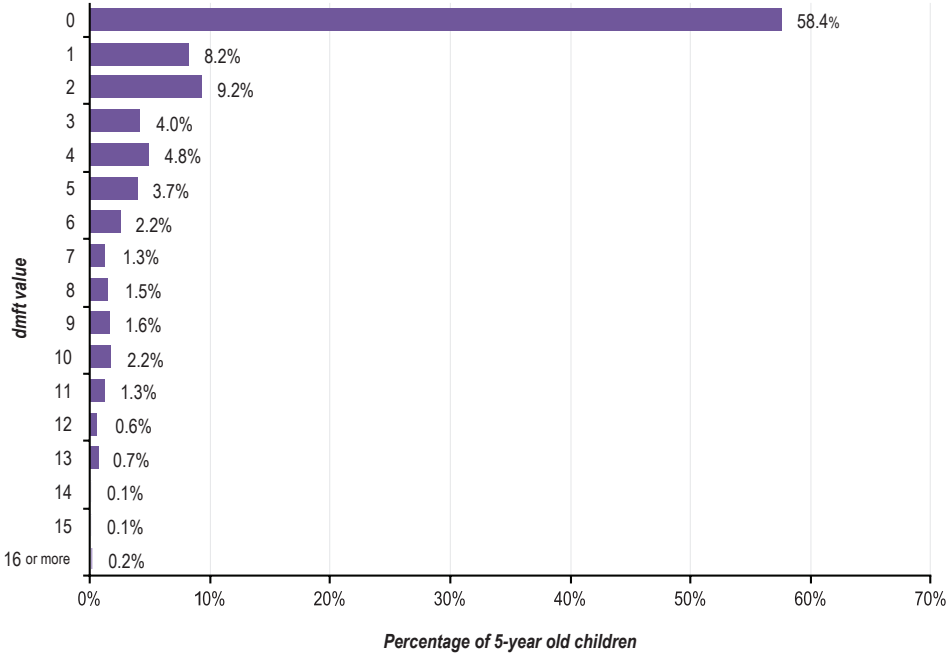
SECTION 1

5-year old children

Tooth Status – what was the level of tooth decay experience

The level of tooth decay experience in the 5-year old children as measured by the mean decayed, missing, and filled teeth (dmft) value was 1.8. Most of the tooth decay experience (dmft) was the decay component (dt) with 88.9% (1.6/1.8) of the affected teeth untreated. The distribution of decayed teeth among the children was skewed (Figure 1.1). Up to 58.4% had no decay, but about 20.2% of the rest had four or more teeth with tooth decay experience (dmft > 3) which accounted for 78.8% of all the teeth with decay experience among the 5-year old children.

Figure 1.1 ***Distribution of 5-year old children according to dmft value***



Base: All 5-year old children
2021: (N = 39 700)

The level of the tooth decay experience among 5-year old children and the percentage of children affected in the 2001, 2011, and 2021 surveys are listed in Table 1.1 and Table 1.2.

Table 1.1 ***Level of tooth decay experience as measured by the dmft index among 5-year old children in 2001, 2011 and 2021***

Tooth decay experience	2001 (N = 67 300)	2011 (N = 52 300)	2021 (N = 39 700)
Mean dmft	2.3	2.5	1.8
Mean dt (decayed)	2.1	2.3	1.6
Mean mt (missing)	< 0.05	< 0.05	< 0.05
Mean ft (filled	0.2	0.2	0.2

Base: All 5-year old children

Table 1.2 ***Percentage of 5-year old children with tooth decay experience in 2001, 2011 and 2021***

Tooth decay experience	2001 (N = 67 300)	2011 (N = 52 300)	2021 (N = 39 700)
dmft	51.0%	50.7%	41.6%
dt (decayed)	49.4%	49.4%	39.2%
mt (missing)	1.3%	0.7%	1.2%
ft (filled	7.4%	7.3%	6.0%

Base: All 5-year old children

Dental abscess was present in 0.9% (3 00) of the 5-year old children. Most of these abscesses were probably associated with extensively decayed teeth. The percentage of children with abscess was lower than that found in the 2001 and 2011 survey (around 6%).

Tooth status – how clean were the teeth ?

The cleanliness of the children's teeth was measured by the percentage of tooth surfaces with visible dental plaque. The mean percentage of tooth surfaces with visible dental plaque in the 5-year old children was 17.3%. In 2001 and 2011, the mean percentages were 23.5% and 22.1% respectively.

What was the oral health related behaviour of the 5-year old children?

- About 77.9% of the 5-year old children brushed their teeth twice or more daily while only 3.3% of them brushed less than once a day.
- Up to 59.7% of parents reported that they sometimes assisted their children in toothbrushing while 30.7% of parents always did so.
- Almost all parents (97.0%) reported that their children always used toothpaste when they brushed their teeth. However, 60.7% of them reported that the toothpaste contained fluoride while 14.4% of them used non-fluoridated toothpaste and 24.9% of them did not know its content.
- Around 67.4% of the parents reported that their children snacked daily and 9.9% would give snacks to their children three times or more per day.

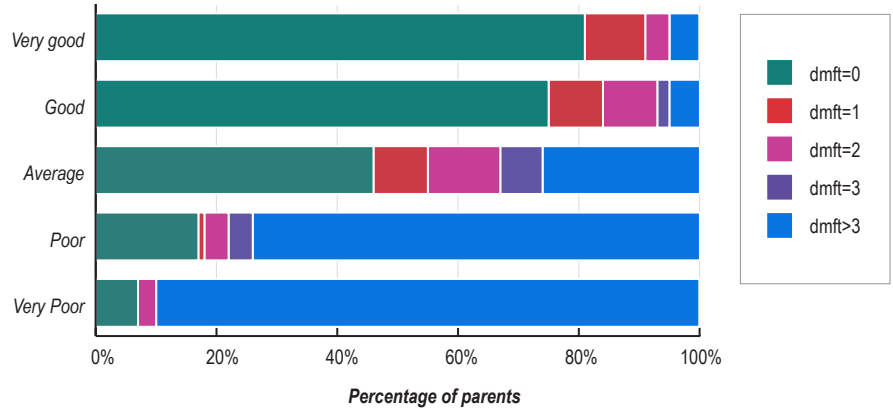
What did the parents know about dental diseases?

- Up to 97.5% of the parent considered taking too much sugary food or drink as a risk factor for tooth decay. About half (49.4%) of them could identify eating or drinking too frequently as a factor.
- Almost half (49.8%) and one-third (36.7%) of the parents had the misconceptions that not rinsing after meal and lack of calcium were relevant factors for increasing the risk of tooth decay.
- The majority of parents (86.1%) could identify that inadequate brushing along the gum line was a risk factor for gum disease while almost half (44.3%) of them knew that not using dental floss was also a risk factor.
- Among the parents, 40.1% of them knew that smoking was a risk factor for gum disease.

What were the parents' perceptions of the oral health of their 5-year old children?

The parents' perception of very poor oral health aligned with their children's actual oral health condition, as 93.7% of the children whose parents rated them as having very poor oral health condition had more than three teeth with decay experience (dmft>3). However, the parents' perception of good or very good oral health were less precise. Up to 12.5% and 15.3% of the children whose parents rated them as having very good oral health and good oral health respectively actually had dmft value of 2 or above.

***Figure 1.2** Oral health condition of 5-year old children as perceived by their parents and the children's decay experience*



Base: All parents of 5-year old children 2021: (N = 39 700)

What was the pattern of utilization of oral health care services among the 5-year old children?

- Only 25.9% of the parents had brought their 5-year old children to visit dentist.
- Among the children who had visited dentist, up to 39.8% of the parents reported that the major reason for the visit was checkup.

Table 1.3 Distribution of 5-year old children with dental visit experience according to the reported major reason for their latest dental visit

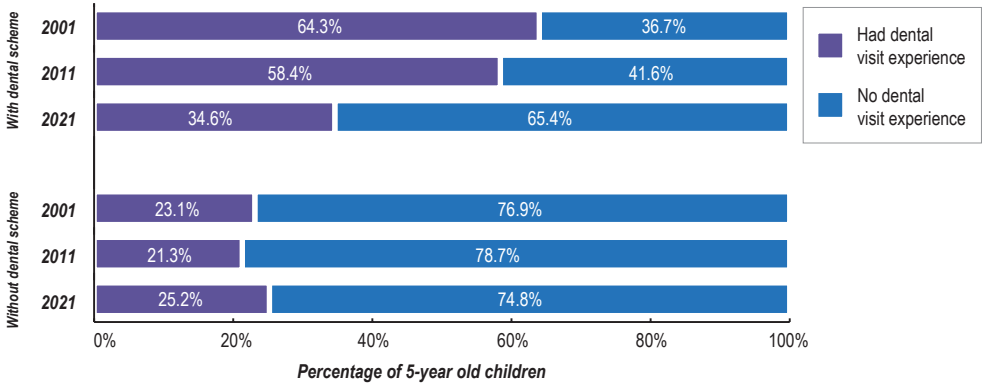
Major reason for the children's latest dental visit	Percentage	Sub-categories of major reason for the children's latest dental visit	Percentage
Checkup	39.8%	Checkup	39.8%
Tooth problem	46.5%	Suspect tooth decay	29.1%
		Toothache	10.6%
		Trauma	6.8%
Other reasons	13.7%	Other reasons	13.7%

Base: All 5-year old children who had previous dental visit and whose parents responded to the question 2021: (N = 10 300)

- Around 61.8% of the parents preferred to have their children's decayed teeth restored and only 12.1% preferred to have them extracted. About 20.4% of the parents did not know what to do or chose to leave the decayed teeth alone.

- Up to 34.6% of the parents of those children who were covered by dental scheme had brought their children to visit dentist while only 25.2% of parents of those children without dental scheme coverage had done so (Figure 1.3).

Figure 1.3 Distribution of children according to dental scheme coverage and their dental visit experience in 2001, 2011 and 2021



Base (with dental scheme):
All 5-year old children covered by dental scheme and whose parents answered the questions
2001: (N = 7 100) 2011: (N = 5 200) 2021: (N = 3 300)

Base (without dental scheme):
All 5-year old children not covered by dental scheme and whose parents answered the questions
2001: (N = 60 200) 2011: (N = 47 000) 2021: (N = 36 400)

Summary and way forward

Compare with the past twenty years, there was a further improvement in the level of tooth decay experience. However, the population of 5-year old children with decay experience remained high and skewed over the latest ten years and up to 88.9% of the decayed teeth in children were untreated. Regarding the oral health home care behavior of the 5-year old children, most of them always brushed their teeth with toothpaste, and a higher proportion of them got parental assistance when they brushed. The slow improvement in the decay experience could thus partly be attributed to the fact that most of the children did not go for dental checkup where they could receive individualized oral health education and early preventive intervention. In this survey, nearly 75% of the 5-year old children had never visited a dentist. During the COVID-19 pandemic, only 25.9% of the parents of 5-year old children had brought their children to visit dentist. Around half of them (46.5%) did so mainly because of dental problems. The low dental checkup rate, together with the wrong perception of some parents that the oral health of their children was good or very good while in fact they had tooth decay with dmft value of 2 or above, could result in many decayed teeth remain undetected or untreated.

Looking at the way forward, the dental profession needs to further strengthen oral health education to parents of young children and encourage them to have regular dental checkup from as early as 6 months after the eruption of the first tooth. Early screening programme of the infant could help early identification of the high risk group for dental decay. Parents should also be further motivated to help their children with toothbrushing and reduce snacking frequency. This survey showed that the use of fluoride toothpaste of the parents was polarized. About 60% of the parent used fluoride toothpaste for their children. On the other hand, more than 10% of the parents used non-fluoridated toothpaste. Continual promotion of using fluoridated toothpaste and establishing good dietary habit are required. The initiation of dental programmes that focus on pre-school children and risk assessment may help in early diagnosis, prevention and intervention of oral diseases.

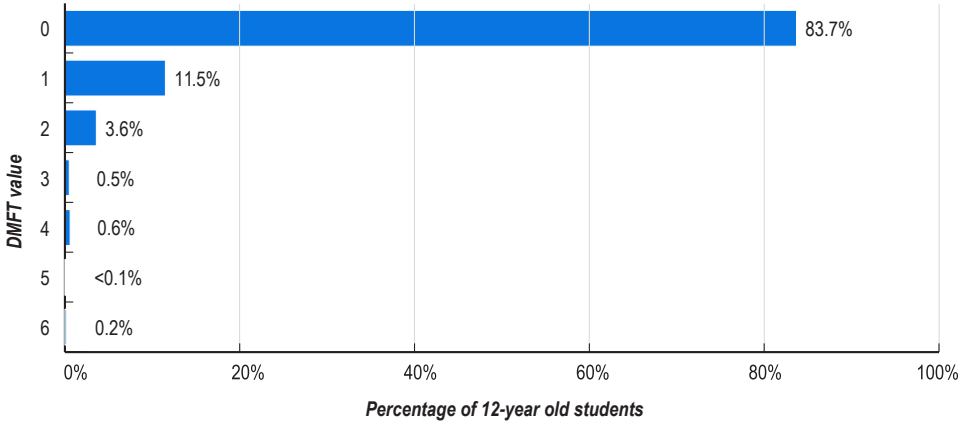
SECTION 2

12-year old students

Tooth Status – what was the level of tooth decay experience

The level of tooth decay experience in the 12-year old students as measured by the mean Decayed, Missing and Filled Teeth (DMFT) index was found to be very low with a mean DMFT value of 0.24. Only 16.3% of the students had tooth decay experience in their permanent teeth. For the students with tooth decay experience, most of them had only one affected tooth (Figure 2.1).

Figure 2.1 ***Distribution of 12-year old students according to DMFT value***



Base: All 12-year old students
2021: (N = 50 000)

The level of tooth decay experience in the 12-year old students and the proportion of students affected as found in the 2001, 2011 and 2021 surveys are showed in Table 2.1 and Table 2.2.

***Table 2.1** Level of tooth decay experience as measured by the DMFT index among 12-year old students in 2001, 2011 and 2021*

Tooth decay experience	2001 (N = 67 100)	2011 (N = 56 900)	2021 (N = 50 000)
Mean DMFT	0.8	0.4	0.24
Mean DT (decayed)	0.1	0.1	0.05
Mean MT (missing)	0.1	< 0.05	0
Mean FT (filled	0.6	0.3	0.19

Base: All 12-year old students

***Table 2.2** Percentage of 12-year old children with tooth decay experience in 2001, 2011 and 2021*

Tooth decay experience	2001 (N = 67 100)	2011 (N = 56 900)	2021 (N = 50 000)
DMFT	37.8%	22.6%	16.3%
DT (decayed)	6.9%	5.4%	4.2%
MT (missing)	3.1%	0.5%	0.0%
FT (filled	33.8%	19.3%	13.3%

Base: All 12-year old students

What was the gum condition of the students?

The gum condition of the 12-year old students as measured by the Community Periodontal Index (CPI) are shown in Table 2.3 and Table 2.4.

Table 2.3 ***Gum condition as measured by CPI among 12-year old students***

Gum condition	No bleeding gum and calculus detected	Bleeding gum + no calculus	Calculus +/- bleeding gum
Percentage among population	16.0%	62.8%	21.2%

Base: All 12-year old students who received examination on gum condition 2021: (N = 49 100)

Table 2.4 ***Mean number of sextants with healthy gum, bleeding gum and calculus in 12-year old students***

Gum condition	No bleeding gum and calculus detected	Bleeding gum + no calculus	Calculus +/- bleeding gum
Mean number of sextants (6 sextants per person)	3.6	2.1	0.3

Base: All 12-year old students who received examination on gum condition 2021: (N = 49 100)

Comparing the results of this survey to that of 2001 and 2011 surveys, the gum condition of the 12-year old students had shown some improvement. In the present survey, an increased proportion of students (16.0% as compared with 5.5% and 13.8% in the 2001 and 2011 surveys respectively) had healthy gum in all parts of their mouth with no bleeding gum and calculus and a decreased proportion of them (21.2% as compared with 59.5% and 22.4% in the 2001 and 2011 survey respectively) had calculus present in some parts of the mouth.

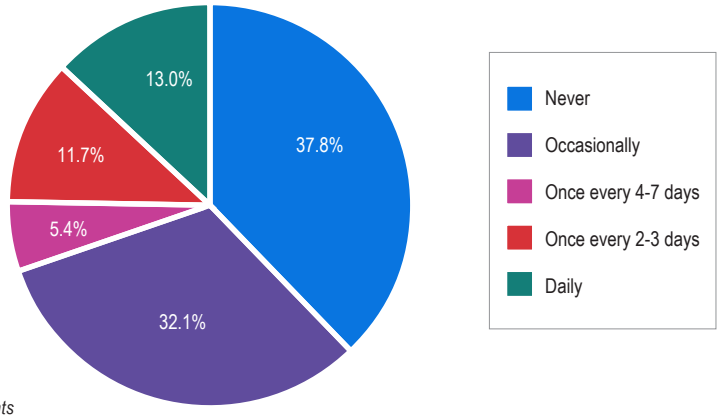
Tooth status – how clean were the teeth?

The cleanliness of the teeth of the 12-year old students as measured by the mean percentage of tooth surfaces with visible dental plaque was found to be 21.7%. In 2001 & 2011, the mean percentage of tooth surfaces with visible dental plaque are 36.8% and 27.0% respectively. There had been continual improvement in the cleanliness of the students' teeth.

How did the 12-year old students practice oral self-care?

- Up to 80.2% of the students brushed twice or more a day. Only (2.7%) of the students brushed less than once a day.
- Almost all (95.5%) of the students reported that they always used toothpaste when they brushed their teeth. However, only 58.8% of them knew that the toothpaste they were using contained fluoride.
- Up to 62.2% of the students reported that they used dental floss. However most of the them floss only used it occasionally (Figure 2.2).
- About 70% of the students had no snacking habit but 9.7% snacked three times or more per day.

Figure 2.2 Distribution of 12-year old students according to frequency of using dental floss



Based: All 12-year old students 2021: (N=50 000)

What did the students and their parents know about dental diseases?

- Majority of students and parents (92.5% and 90.8% respectively) knew that taking too much sugary food or drink could increase the risk of tooth decay. More than 40% of them (40.4% of students and 49.9% of parents) knew that eating or drinking too frequently was a risk factor for tooth decay.

- About 60% of the students and parents (57.0% and 66.0% respectively) could identify not brushing the teeth with fluoride toothpaste in the morning and at night was a risk factor for tooth decay.

- Up to 68.1% of the students and 81.5% of the parents could identify inadequate brushing along the gum line as a risk factor for gum disease while 31.2% of the students and 42.5% of their parents knew that not using dental floss was a risk factor.

- About half (50.3%) of the student and one third (31.2%) of the parents knew that smoking was a risk factor for gum disease.

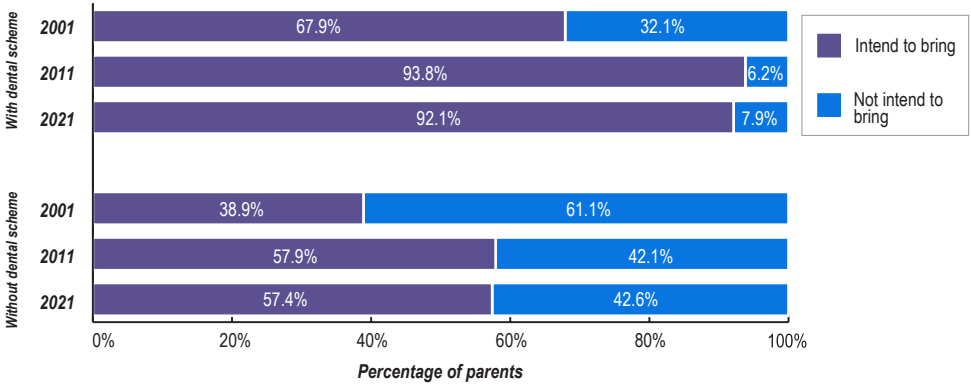
What was the pattern of utilization of oral health care services among the 12-year old children?

- About 70% of the students and their parents (67.8% and 68.6% respectively) considered regular dental checkup was a way of preventing tooth decay. Whereas, about half (56.5%) of the students and two-third (67.0%) of parents considered regular dental checkup was a way of preventing gum disease.

- When the parents were asked whether they intended to bring the 12-year old students to seek regular dental checkup, 62.5% of them indicated that they would do so. Up to 24.5% of the 12-year old students had visited the dentist after entering secondary school, and the main type of treatment received was professional tooth cleaning (scaling).

- Up to 92.1% of the parents of those students who were covered by dental scheme reported the intention to bring the students to seek regular dental checkup while only 57.4% of parents of those students who were not covered by dental scheme intended to do so (Figure 2.3).

Figure 2.3 ***Distribution of parents of 12-year old students according to whether they intended to bring the students to seek regular dental checkup in 2001,2011 and 2021***



Base (with dental scheme): All parents of those 12-year old students covered by dental scheme who answered the questions
2001: (N = 9 600) 2011: (N = 9 800) 2021: (N = 7 400)

Base (without dental scheme): All parents of those 12-year old students not covered by dental scheme who answered the questions
2001: (N = 57 500) 2011: (N = 47 100) 2021: (N = 42 700)

Summary and way forward

The findings of the 2001, 2011 and 2021 surveys indicated that the level of tooth decay experience of the 12-year old students was on a downward trend continuously, and had dropped to a very low level. Also, further improvement was found in their gum health, whereas the oral health knowledge and the oral care habit were maintained. Over 60% of parents responded that they intended to bring the students to checkup.

In general, most students still had bleeding gum and calculus in parts of their mouth. Many of them used floss occasionally and daily flossing habit had not yet been established among the students. The survey also showed there was room for improvement in some aspects of their oral health knowledge and perception over the years. As before, a sizeable proportion of students and parents were still unaware of the fact that frequent eating or drinking was a risk factor for tooth decay. Only half of the students could relate smoking to gum disease. The risk and harmful effect of frequent eating or drinking on teeth and smoking on the gum should be reinforced in future oral or general health education by dental professionals. In addition, although tooth decay is not a great concern for this age group, their knowledge on oral health should be enhanced. There was still a significant proportion of students who were not aware of the benefits of fluoride and regular dental check-up. As this group of students had already left the School Dental Care Service administered for primary school children, some form of dental checkup scheme could be considered by the Government for secondary school students as a follow up of their oral health condition. In fact, the Hong Kong Government is going to launch a primary dental care scheme for adolescents to encourage regular dental checkup among the age groups. We hope that through the scheme, their oral health knowledge and habits could be strengthened, and they can take good care of their oral health themselves and maintain good oral health until old age without losing any of their teeth.

SECTION 3

35 to 44-year old adults

Tooth loss condition

It was recognized by the World Health Organization that a functional and aesthetic dentition required no less than 20 well distributed teeth. The proportion of adults who had 20 teeth was assessed in this survey. In this survey, each adult had an average of 28.9 teeth and 99.9% (983 800) of them had at least 20 teeth (Table 3.1). Almost all adults had at least 10 occluding pairs (99.1%) (Table 3.2).

Table 3.1 ***Percentage of adults with at least 20 teeth left in 2001, 2011 and 2021***

Number of teeth left	2001 (N = 1 354 700)	2011 (N = 1 062 900)	2021 (N = 985 200)
≥ 20 teeth left	99.2%	99.8%	99.9%

Base: All Adults

Table 3.2 ***Percentage of adults with number of occluding pairs in 2021***

No. of occluding pairs*	Percentage
0 – 9 pairs	0.9%
≥ 10 pairs	99.1%

Base: All Adults
2021: N = 985 200
**Occluding pairs formed by natural tooth with natural tooth/fixed prosthesis are counted.*

Only 6.1% of adults were found with dental prostheses, irrespective of the type. 6.0% of adults had dental bridges and 3.2% had dental implants (Table 3.3).

Table 3.3 ***Percentage of adults with different types of dental prostheses in 2021***

Type of dental prostheses	2021 (N = 985 200)
With any prostheses	6.1%
With dental bridges	6.0%
With removable partial dentures	0.3%§
With full dentures	0.0%§
With dental implants	3.2%

Base: All adults

§ *This estimate was compiled based on a very small sample. Readers are advised to interpret this estimate with caution.*

Level of tooth decay experience

The mean DMFT value among the adult population was 6.6. When compared with 2001 and 2011, adults had slightly more teeth remaining (from 28.1 in 2001, 28.6 in 2011 and 28.9 in 2021) (Table 3.4).

Table 3.4 ***Level of tooth decay experience as measured by the DMFT index among adults in 2001, 2011 and 2021***

Tooth decay experience	2001 (N = 1 354 700)	2011 (N = 1 062 900)	2021 (N = 985 200)
Mean DMFT	7.4	6.9	6.6
Mean DT (Decayed)	0.7	0.7	0.7
Mean MT (Missing)	3.9	3.4	3.1
Mean FT (Filled)	2.8	2.8	2.8

Base: All Adults

The proportion of adults with tooth decay experience remained more or less the same over the years (Table 3.5).

Table 3.5 ***Percentage of adults with tooth decay experience in 2001, 2011 and 2021***

Tooth decay experience	2001 (N = 1 354 700)	2011 (N = 1 062 900)	2021 (N = 985 200)
DMFT	97.5%	96.1%	95.9%
DT (Decayed)	32.0%	31.2%	31.7%
MT (Missing)	91.4%	89.7%	86.2%
FT (Filled)	66.6%	67.4%	67.0%

Base: All Adults

Although the level of coronal caries remained stable, there was an increase observed in the proportion of adults with decayed and untreated root surface (5.9% in 2021, 3.0% in 2011) (Table 3.6).

Table 3.6 ***Percentage of adults with root surface decay experience in 2001, 2011 and 2021***

Root surface decay experience	2001 (N = 1 354 700)	2011 (N = 1 062 900)	2021 (N = 985 200)
DF-root	4.2%	4.0%	7.2%
D-root (Decayed)	3.4%	3.0%	5.9%
F-root (Filled)	1.0%	0.9% §	1.4%

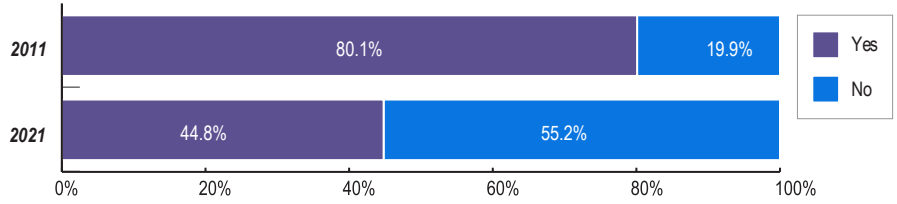
Base: All Adults

§ This estimate was compiled based on a very small sample. Readers are advised to interpret this estimate with caution.

Gum condition

There were 44.8% (441 200) of adults having half or more of their teeth with bleeding gums, which was significantly lower than adults in 2011 (80.1%) (Figure 3.1). There was an increase in the proportion of adults with deeper gingival pockets of 4 mm or above (Table 3.7). It was noted that higher proportion of back teeth (molars) had shallow or deep pockets than other tooth types (Table 3.8).

Figure 3.1 ***Percentage of adults having half or more of the teeth with bleeding gums***



Base: All adults
2011: N = 1 062 900
2021: N = 985 200
(The same data was not available in 2001 for comparison)

Table 3.7 ***Percentage of adults according to the highest pocket depth in 2001. 2011 and 2021***

Highest pocket depth	2001 (N = 1 354 700)	2011 (N = 1 062 900)	2021# (N = 985 200)
0-3 mm (Not considered as pocket)	54.0%	60.4%	42.6%
4-5 mm (Shallow pocket)	38.9%	29.8%	42.6%
≥ 6 mm (Deep pocket)	7.1%	9.8%	14.8%
Total	100.0%	100.0%	100.0%

Base: All Adults
 # The diagnostic methodology was extended to include all teeth in the mouth in 2021 instead of half mouth in 2011 and index teeth in 2001

Table 3.8 ***Mean percentage of teeth according to the pocket depth of adults in 2021***

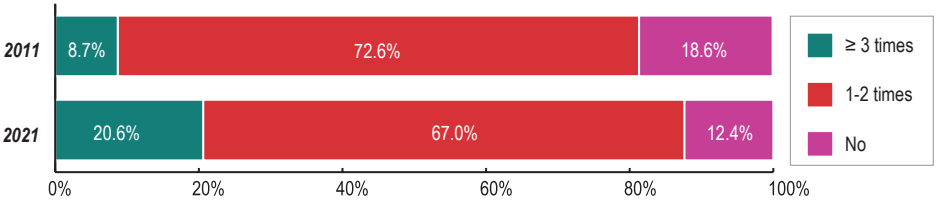
	Molars (back teeth)	Premolars	Incisors and canine
Shallow pockets (pocket depth 4-5 mm)			
Upper teeth	24.0%*	13.7%	8.4%
Lower teeth	15.2%*	8.1%*	6.2%
Deep pockets (pocket depth 6 mm+)			
Upper teeth	3.4%	1.1%**	1.0%
Lower teeth	3.3%**	0.4%**	0.4%
Missing			
Upper teeth	3.2%	5.1%	1.1%
Lower teeth	6.2%	3.7%	1.3%

Base: All adults
** bleeding on probing was detected in >80% of this teeth group*
***bleeding on probing was detected in >90% of this teeth group*

Oral health related behaviours

There was a surge in the proportion of adults reported having snack or food consumption at least three times daily other than normal meals (8.7% in 2011 to 20.6% in 2021) (Figure 3.2).

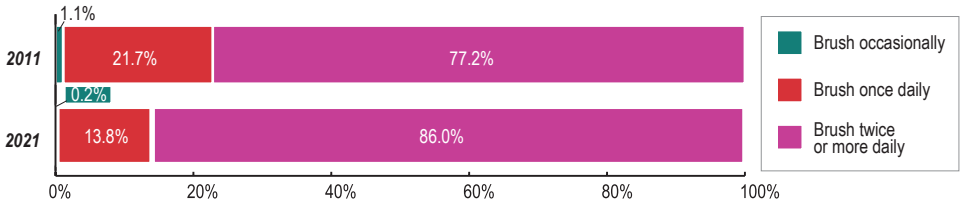
Figure 3.2 ***Percentage of adults according to daily frequency of snacking or food consumption other than normal meals***



Base: All adults
2011: N = 1 062 900
2021: N = 985 200

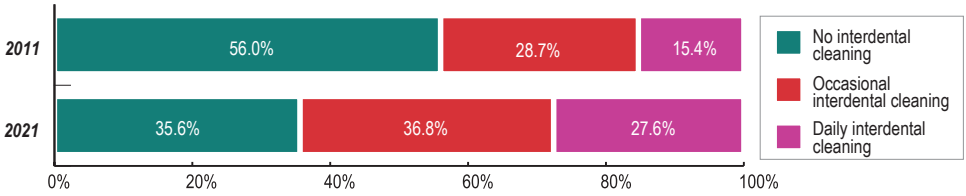
Toothbrushing twice daily had become a well-established oral hygiene habit (Figure 3.3). At the same time, the proportion of adults who practised daily interdental cleaning has nearly doubled (Figure 3.4). Proportion of adults with smoking habit remained stable over the past 10 years (Figure 3.5).

***Figure 3.3** Percentage of adults according to toothbrushing habit*



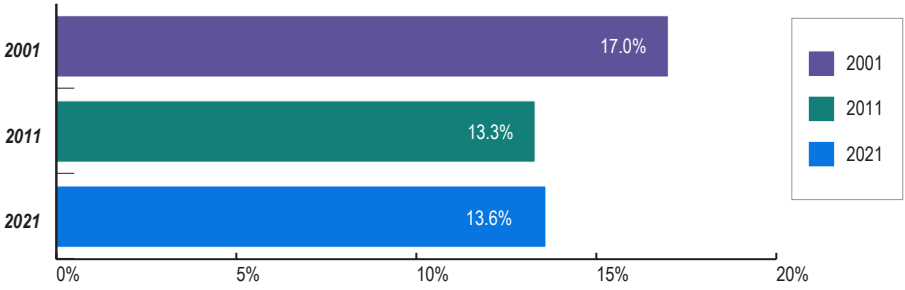
Base: All adults
2011: N = 1 062 900
2021: N = 985 200

***Figure 3.4** Percentage of adults according to the intercleaning habit*



Base: All adults
2011: N = 1 062 900
2021: N = 985 200

***Figure 3.5** Percentage of adults with smoking habit*

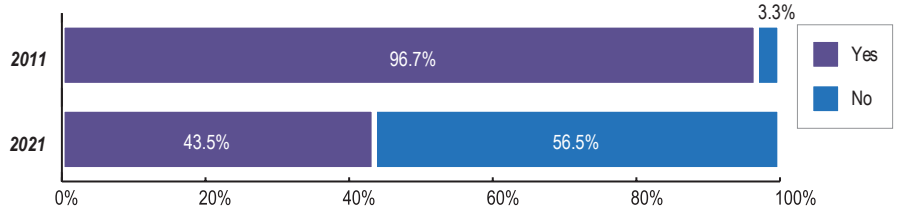


Base: All adults
2001: N = 1 354 700
2011: N = 1 062 900
2021: N = 1 010 700 (Population Health Survey 2020-2022 Data)*

Cleanliness of teeth

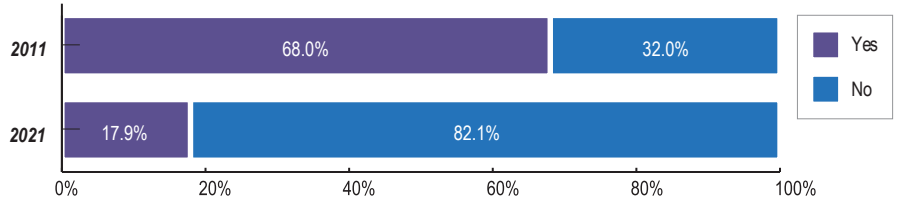
There was an improvement in the level of plaque control which was supported by a noticeable decline in the number of adult's teeth being covered by visible dental plaque and calculus (Figure 3.6 and 3.7).

***Figure 3.6** Percentage of adults having visible dental plaque on half or more of their teeth*



Base: All adults
2011: N = 1 062 900
2021: N = 985 200

***Figure 3.7** Percentage of adults having calculus on half or more of their teeth*

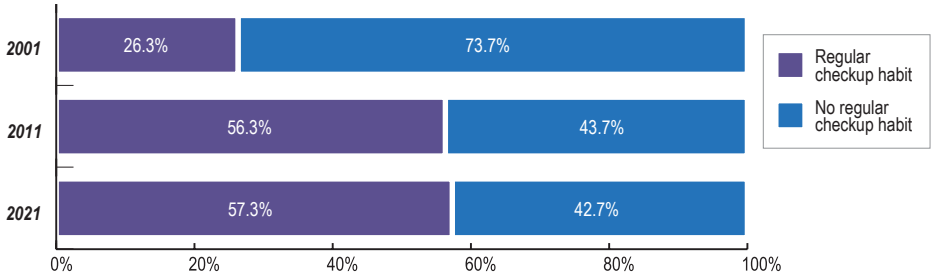


Base: All adults
2011: N = 1 062 900
2021: N = 985 200

Dental checkup habit

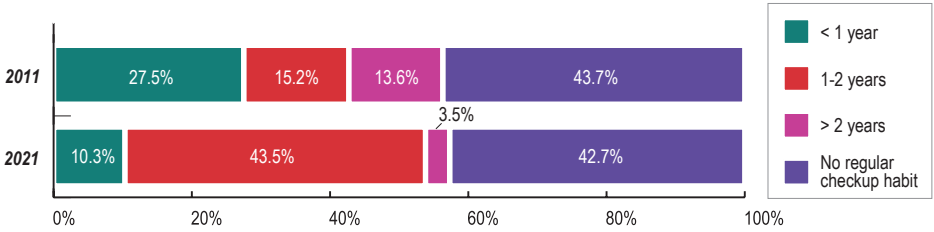
In 2021 survey, the proportion of adults with habit of seeking dental checkup for scaling or checkup remained similar with a decade ago (57.3% (564 400) in 2021, 56.3% (598 400) in 2011) (Figure 3.8). There was an extended interval between dental checkup when compared with 2011 (Figure 3.9).

***Figure 3.8** Percentage of adults according to the dental checkup habit (2001, 2011 and 2021)*



Base: All Adults
2001: N = 1 345 700
2011: N = 1 062 900
2021: N = 985 200

***Figure 3.9** Percentage of adults according to the dental checkup habit*



Base: All adults
2011: N = 1 062 900
2021: N = 985 200

Facilitators and barriers to interdental cleaning habit

- 'Removing food trapped between teeth' was the most common reason for adults to maintain their interdental cleaning habit, followed by 'teeth became cleaner after use'.
- Less than 6% of adults could relate their flossing or use of interdental brush habits with prevention of either tooth decay or gum disease.
- 'Lazy/trouble to use/ did not want to use' (34.8%) and 'Did not know how to use' (18.4%) were the two common reasons for adults not using dental floss
- 'No such need' (24.3%) was the most common reason for adults not using interdental brush

Reasons and beliefs behind regular dental checkup habit

- Adults with regular dental checkup habits were defined as individuals who made dental visits within two years' interval in the absence of any oral problem.
- Three-quarter (75.2%) of regular attenders stated that 'they will go for regular dental checkup in order to have early detection of tooth problems'.
- For adults with the habit of seeking regular dental checkup, two-third (68.1%, 360 700) stated that they had this habit because they wanted to go for scaling or dental checkup.
- 25.9% (137 400) of regular attenders went for prevention of dental problems based on the belief that prevention was better than cure.
- About 15% of adults attended regularly because they took full benefit from their entitlement to insurance plan / employment benefit.

Reasons and beliefs behind the irregular dental checkup habit

- Majority (56.9% (259 200) in 2021) of the irregular attenders felt that their teeth were good / had no pain or they had no need to have regular dental checkup, similar to their counterparts a decade ago (60.0% (365 200) in 2011).

- Around 50% of irregular attenders thought that 'practising good oral hygiene at home can replace regular scaling' (51.8%) and they also claimed that 'dare not visit a dentist because the total cost of dental treatments at the end is often unpredictable' (60.6%).

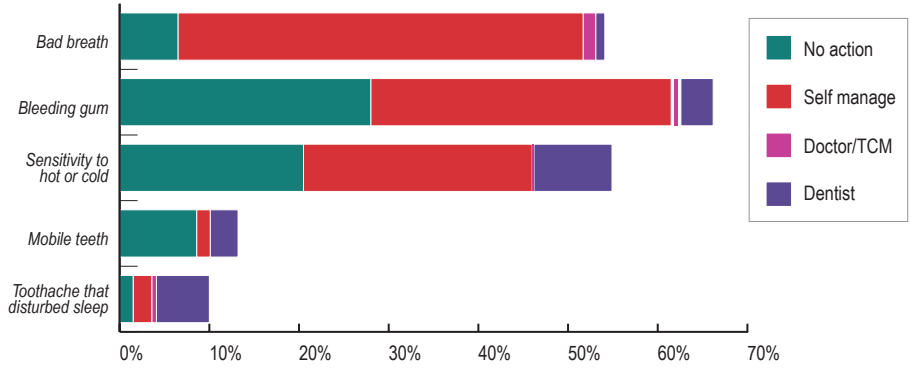
- A proportion of the irregular attenders claimed that they did think of going for regular checkup but had encountered problems.

- Among the barriers mentioned, no time (13.5%, 61 700) and charge was unaffordable / didn't want to spend money on checkup (7.3%, 33 300) were the two comparatively more frequently mentioned.

Action taken when experiencing oral symptom

When experiencing oral symptoms, majority of the affected adults either did not take any action or manage the oral symptoms by themselves rather than attending dental consultation, even for toothache that disturbed sleep (Figure 3.10).

***Figure 3.10** Proportion of adults according to the oral symptom experienced in the 12 months before the survey and the action taken in 2021*



Base: All adults
2021: N = 985 200
The bases for specified oral symptoms refer to adults who had the corresponding specified oral symptoms in the 12 months before the survey.
** TCM – Traditional Chinese medical practitioners*

Possible barriers to seeking professional dental care when experiencing oral symptom

- It was noted that even when experienced severe toothache that disturbed sleep, there was still 40.8% of adults did not attend dental consultation.
- A number of adults with oral symptoms knew that they needed to seek professional dental care but were hindered from doing so because of certain barriers.
- The most frequently reported barrier was ‘No time’ for all symptoms including mobile teeth and toothache that disturbed sleep which would likely affect their daily functions.

Summary and way forward

The oral health of the Hong Kong adult population has improved over the past decade, with less visible dental plaque, bleeding gums, and calculus in over half of their teeth. However, there are areas that require attention and behavioral modifications. Untreated root decay has doubled that of 2011. The proportion of adults with gum pockets has increased despite less visible plaque and less gum bleeding. Some adults believe they have good daily oral hygiene, but the presence of untreated tooth decay and gum pockets in the back teeth region suggests that current oral hygiene practices may not be effective. The use of professional dental care is also low, with less frequent checkup interval. Most adults still ignore or self-manage their perceived oral discomforts, which is unfavorable to timely management of dental diseases. The dental profession should address time constraints and perceived high cost of care as they were reported as reasons for not seeking dental care.

Despite daily toothbrushing, back teeth oral hygiene remains subpar. Proper daily oral hygiene requires professional instruction in cleaning aid selection and technique, especially in the back teeth region. Gum bleeding and pockets are common in this area. Dental checkups provide opportunities for professional instruction, risk assessment, and preventive dental treatment. Dentists can perform detailed examinations and special investigations for early identification and timely management of dental diseases. Citizens should manage their own oral health, and the dental profession should assist in improving the oral health of citizens through promotion, education, and addressing barriers from dental clinics.

SECTION 4

65 to 74-year old non-institutionalised older persons (NOP)

Tooth loss condition

The proportion of NOP who had lost all their teeth reduced markedly from 5.6% in 2011 to 0.9% in 2021 (Table 4.1). The mean number of teeth among NOP in 2021 (22.8) has further increased when compared with 2011 (19.3) and 2001 (17.0).

It was recognised by the World Health Organization that a functional and aesthetic dentition requires no less than 20 well distributed teeth. The proportion of NOP who had 20 teeth was assessed in this survey. In this survey, 77.4% of NOP had 20 or more teeth which were about 18 percentage points higher when compared with 2011 (59.5%). 66.7% of NOP had at least 10 occluding pairs (Table 4.2).

Table 4.1 ***Percentage of NOP according to the number of teeth in 2001, 2011 and 2021***

Tooth number	2001	2011	2021
	(N = 445 500)	(N = 450 800)	(N = 883 200)
Total tooth loss	8.6%	5.6%	0.9%
≥ 20 teeth left	49.7%	59.5%	77.4%

Base: All NOP

Table 4.2 ***Percentage of NOP with number of occluding pairs in 2021***

No. of occluding pairs*	Percentage
0 – 9 pairs	33.3%
≥ 10 pairs	66.7%

Base: All surveyed NOP
2021: N = 883 200
**Occluding pairs formed by natural tooth with natural tooth/fixed prosthesis are counted.*

Fewer NOP were found with any prosthesis (50.7% (447 700) in 2021, 63.2% (284 900) in 2011, 68.1% (303 400) in 2001). For those who had dental prostheses made, there was a change in the types of prosthesis used. There was a 4-fold increase in the proportion of them having dental implants (10.0% (88 100) in 2021, 2.5% (11 300) in 2011) accompanied with a major drop of NOP using removable and/ or full dentures to replace their missing teeth in 2021 (26.6% (234 900) in 2021, 46.7% (210 500) in 2011) (Table 4.3).

Table 4.3 ***Percentage of NOP with different types of dental prostheses in 2001, 2011 and 2021***

Type of dental prostheses	2001 (N = 445 500)	2011 (N = 450 800)	2021 (N = 883 200)
With any prostheses	68.1%	63.2%	50.7%
With dental bridges	30.2%	31.4%	32.1%
With removable partial dentures	33.6%	35.5%	22.8%
With full dentures	19.8%	11.2%	3.8%
With dental implants	*	2.5%	10.0%

Base: All NOP
** this parameter was not measured in 2001*

Level of tooth decay experience

The mean DMFT value among the NOP population was 13.5 which had further declined when compared with 2011 (16.2) and 2001 (17.6), mainly due to reduction in missing teeth (Table 4.4).

Table 4.4 ***Level of tooth decay experience as measured by the DMFT index among NOP in 2001, 2011 and 2021***

Tooth decay experience	2001 (N = 445 500)	2011 (N = 450 800)	2021 (N = 883 200)
Mean DMFT	17.6	16.2	13.5
Mean DT (Decayed)	1.3	1.3	1.2
Mean MT (Missing)	15.1	12.7	9.2
Mean FT (Filled)	1.2	2.3	3.1

Base: All NOP

The proportion of adults with tooth decay experience remained more or less the same over the years. Similar to 10 years ago, about one-half of NOP had untreated tooth decay (Table 4.5).

Table 4.5 ***Percentage of NOP with tooth decay experience in 2001, 2011 and 2021***

Tooth decay experience	2001 (N = 445 500)	2011 (N = 450 800)	2021 (N = 883 200)
DMFT	99.4%	99.3%	99.6%
DT (Decayed)	52.9%	47.8%	47.1%
MT (Missing)	98.1%	98.1%	97.8%
FT (Filled)	40.3%	59.5%	69.9%

Base: All NOP

The proportion of NOP with root surface decay experience was on an increasing trend (28.8% (253 900) in 2021, 24.6% (110 900) in 2011, 22.6% (110 700) in 2001). There was about 80% of root decay (23.3%/28.8%*100%) were left untreated (Table 4.6).

Table 4.6 ***Percentage of NOP with root surface decay experience in 2001, 2011 and 2021***

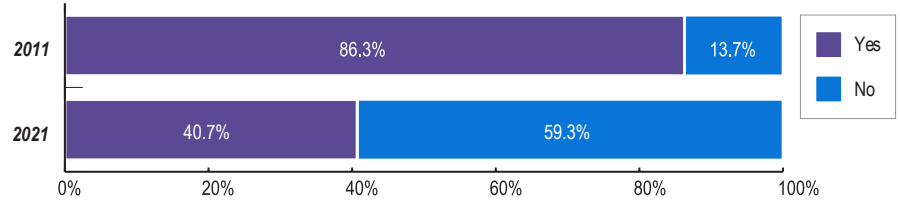
Root surface decay experience	2001 (N = 445 500)	2011 (N = 450 800)	2021 (N = 883 200)
DF-root	22.6%	24.6%	28.8%
D-root (Decayed)	21.5%	21.8%	23.3%
F-root (Filled)	3.1%	4.1%	8.4%

Base: All NOP

Gum condition

There were 40.7% (355 800) of NOP having half or more of their teeth with bleeding gums, which was significantly lower than NOP in 2011 (86.3%) (Figure 4.1). There was an increase by about 10% in the proportion of NOP with deeper gingival pockets of 4 mm or above (Table 4.7). It was also noted that 33.8% of upper molars and 42.3% of lower molars were already extracted in the NOP (Table 4.8).

Figure 4.1 ***Percentage of dentate NOP having half or more of the teeth with bleeding gums***



Base: Dentate NOP
2011: N = 386 200
2021: N = 874 900
(The same data was not available in 2001 for comparison)

Table 4.7 ***Percentage of dentate NOP according to the highest pocket depth in 2001, 2011 and 2021***

Highest pocket depth	2001 (N = 358 700)	2011 (N = 386 200)	2021# (N = 874 909)
0-3 mm (Not considered as pocket)	44.7%	40.8%	30.0%
4-5 mm (Shallow pocket)	44.3%	38.8%	44.1%
≥ 6 mm (Deep pocket)	11.0%	20.4%	25.8%
Total	100.0%	100.0%	100.0%

Base: All dentate NOP

 # The diagnostic methodology was extended to include all teeth in the mouth in 2021 instead of half mouth in 2011 and including only index teeth in 2001

Table 4.8 ***Mean percentage of teeth according to the pocket depth of NOP in 2021***

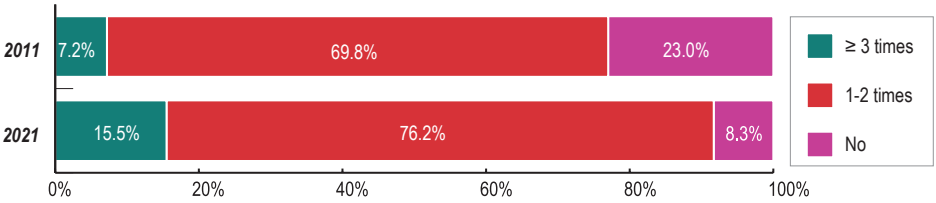
	Molars (back teeth)	Premolars	Incisors and canine
Shallow pockets (pocket depth 4-5 mm)			
Upper teeth	17.1%*	15.6%*	10.9%
Lower teeth	11.2%*	10.2%*	8.5%*
Deep pockets (pocket depth 6 mm+)			
Upper teeth	4.7%*	2.1%	2.2%**
Lower teeth	2.6%	2.1%	1.6%*
Missing			
Upper teeth	33.8%	23.8%	14.3%
Lower teeth	42.3%	17.6%	11.5%

Base: All dentate NOP
**bleeding on probing was detected in >70% of this teeth group*
***bleeding on probing was detected in >80% of this teeth group*

Oral health related behaviours

There was a surge in the proportion of NOP reported having snack or food consumption at least three times daily other than normal meals (15.5% (137 300) in 2021, 7.2% (32 500) in 2011) (Figure 4.2).

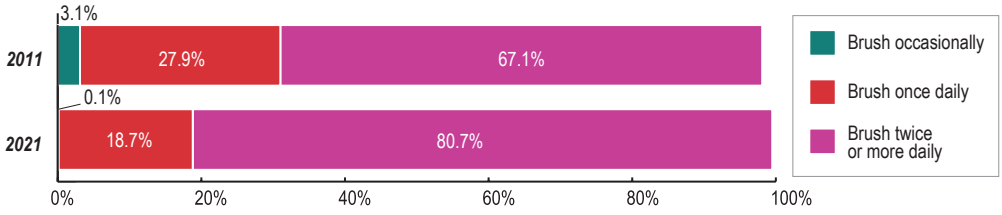
***Figure 4.2** Percentage of NOP according to daily frequency of snacking or food consumption other than normal meals*



Base: All NOP
2011: N = 450 800
2021: N = 883 200

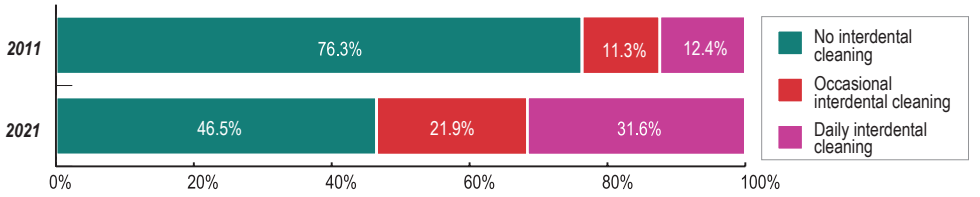
Almost all (99.4%, 869 000) of dentate NOP brushed their teeth every day. There is a significant increase of dentate NOP who brushed twice or more daily in 2021 (80.7%, 705 800) when compared with 2011 (67.1%, 285 400) (Figure 4.3). More than half of dentate individuals reported having the habit of interdental cleaning, with about one-third of them doing it on a daily basis. (Figure 4.4). Proportion of NOP with smoking habit were found reducing over the past 20 years (Figure 4.5).

***Figure 4.3** Percentage of dentate NOP according to toothbrushing habit*



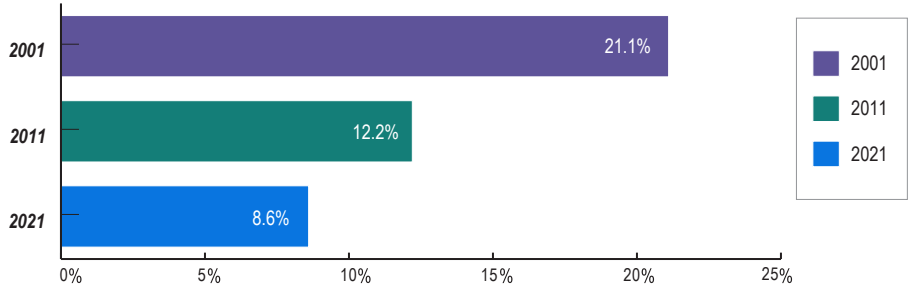
Base: Dentate NOP
2011: N = 425 500
2021: N = 874 900

***Figure 4.4** Percentage of dentate NOP according to the interdental cleaning habit*



Base: Dentate NOP
2011: N = 425 500
2021: N = 874 900

***Figure 4.5** Percentage of NOP with smoking habit in 2001, 2011 and 2021*

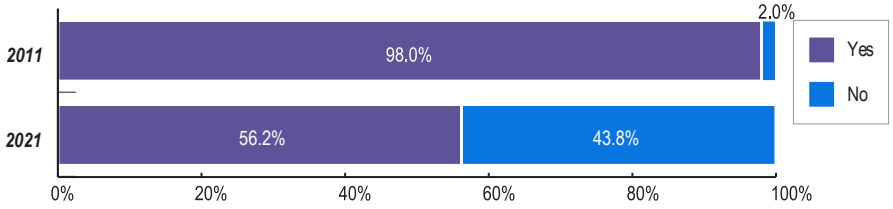


Base: All NOP
2001: N = 445 500
2011: N = 450 800
2021: N = 837 900 (Population Health Survey 2020-2022 Data)

Cleanliness of teeth

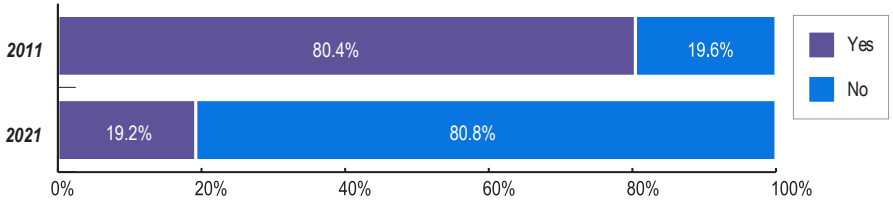
There was an improvement in the level of plaque control which was supported by a noticeable decline in the number of NOPs teeth being covered by visible dental plaque and calculus (Figure 4.6 and 4.7).

Figure 4.6 ***Percentage of dentate NOP having visible dental plaque on half or more of their teeth***



Based: Dentate NOP (represented by the NOP with gum examination performed)
2011: N = 386 200
2021: N = 874 900

Figure 4.7 ***Percentage of dentate NOP having calculus on half or more of their teeth***

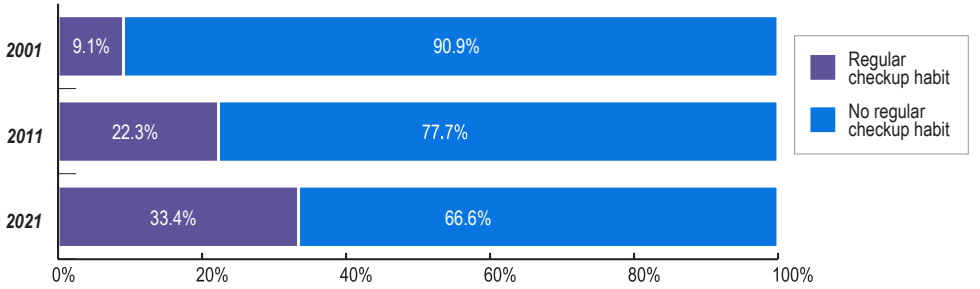


Based: Dentate NOP (represented by the NOP with gum examination performed)
2011: N = 386 200
2021: N = 874 900

Dental checkup habit

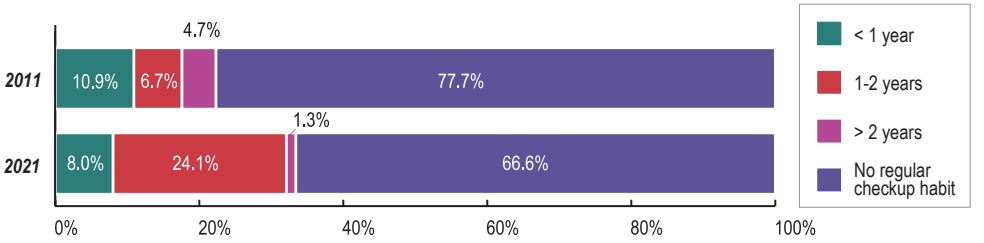
The proportion of NOP with regular dental checkup habit had continued to increase over the past three decades, from under 10% in 2001 to over 30% in 2021 (Figure 4.8). There was an extended interval between dental checkup when compared with 2011 (Figure 4.9).

***Figure 4.8** Percentage of NOP according to the dental checkup habit (2001, 2011 and 2021)*



Base: All NOP
2001: N = 445 500
2011: N = 450 800
2021: N = 883 200

***Figure 4.9** Percentage of NOP according to the dental checkup habit*



Base: All NOP
2011: N = 450 800
2021: N = 883 200

Facilitators and barriers to interdental cleaning habit

- 'Removing food trapped between teeth' was the most common reason for NOP to maintain their interdental cleaning habit, followed by 'teeth became cleaner after use'.
- Only about 1-3% of NOP could relate their flossing or use of interdental brush habits with prevention of either tooth decay or gum disease.
- 'Did not know how to use' (30.8%) and 'Lazy/trouble to use/ did not want to use' (22.7%) were two most common reasons for NOP not using dental floss.
- 'Did not know what it is' (25.8%) and 'No such need' (25.0%) were the common reasons for NOP not using interdental brush.

Reasons and beliefs behind regular dental checkup habit

- NOP with regular dental checkup habits were defined as individuals who made dental visits within two years' interval in the absence of any oral problem.
- 72.7% of regular attenders stated that 'they will go for regular dental checkup in order to have early detection of tooth problems'.
- For NOP with the habit of seeking regular dental checkup, 61.5% stated that they had this habit because they wanted to go for scaling or dental checkup.
- 21.1% of regular attenders went for prevention of dental problems based on the belief that prevention was better than cure.
- About 13.9% of NOP attended regularly because they took full benefit from their entitlement to insurance plan / employment benefit.

Reasons and beliefs behind the irregular dental checkup habit

- Majority (61.0% in 2021) of the irregular attenders felt that their teeth were good / had no pain or they had no need to have regular dental checkup, similar to their counterparts a decade ago.

- Around 64% of irregular attenders thought that 'practising good oral hygiene at home can replace regular scaling' and they also claimed that 'dare not visit a dentist because the total cost of dental treatments at the end is often unpredictable' (58.3%).

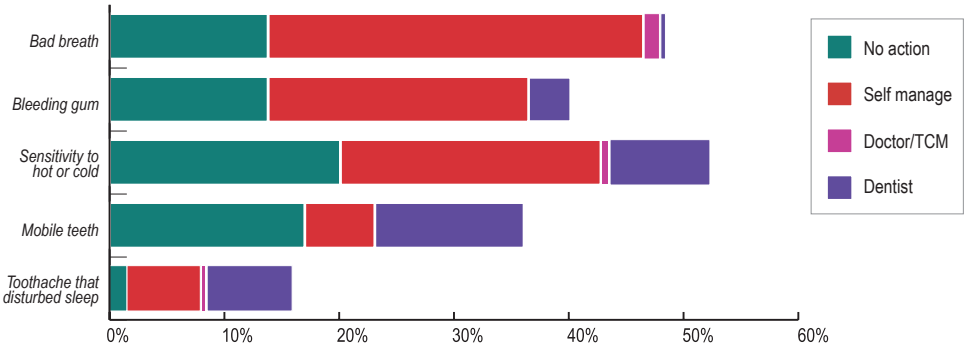
- A proportion of the irregular attenders claimed that they did think of going for regular checkup but had encountered problems.

- Among the barriers mentioned, charge was unaffordable / didn't want to spend money on checkup (12.7%) were the one frequently mentioned.

Action taken when experiencing oral symptom

When experiencing oral symptoms, majority of the affected NOP either did not take any action or manage the oral symptoms by themselves rather than attending dental consultation, even for toothache that disturbed sleep (Figure 4.10).

***Figure 4.10** Percentage of NOP according to the oral symptom experienced in the 12 months before the survey and the action taken in 2021*



Base: All NOP
2021: N = 883 200
The bases for specified oral symptoms refer to NOP who had the corresponding specified oral symptoms in the 12 months before the survey.
** TCM – Traditional Chinese medical practitioners*

Possible barriers to seeking professional dental care when experiencing oral symptom

- It was noted that even when experienced severe toothache that disturbed sleep, there was still considerable proportion of NOP did not attend dental consultation.
- A number of NOP with oral symptoms knew that they needed to seek professional dental care but were hindered from doing so because of certain barriers.
- The main reported barriers were unaffordable charge and reluctance to spend money on dental care.

Impact of oral health on the quality of life

- Compared with 2001, more NOP reported they had to interrupt meals because of problems with their teeth, mouth or dentures. Psychologically, more NOP worried, a bit embarrassed by dental problems and upset because of problems with their teeth, mouth or dentures.

Summary and way forward

The survey found that NOP have more teeth and cleaner teeth, with less plaque and calculus. However, gum condition is still worth attention, and more NOP having untreated decay on root surfaces. One-third of NOP have fewer than 10 occluding pairs of teeth, with missing back teeth being mainly molars. Some NOP do not attend regular dental checkups due to belief in good home care is sufficient, but this belief is inaccurate. Moreover, some NOP do not attend regular dental checkups due to self-perceived good oral health, leading to delayed identification of dental problems. The oral health care system may also hinder utilisation by NOP, with cost being a concern. The dental profession should address the perceived high cost of care as a reason for not seeking dental care.

Maintaining good oral health is crucial for overall health of elders. However, missing teeth in older adults are alarming, with 30-40% of molars missing when they reach the stage of NOP. Primary dental care, focusing on prevention, should be commenced early and regularly throughout an individual's life to prevent future tooth loss and minimize the need for costly curative treatments. Dental professionals should also provide professional self-care instructions, risk assessments, lifestyle advice, and preventive dental treatments. To improve overall health management, NOP and private dental professionals may consider joining the Electronic Health Record Sharing System.

SECTION 5

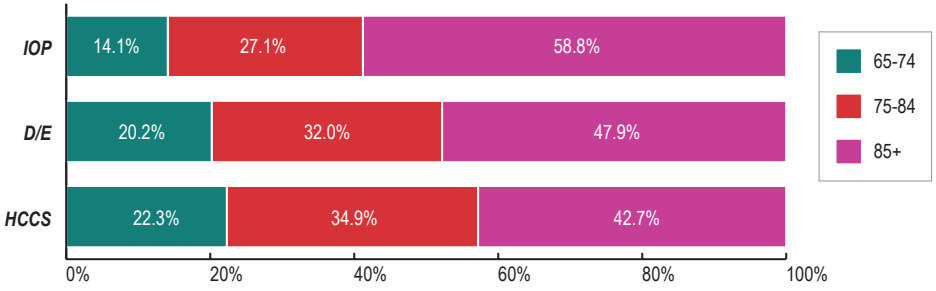
Aged 65 and above users of Social Welfare Department Long-term Care Services

The three categories of Long-term Care (LTC) services users that had been covered in this survey were listed as following:

1. Users of Residential Care Services (IOP)
2. Users of Day Care Centres or Units for the Elderly (DE)
3. Users of Enhanced Home & Community Care Services and Integrated Home Care Services (Covered Frail Cases only) (HCCS).

For the age distribution of all three categories of LTC users (Figure 5.1), the youngest age group (65-74) constituted the minority and the majority was aged 85 and above. The IOP had the highest proportion of users aged 85 and above (58.8%) compared to DE users (47.9%) and HCCS users (42.7%).

***Figure 5.1** Distribution of LTC users according to age*

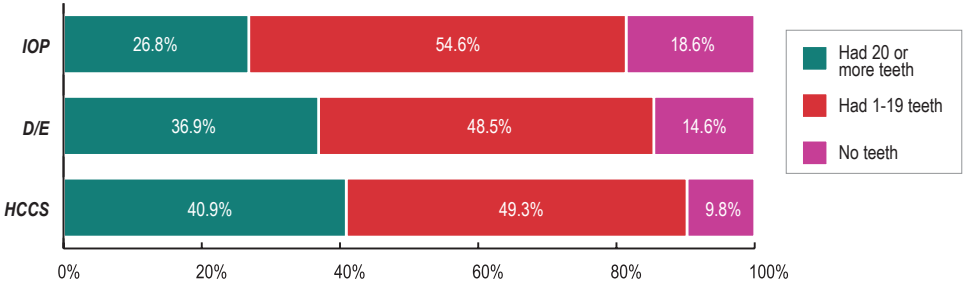


Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

Oral status – number of remaining teeth

The degree of tooth loss among LTC users was summarised in Figure 5.2. IOP had the highest degree of tooth loss with 12.1 remaining teeth on average, and had the highest proportion with no remaining teeth (18.6%). HCCS users had 14.9 remaining teeth on average and 9.8% had no remaining teeth. DE users were in between with 14.0 remaining teeth on average and had 14.6% had no remaining teeth. Overall, there were lower proportion of LTC users with complete tooth loss and there were more remaining teeth compared to 2011.

Figure 5.2 Distribution of LTC users according to the number of remaining teeth

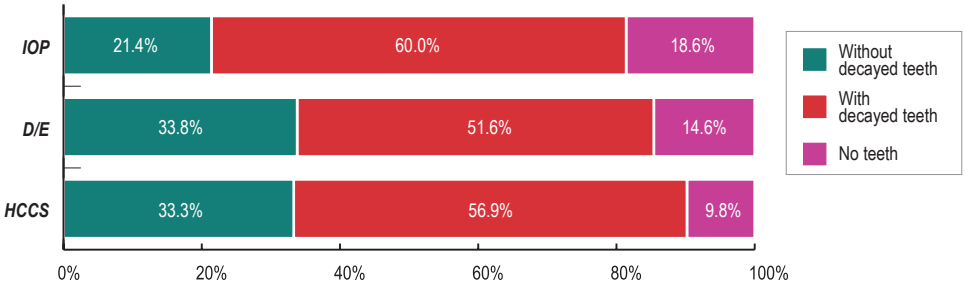


Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

Status of remaining teeth – tooth decay

Untreated decayed teeth were found in more than half of the LTC users with at least one tooth remaining. 73.7% of dentate IOP (60%/81.4%), 60.4% of dentate DE users (51.6%/85.4%) and 63.1% of dentate HCCS users (56.9%/90.2%) had at least one decayed teeth (Figure 5.3). The mean number of teeth with different tooth decay experience among LTC users was shown in Table 5.1.

Figure 5.3 ***Proportions of LTC users affected by untreated tooth decay***



Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

Table 5.1 ***Tooth decay experience among LTC users***

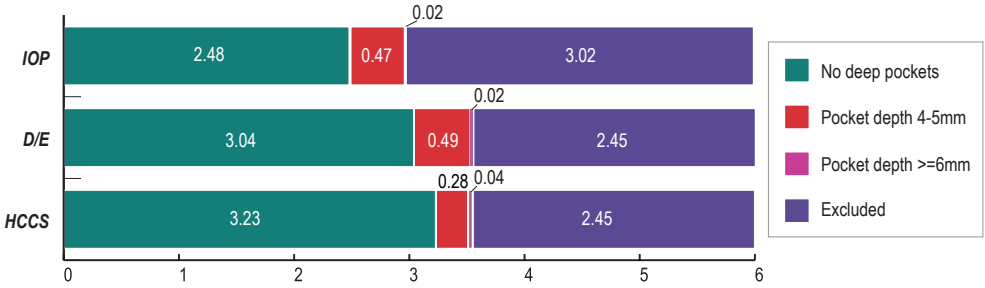
LTC	Tooth decay experience	Remaining teeth	DT (Decayed)	FT (Filled)
IOP	Mean	12.1	2.7	1.3
	% affected	81.4%	60.0%	39.2%
DE	Mean	14.0	2.0	1.7
	% affected	85.4%	51.6%	48.2%
HCCS	Mean	14.9	2.2	1.8
	% affected	90.2%	56.9%	53.4%

Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

Status of remaining teeth – oral hygiene and gum condition

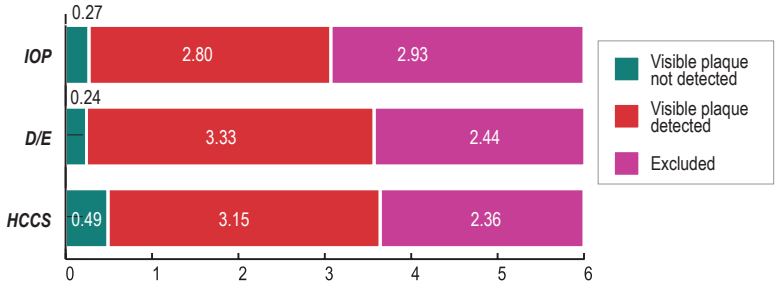
Deep gum pockets were not common among LTC users (Figure 5.4). However, cleanliness of teeth was a concern as visible dental plaque was found in most of the sextants[1] in vast majority of the LTC users with remaining teeth (Figure 5.5).

Figure 5.4 ***Mean number of sextants of LTC users with presence of gum pocket***



Base: All LTC users with remaining teeth and received gum examination
IOP: (N =46 300)
DE users:(N =5 910)
HCCS users: (N = 14 200)

Figure 5.5 ***Mean number of sextants of LTC users with presence of visible plaque***



Base: All LTC users with remaining teeth and received gum examination
IOP: (N =46 300)
DE users:(N =5 910)
HCCS users: (N = 14 200)

1 In the section about oral hygiene and gum condition, the unit of measurement is 'sextant'. A person has 6 sextants:

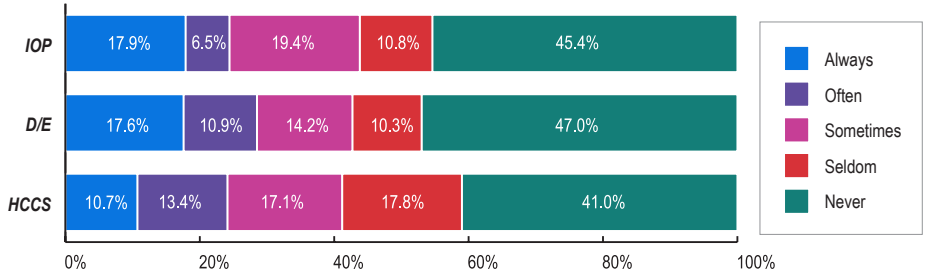
1. Upper right back teeth (3 molars and 2 premolars)
2. Upper front teeth (4 incisors and 2 canines)
3. Upper left back teeth (3 molars and 2 premolars)
4. Lower right back teeth (3 molars and 2 premolars)
5. Lower front teeth (4 incisors and 2 canines)
6. Lower left back teeth (3 molars and 2 premolars)

Positive findings for any one tooth within a sextant is regarded as positive finding for that sextant. If a sextant has only 1 tooth or no teeth left, the sextant is reported as 'excluded'. LTC users who are not suitable for receiving gum examination due to medical reasons or having no teeth are excluded. Therefore, the result in this section can reflect to 46 300 IOP, 5 910 DE users and 14 200 HCCS users.

Impact on daily life due to oral condition

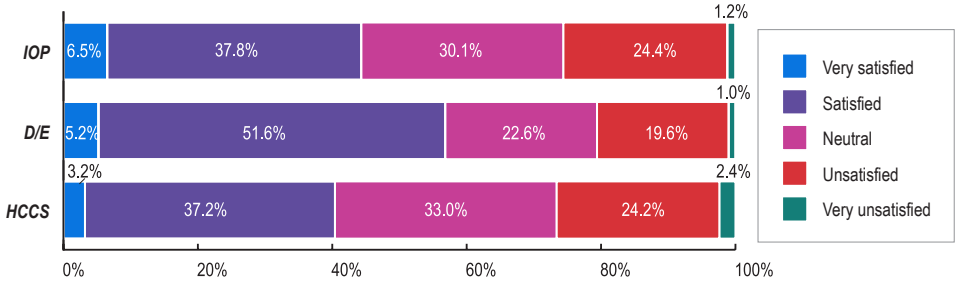
More than half of the three groups of LTC users reported the need to avoid or being unable to choose certain food in the past year (Figure 5.6) and almost all LTC users were not very satisfied with the appearance of their teeth (Figure 5.7).

Figure 5.6 ***Impact of oral condition – limitation of food choices***



Base: All LTC users who could complete questionnaires
IOP: (N = 45 500)
DE users:(N = 6 340)
HCCS users: (N = 15 000)

Figure 5.7 ***Impact of oral condition – satisfaction to their appearance***

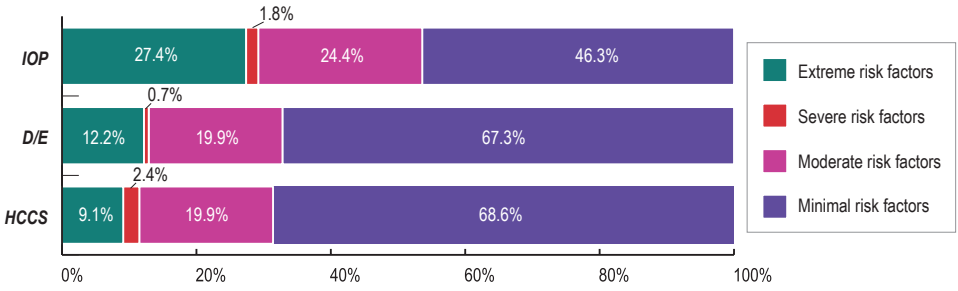


Base: All LTC users who could complete questionnaires
IOP: (N = 45 500)
DE users:(N = 6 340)
HCCS users: (N = 15 000)

Oral risk related to tooth decay and periodontal disease

Oral risk is an indicator for the chance in developing dental disease in future. The risk factors might be contributed by their risk behaviour toward oral health, for example snacking habit and smoking habit, which usually are modifiable. Around one-fourth of IOP (29.2%, 11 200) was categorised as having extreme[2] and severe oral risk, followed by (12.9%, 710) of DE users and (11.5%, 1 560) for HCCS users (Figure 5.8). LTC users exhibited different level of oral risk especially a number of LTC users showed compromised ability to perform daily oral cleaning. The involvement of carers is necessary for this group of LTC users to maintain good oral hygiene and denture hygiene. It is essential to implement behavioural interventions to tackle those modifiable oral risk, such as comprehensive oral care training to carers, in order to promote sustainable and healthier oral habits among LTC users.

***Figure 5.8** Impact of oral condition – oral risk classified by mild to severe level*



Base: All LTC users who could complete questionnaires and had at least one tooth
IOP: (N = 38 100)
DE users:(N = 5 510)
HCCS users: (N = 13 500)

2 'Extreme oral risk' referred to the LTC users who do not perform regular oral cleaning by themselves or their carers; with frequent snacking and current having a habit of smoking; and those who had unclear status of tooth brushing frequency, brushing assistance and smoking habit. 'Severe oral risk' referred to the LTC users who had 3 times per day of snacking or more, did not brush their teeth, brush their teeth irregularly or need assistance for toothbrushing. 'Moderate oral risk' referred to the LTC users who brush their teeth once daily and did not fall into previous categories, and 'minimal oral risk' referred to the LTC users who brushed their teeth twice daily and did not fall into previous categories.

The assessed and realistic dental treatment need of LTC users

According to the recommendations from the World Health Organization, tooth-based treatment should be planned according to the crown and root status, the periodontal status, and mobility of the tooth. The assessed treatment need was presented to the individual and the individual's acceptance of treatment was recorded as the realistic treatment need. The distribution of LTC users according to their assessed treatment need and their treatment acceptance was summarised in Table 5.2 and 5.3.

Table 5.2 ***Percentage of LTC users in 2021 according to the level of assessed treatment need***

	IOP (N=60 000)	DE (N=7300)	HCCS (N=17 700)
No assessed need	14.6%	12.6%	6.8%
Had assessed need	85.4%	87.4%	93.2%

Table 5.3 ***Percentage of LTC users in 2021 according to the level of realistic treatment need (acceptance of assessed treatment)***

	IOP (N=60 000)	DE (N=7300)	HCCS (N=17 700)
No assessed need	14.6%	12.6%	6.8%
Accepted assessed need	50.5%	60.5%	76.1%
Rejected assessed need	18.7%	16.1%	11.1%
Unable to express accpetance	16.2%	10.8%	6.0%

While the acceptance of dental treatment was found to be low among LTC users in this round of Oral Health Survey, the acceptance level was already much higher than that found in Oral Health Survey 2011. Older persons born in different generations experienced different social and economic environment and might have different perceptions towards oral health, thus their expectation and demands in oral health and dental care might also be different. This may be an indication of increasing expectations in oral health and higher demands for dental care over the past 10 years. Also, the differences in self-perception of oral health and reported oral problem between HCCS users, IOP and DE users may contribute to their difference in level of acceptance of dental treatments.

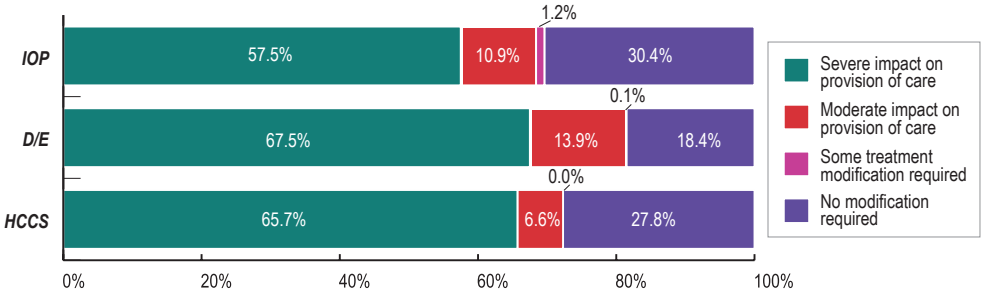
It is worth to note that some LTC users were unable to express their acceptance, ranging from 6.0% of HCCS users to 16.2% of IOP. These LTC users may also had difficulties in giving consent in actual provision of dental services.

The complexities involved in providing dental services to LTC users

LTC users may present challenges to dentists providing dental care due to their medical, physical, cognitive and social status. To systematically assess the complexities involved in providing dental services to LTC users, this survey has set the assessment criteria with reference to an evaluative instrument adapted from an internationally recognised tool[3]. This instrument measures the barriers that dentists face while attending to persons requiring special dental care.

Medical condition of the LTC users reflects if modification is required for provision of dental care due to the patient's complex medical conditions which multi-disciplinary approach might be required. The distribution of impact on provision of dental care due to medical status were summarised in Figure 5.9. Over half of the LTC users in all 3 groups had been categorised as having severe impact of medical condition on provision of dental care. This finding suggested that the majority had multiple medical problems, or with specific medical condition, for example, cancer or stroke, that could greatly interfere with the delivery of their necessary dental care.

Figure 5.9 Distribution of LTC users according to impact on provision of dental care due to medical status

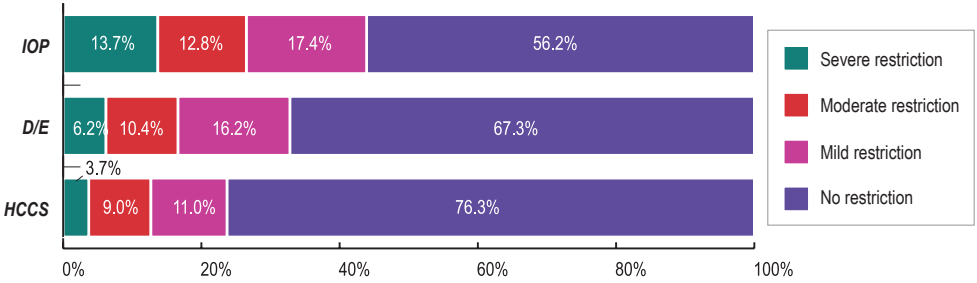


Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

3 'Case Mix 2019' developed by the British Dental Association (https://www.bda.org/about-us/our-structure/representative-committees/community-and-public-dental-services/case-mix/)

Communicative capacity reflects the issues of communication between the dental team and the LTC users and/or carers to determine if any restriction in communication and if extra aids are required. Restriction in communication was more common among IOP, with 13.7% of them had severe restriction in communication (Figure 5.10). It indicated that they had only limited or no ability to communicate and their family and carers were not readily available, or third-party interpreter was required to facilitate the communication. More time and extra resource were required in provision of care to them.

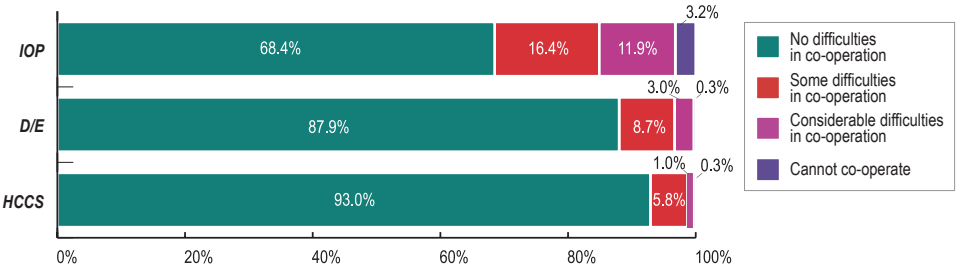
***Figure 5.10** Distribution of LTC users according to barriers on communication assessed by the examining dentists*



Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

Willingness to co-operate reflects the difficulties the dental team faces when delivering dental care to determine what behavioural management technique (including sedation and general anaesthesia) is required to enable the person to accept the treatment. Cooperation barrier was also more common among IOP (Figure 5.11). For severely uncooperative cases, they require dentists to have special training to assess the medical risk and to coordinate with medical team for provision of dental treatments under such modalities. Extra facilities and hospital operating theatre are often required to accommodate such barrier.

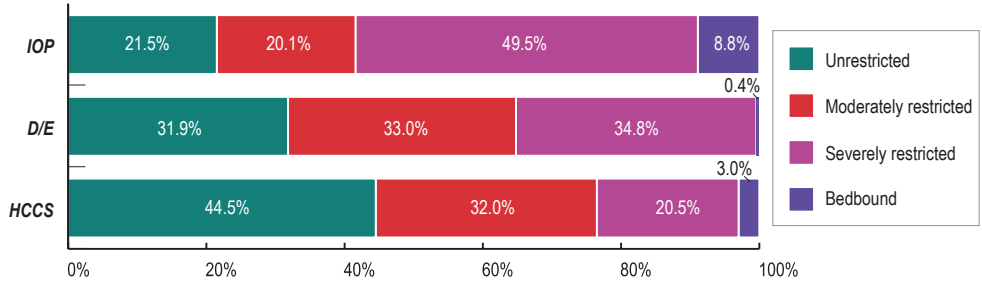
Figure 5.11 ***Distribution of LTC users according to cooperativeness on cooperation assessed by the examining dentists***



Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

Accessibility of dental care services reflects difficulties or barriers the LTC users face during the complete course of dental care. Access barrier to dental care was common among all LTC users (Figure 5.12). 78.5% of IOP, 68.1% of DE users and 55.5% of HCCS users required escort to access the dental clinic. 8.8% of IOP and 3.0% of HCCS users were bedbound, which required outreach dental service to provide regular on-site dental service. However if more complicated dental treatments had to be provided, additional transportation arrangement was necessary to transfer them to the dental clinic.

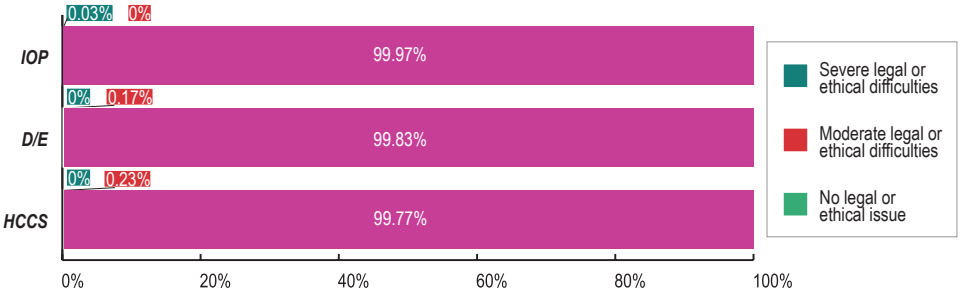
Figure 5.12 ***Distribution of LTC users according to barriers on physical access assessed by the examining dentists***



Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

Legal and ethical constraints identify the difficulties which the dental team might face when obtaining consent with the LTC users or the carers of the users, including the situations when the LTC user concerned is mentally incapacitated. Only a small proportion of LTC users was found with uncertain capacity (Figure 5.13). In this survey, consent had been obtained from all subjects and their family members as pre-requisite. The finding indicated that there were no subject with severe legal or ethical difficulties would underestimate the proportion of such LTC users in the population. For individuals with severe legal or ethical difficulties, the best interest decision for dental treatment would require second doctor's opinion or guardianship board's assistance in accordance to the Mental Health Ordinance (Cap. 136).

Figure 5.13 Distribution of LTC users according to legal/ethical barrier assessed by the examining dentists



Base: All LTC users
IOP: (N = 60 000)
DE users: (N = 7 300)
HCCS users: (N = 17 700)

Summary and way forward

Findings from this Oral Health Survey revealed that both the number of LTC users and the proportion of the older sub-groups among LTC users in Hong Kong population had increased. The above facts accompanied with that more natural teeth were retained but cleanliness of teeth and denture were both problematic. Tooth decay affecting majority of those with teeth remaining while gum pockets were relatively less common. Emphasis and resources should be put into prevention in this population prior to the deterioration of their oral health due to loss of self-care ability and accelerating oral risk, at a stage before the use of long-term care service. Cleanliness of teeth was a concern as visible plaque and calculus was found in vast majority of the LTC users with remaining teeth, which indicated inadequate daily oral hygiene care and lack of professional cleaning. The importance of daily oral care must be promoted not only to the LTC users but also to people involved in the care of LTC users. In parallel, continuous professional dental care should be available and accessible no matter the LTC users are resided in institutions or in community.

Oral discomfort and negative impacts were perceived by some LTC users. Acceptance of dental treatment was still low, but already much higher than in Oral Health Survey 2011. During clinical examinations, dentists encountered varying degrees of difficulty in both assessing and planning treatment for individuals across the different LTC categories. It would be challenging for dentists to address the treatment needs of LTC users as there were large proportion of LTC users faces non-modifiable barriers, including medical comorbidities, limited access to dental care, and challenges with communication and cooperation, which exacerbated the complexity of dental management. These barriers exacerbated the complexity of dental management and required dentists with additional training, specialised additional facilities or special arrangements in provision of dental care. Cases with complex medical conditions and with cooperation problem often require medical input (e.g., require modification of medication or blood check before treatment) for dental treatment planning and require dental treatments to be performed under hospital setting. Training for dental profession on management of patients with needs in special care dental service, and availability of hospital services and facilities including sedation and hospital operating theatre are essential to address the dental needs of this vulnerable population. To maintain the oral health and sustain the result of dental treatment for LTC users, a holistic approach with considerations on their medical, dental, and social challenges should be adapted. Cross-disciplinary collaboration with the social services, medical practitioners, staff from LTC institutions, relatives and carers of the LTC users is required to cope with the raising dental need of this population. Coordinated efforts from different levels are crucial to enabling the LTC users to receive a comprehensive dental care ranged from preventive to curative treatment that is on par with the general population.

SECTION 6

Overview

'The World Health Assembly urged member states to reorient the traditional curative approach, which is basically pathogenic, and move towards a preventive promotional approach with risk identification for timel , comprehensive and inclusive care…'

(World Health Assembly Resolution 74.5, 2021)

Heading towards the same direction, the Government of Hong Kong Special Administrative Region (the Government) established the Working Group on Oral Health and Dental Care (Working Group) in December 2022 to review the existing dental care services and advise the Government on the long-term strategy for oral health and dental care, as well as matters including enhancement of the scope and mode of the services. It was established that the goal of primary dental care is to enhance the oral health of the community through retention of natural teeth.

Over the years, the general public has been focusing on curative dental services such as dental fillings, extraction and the prosthetic replacement of missing teeth in the demand for oral health care. However, the Working Group acknowledged that tooth loss should be tackled 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 Chapter 2) and use preventive dental services such as topical fluoride or fissure sealant.

The strategies of prevention, early identification and timely intervention of chronic diseases promulgated in the Primary Healthcare Blueprint shall be applied in the development of primary dental services. The change in the mindset of the public to support these initiatives is crucial for their effectiveness.

The Interim Report of the Working Group stated that tooth decay and gum diseases are the major dental public health threats to be tackled in Hong Kong. The findings of OHS 2021 substantiate this belief as untreated tooth decay was found in 39% of 5-year old children, 32% of adults and 47% of NOP. Gum pockets were also found in 57% of adults and 70% of NOP. Much work needs to be done to prevent these levels of dental diseases from occurring again in future.

Maintaining personal daily oral hygiene habit and adopting a lifestyle conducive to oral health are the keys to promoting oral health at the individual level. The OHS 2021 found that the reported oral hygiene practices had improved, but this may give a false sense of security to the public. The results of the OHS 2001, 2011 and 2021 all indicated that the habit of regular dental check-ups was not common in all the target age groups. Possibly due to the lack of personalised instruction provided by a dental professional, the reported oral hygiene practices had left the back teeth inadequately cleaned with high risk of developing further dental diseases. The results of OHS 2021 support and reinforce the need to develop primary dental services appropriately for different age groups in order to cope with lifestyle change among the citizens.

The periodic assessment of oral health risks should be an integral part of the primary dental services to be developed. Oral health risks are usually elevated when a person suffers from a medical condition, due to the medical condition per se or due to the side effects of medical treatment. Early initiation and sustained preventive dental care in parallel with medical treatment is necessary to reduce the high level of dental diseases observed among the long-term care service users seen in OHS 2021.

The vision of the Global Strategy on Oral Health adopted in May 2022 at the 75th World Health Assembly (A75/10 Add.1 and WHA75(11)) is universal oral health coverage for all individuals and communities by 2030, enabling them to enjoy the highest attainable state of oral health and contributing to healthy and active lives. Shifting the focus of both the oral healthcare system and people's mindset from curative-oriented to preventive-oriented to increase the likelihood of retaining natural teeth should be the priority of public investment.

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