HKRF | Hong Kong Reference Framework

Life Course Preventive Care in Primary Healthcare

First Edition 2023

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Content

Preface to the First Edition

Primary healthcare professionals play an important role in offering first-contact, community-based care for the general population in a comprehensive, holistic manner. Their healthcare services cover preventive, diagnostic, and curative care at different stages of people's life. This life course approach could enhance people's well-being at all ages by addressing their specific needs. As highlighted by the World Health Organization, this approach may ensure people's access to healthcare services and safeguard their human right to health throughout their life journey.[1] This also synergises with the United Nation's Sustainable Development Goal 3 (SDG 3), namely "ensuring healthy lives and promoting well-being for all at all ages".[2]

It is increasingly recognized that a life course approach could optimize health trajectories by bridging healthy development in early life stages with better health in middle and older ages.[3] An accumulating body of evidence has demonstrated that adopting a life course approach could effectively reduce the risk and burden of common non-communicable diseases (NCDs), including cancer, cardiovascular diseases, and diabetes. A systematic review from the WHO showed that people's propensity to develop NCDs and obesity could be affected during fetal development and infancy.[4] For instance, exclusive breastfeeding for the first six months of life is associated with higher intelligence in childhood, lower likelihood of being overweight or obese, and a reduced risk of incident diabetes.[5] Another example is screening for high blood pressure in adults aged 18 years or older, which could substantially reduce the incidence of cardiovascular events.[6] Similarly encouraging evidence on the benefits of early preventive care has been found for other conditions, such as health assessment for metabolic diseases, adoption of healthy lifestyle habits, cancer screening, and immunisation.

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[1] World Health Organization. Life Course. Available at: https://www.who.int/our-work/life-course. Accessed on August 21, 2023.

[2] United Nations. Available at: https://sdgs.un.org/goals/goal3 .Accessed on August 21, 2023.

[3] World Health Organization. Creating healthy life trajectories: universal health coverage and a life course approach. https://cdn.who.int/media/docs/default-source/universal-health-coverage/who-uhl-technical-brief-template---uhl-life-course.pdf. Accessed on August 21, 2023.

[4] World Health Organization. Good maternal nutrition the best start in life. 2016. http://www.euro.who.int/en/health-topics/disease-prevention/nutrition/publications/2016/good-maternal-nutrition.-the-best-start-in-life-2016. Accessed on August 21, 2023.

[5] World Health Organization. Breastfeeding. Available at: https://www.who.int/health-topics/breastfeeding#tab=tab_1. Accessed on August 21, 2023.

[6] U.S. Preventive Services Task Force. Screening for High Blood Pressure in Adults: Recommendation Statement. Am Fam Physician. 2016;93(4):300-302

The Expert Panel on Reference Frameworks has produced this Reference Framework for Life Course Preventive Care. It introduces life course approach as a holistic public health strategy to enhance primary care; provides preventive interventions and implementation details across people's lifespan; and highlighted some of the government subsidised services and programmes. It promotes the formulation of healthcare plans for the general public at different stages of life, including that for children, men, and women. The recommendations in the reference framework represent effective, practical, and user-friendly clinical practice guides for use in various primary care settings. Apart from offering a common reference to guide and coordinate life course healthcare to people from different healthcare settings in Hong Kong, this Framework also represents an important blueprint to empowering Family Doctors to translate recommendations to clinical practice. In order to implement evidence-based healthcare, the Expert Panel is reviewing and updating this Framework on a regular basis based on continuous scientific evaluation of high quality research.

Family doctors are in the most privileged position to enhance preventive and curative care, both in the community and clinic settings. It is hoped that this important document will meet with support from Family Doctors and other healthcare stakeholders so as to achieve optimal patient care and improvements in population health.

Professor Martin WONG
Convenor
Expert Panel on Reference Framework

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Key to Evidence statements and Grades of Recommendations^

Levels of Evidence

1++	High quality meta-analyses, systematic reviews of randomised clinical trials (RCTs), or RCTs with a very low risk of bias
1+	Well conducted meta-analysis, systematic reviews of RCTs, or RCTs with a low risk of bias
1-	Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias
2++	High quality systematic reviews of case-control or cohort studies High quality case-control or cohort studies with a very low risk of confounding, bias, or chance and a high probability that the relationship is causal
2+	Well conducted case control or cohort studies with a low risk of confounding, bias, or chance and a moderate probability that the relationship is causal
2-	Case control or cohort studies with a high risk of confounding, bias, or chance and a significant risk that the relationship is not causal
3	Non-analytic studies, e.g. case reports, case series
4	Expert opinion

Grades of Recommendations

A	At least one meta-analysis, systematic review, or RCT rated as 1++, and directly applicable to the target population; or A systematic review of RCTs or a body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results
B	A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 1++ or 1
C	A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 2++
D	Evidence level 3 or 4; or Extrapolated evidence from studies rated as 2+

^ Scottish Intercollegiate Guidelines Network (SIGN) classification.

Statement of Intent

The framework is constructed from global evidence of best practice. As with all guidance it aims to support decision making, recognising that all individuals and patients are unique and have their own needs. The Expert Panel endeavours to provide accurate and up-to-date information. The frameworks provide support for decision making and as such are not mandatory. They should not be construed as within any legal framework, but rather as guidance for professional practice. Standards of care for individual patients are determined on the basis of all the facts and circumstances involved in a particular case. They are subject to change as scientific knowledge and technology advances and patterns of care evolve. Management of diseases must be made by the appropriate primary care practitioners responsible for clinical decisions regarding a particular treatment procedure or care plan after discussion with the patient.

Chapter 1. Introduction

The Primary Healthcare Blueprint, unveiled by the Government of the Hong Kong Special Administrative Region in December, 2022, is a comprehensive plan that aims at addressing the mounting challenges faced by the primary healthcare system due to an ageing population and increasing chronic diseases.

Vision of the Blueprint are:
(a) To improve the overall health of the population
(b) To provide accessible and comprehensive healthcare services
(c) To establish a sustainable healthcare system

The Blueprint emphasised on community-based primary care and chronic disease prevention to improve public health and ensure long-term sustainability. To achieve this, incorporating "family doctor for all" concept and adopting a life course approach with emphasis on preventative measures and continuous care across all life stages are essential. Strengthening community-based primary care services and involving local stakeholders play a crucial role in supporting tailored health promotion activities.

Chapter 2. "Family Doctor for All"

In many developed and developing countries, family doctors act as health advocates for clients, who take lead to promote healthy lifestyle and provide preventive care, including vaccination and periodic health assessment to screen for chronic non-communicable diseases and cancers, in addition to their roles as first contact point for the assessment and management of acute and chronic illnesses, and coordinators to secondary healthcare and multi-disciplinary team services.

To address the challenges arising from an increasing ageing population and overloaded public secondary healthcare systems, having paired family doctors for all citizens will be one of the most effective ways to keep our citizens as healthy as possible in the community, through prevention, early detection, and timely multi-disciplinary intervention for chronic diseases, especially for mild case.

Chapter 3. Life Course Preventive Care: A Holistic Public Health Approach

The World Health Organization (WHO) and many countries worldwide emphasise on the importance of a life course approach to preventive care, including the United Kingdom, United States, Australia, and Singapore. While specific strategies and terminology might vary among countries, the primary goals of fostering wellness at each stage of life and minimising disease burden over an individual's lifetime remain consistent. Common preventive services across countries include vaccinations, health checks, cancer screening, health promotion, and chronic disease management.

Life course preventive care is a public health approach designed to reduce disease risk factors and promote health throughout an individual's life. This strategy involves addressing various stages of life, from prenatal and early childhood through the elderly years. The primary goal is to minimise the development and accumulation of risk factors across a lifetime, ultimately leading to improved health and quality of life for individuals and reduced healthcare burdens for societies.

Life Stage	Key Areas
Prenatal and Early Childhood Interventions	Focusing on providing support to mothers and children during the critical early stages of development to prevent future disease risk. Examples include promoting breastfeeding, adequate nutrition, positive parenting[7], childhood vaccinations and promotion of healthy lifestyle.
Youth Interventions	Targeting adolescents, these interventions aim to address risk factors such as tobacco and drug use, unhealthy diet, and physical inactivity, which can establish lifelong harmful habits. Additionally, promoting mental health and providing sex education and safe sex programmes are crucial during this stage.
Adult Interventions	Encouraging screening programmes for chronic diseases like cancer and diabetes, as well as promoting healthy lifestyle changes and risk reduction for conditions such as heart disease and stroke.

[7] Parenting means fulfilling the roles of a parent in meeting the individual needs of the child, and nurturing the child's physical, cognitive, socio-emotional, moral & personality development. Evidence has revealed that parenting education/training is effective in improving parental competence and reducing child emotional & behaviour problems.

Elderly Interventions	Focusing on the senior population, these interventions aim to prevent and manage chronic conditions, reduce falls and injuries, and promote healthy aging and mental well-being.

Chapter 4. Preventive Interventions and Implementation across the Lifespan

To implement effective life course prevention strategies, a coordinated, multi-sectoral approach is necessary. This includes collaboration between healthcare providers, educators and community organisations to ensure that resources and support are available at every stage of life. By addressing the unique needs of each age group and working together to promote overall health and well-being, life course preventive care can contribute to healthier, more vibrant societies.

The life course preventive care approach involves interventions at various stages of life, including:

(a) Infancy and childhood (0 – 10 years old)

Early experience during infancy and childhood can significantly impact lifelong health, well-being, and disease risk. Hence, the early years of life represent a crucial period for preventive measures. The science of early child development (ECD) has revealed that early experiences have profound influences on learning, behaviour, physical and mental health trajectories. To facilitate the healthy development of child, parents/ carers play a key role in providing a nurturing and responsive relationship on top of a stable & safe environment as well as providing optimal nutrition and fostering healthy lifestyles. Adopting early preventive strategies and fostering a collaborative approach that involves parents, healthcare providers, and communities is essential for promoting lifelong health in children. Key preventive strategies include:

(i) **Immunisations**: Promoting routine immunisations is a fundamental strategy for reducing disease burden across the lifespan. Vaccines are safe and effective, with minor side effects compared to the diseases they prevent. Educating the public about recommended immunisation schedules is essential for protecting individual and community health. Most childhood immunisations require multiple doses for optimal protection.

(ii) **Nutrition and growth**: Adequate nutrition during infancy and childhood is critical for optimal growth, development, and lifelong health. Healthcare providers play a crucial role in advising families, identifying risks, and offering interventions and resources for healthy nutrition from birth. Key recommendations for ensuring proper nutrition include:

- Exclusive breastfeeding for the first six months of life and continuation of breastfeeding up to 2 years or beyond;
- Introducing solid foods around six months of age;
- Encouraging a balanced diet and healthy eating behaviors;
- Monitoring growth and risks of growth problem, such as nutrient deficiencies or poor intake; and
- Considering special diets only if medically necessary.

The "Self Learning Kit on Breastfeeding for Health Professionals" (the Kit) was developed by the Department of Health (DH) to support health workers to equip the knowledge and skills to facilitate the initiation, establishment and maintenance of breastfeeding. For more information, please refer to https://bfkit.familyhealthservice.gov.hk/bfkit_landing.html

(iii) **Healthy lifestyle practices**: Encouraging daily physical activity and proper nutrition from an early age is crucial for lifelong health. Promoting physical activity in children, starting from infancy, can lead to profound effects on their overall well-being. Regular exercise provides significant physical and mental benefits, such as optimal weight management, motor skill development, and social-emotional growth. To foster an active lifestyle and decrease the risk of chronic diseases, it is essential to offer safe opportunities for outdoor play and participation in sports programmes.

(iv) **Parenting and development**: Providing parenting education on childcare, child development, and positive parenting with an aim to equip parents/ carers with the necessary knowledge and skills to bring up happy and well-adjusted children. For more information on parenting and child development, please refer to https://www.fhs.gov.hk/english/

Regular health surveillance, which includes monitoring growth, development, and overall health, plays a vital role in identifying and addressing potential issues. Early identification of children with growth, development or behavior problems allows further evaluation and diagnosis, which results in early and timely intervention.

Hong Kong Reference Framework for Preventive Care for Children in Primary Care Setting provides recommendations and useful information on assessment and management of preventive care in children. For more information, please refer to https://www.healthbureau.gov.hk/pho/rfs/english/reference_framework/pre_care_for_child.html

(b) Adolescence (11 – 19 years old)

Adolescence is a critical period of growth and development, characterised by physical, emotional, and social changes. The choices and experiences during this time can significantly influence health and well-being across the lifespan. Adolescents face unique health challenges, including risky behaviors, mental health concerns, and injuries. A life course approach to preventive care should focus on promoting positive behaviors, addressing risk factors, and providing support and resources to help adolescents navigate this complex developmental period. Key preventive strategies for adolescents include:

(i) **Nutrition and physical activity**
Maintaining nutrition and physical activity habits during adolescence sets the stage for lifelong health. Encourage a balanced diet, regular exercise, and positive eating behaviors to prevent obesity and related health issues. Healthcare providers, schools, and families all have roles in promoting and supporting these behaviors.

(ii) **Substance use prevention and support**
Adolescents may experiment with substances like alcohol, tobacco, and drugs, which can lead to addiction, injuries, and chronic health issues. Preventive care should focus on education and awareness to discourage substance use, as well as early intervention and support for those struggling with addiction. Healthcare providers, schools, and families all play essential roles in this process.

(iii) **Mental health promotion and intervention**

Mental health plays a crucial role in overall well-being during adolescence. Ensuring timely identification, intervention, and support for mental health concerns can improve long-term outcomes. Healthcare providers should screen for mental health issues regularly, provide counseling, and make appropriate referrals for treatment. Schools, families, and communities can support mental health by promoting open conversations, reducing stigma, and providing resources.

(iv) **Sexual and reproductive health education and services**

Adolescents need access to comprehensive sexual and reproductive health education and services to make informed decisions about their bodies and relationships. This includes information on contraception, sexually transmitted infections (STIs), and healthy relationships. Healthcare providers should provide age-appropriate counselling and services, while schools and families can support open and accurate conversations about these topics.

(v) **Injury prevention and safety promotion**

Injuries, such as those resulting from motor vehicle accidents, sports, and violence, are a leading cause of morbidity and mortality among adolescents. Preventive care should focus on promoting safety habits (e.g., wearing seatbelts, helmets) and providing education on injury prevention. Schools, communities, and families can also support safe environments for adolescents.

Hong Kong Reference Framework for Preventive Care for Children in Primary Care Setting provides recommendations and useful information on assessment and management of preventive care in children. For more information, please refer to https://www.healthbureau.gov.hk/pho/rfs/english/reference_framework/pre_care_for_child.html

(c) Adulthood (20 – 64 years old)

Adulthood is marked by various life transitions, such as career changes, marriage, and parenthood. This period involves the management of stressors, the promotion of healthy behaviors, and the prevention of chronic diseases. A life course approach to preventive care in adulthood should focus on creating opportunities for health promotion, disease prevention, and early detection of potential health issues. Key preventive strategies for adults include:

(i) **Regular health screenings and check-ups**
Facilitate the detection of early signs of chronic diseases, such as hypertension, diabetes, and cancer. Adults should be encouraged to follow recommended screening guidelines and consult their healthcare provider for routine check-ups.

(ii) **Substance use prevention and treatment**
Continued efforts to prevent and treat substance use disorders are essential throughout adulthood. Providing resources and support for adults struggling with addiction, and promote awareness and education around substance use risks are essential.

(iii) **Mental health support**
Adults need support for mental health concerns, such as depression, anxiety, and stress. Healthcare professionals should encourage open conversations about mental health, provide resources, and ensure access to appropriate treatment and support services.

(iv) **Workplace and community health promotion**
Workplaces and communities can play a vital role in promoting healthy behaviors and preventing chronic diseases. It is recommended to encourage healthy initiatives, such as wellness programmes, fitness facilities, and healthy food options, in these settings.

(d) Older adulthood (65 years and older)

Older adulthood is characterised by changing health needs, increased vulnerability to disease, and a greater need for health services. A life course approach to preventive care in older adulthood should emphasise maintaining functional ability, preventing disability, and promoting quality of life. Key preventive strategies for older adults include:

(i) **Regular health screenings and assessments**
Older adults should continue to receive regular health screenings and assessments to detect chronic diseases, cognitive decline, functional limitations and cancers. Early detection and intervention can improve health outcomes and quality of life.

(ii) **Immunisations**
Continued vaccination efforts are crucial for older adults, as they are more susceptible to vaccine-preventable diseases. Encourage older adults to receive recommended vaccines, such as seasonal influenza, pneumococcal, and shingles vaccines.

(iii) **Fall prevention**
Falls are a leading cause of injury and disability among older adults. Implementing fall prevention strategies, such as strength and balance exercises, home modifications, and medication reviews, can reduce the risk of falls and their associated consequences.

(iv) **Social engagement and support**
Social engagement and support are crucial for maintaining mental and emotional health in older adulthood. Encouraging older adults to stay connected with friends, family, and community resources promotes a sense of belonging and purpose, reducing loneliness and depression. Regular social interaction and participation in meaningful activities are vital for healthy aging and can provide a buffer against declines in physical and cognitive abilities.

Hong Kong Reference Framework for Preventive Care for Older Adults in Primary Care Setting provides recommendations and useful information on assessment and management of preventive care in older adults. For more information, please refer to https://www.healthbureau.gov.hk/pho/rfs/english/reference_framework/pre_care_for_older_adults.html

Chapter 5. The Life Course Preventive Care (Health Plan) Chart

The Life Course Preventive Care (Health Plan) Chart aims to provide a set of recommendations for primary healthcare professionals and public on tailored preventive care, depending on individual's age and sex. It focuses on preventive activities applicable to general asymptomatic (low risk) population with additional information about individual's risk assessment on vaccination and cancer screening for person at higher risk.

Clinicians should make their clinical decision depending on individual's medical condition, risk and preference in order to make preventive care recommendations best suit the patient's need.

The list is designed to be used as a:

(a) guide to recommend individual whom screening or preventive care is most appropriate
(b) reminder for family doctor and primary healthcare professional to check what preventive care are to be performed in different sex and various age groups
(c) checklist of preventive care used according to an individual patient's health profile
(d) patient education tool

The Life Course Preventive Care (Health Plan) for Children, Men and Women are attached in Annex I. The chart is not meant to be exhaustive and will be regularly updated according to latest evidence.

Chapter 6. Community-based Health Prevention Programmes in Hong Kong: An Overview of Government Subsidised Services and Programmes

The Hong Kong government has implemented several preventive care programmes to promote the health and wellbeing of its citizens including but not limited to the following:

(a) Health Assessment and Monitoring Services

(i) **Health and Developmental Surveillance in Maternal and Child Health Centres (MCHCs):** This Scheme, operated by MCHCs under the Department of Health, consists of a series of routine reviews conducted by health professionals, designed to achieve timely identification and referral of children with health and developmental problems. It includes newborn consultation, periodic monitoring of growth and diet assessments, developmental surveillance, hearing and vision screening at specific ages. It emphasises partnership with parents/ caregivers, through anticipatory guidance, eliciting parents' concern and observing the child. For more information, please refer to: https://s.fhs.gov.hk/1wsdd

(ii) **Health Assessment in Student Health Service Centres (SHSCs)**: The SHSCs of the Department of Health offer health screening and related services to students in all primary and secondary day schools. These include screening on vision, hearing, blood pressure, scoliosis, physical examination, psychosocial health, health counselling, and health education. The programmes aim to provide health assessment and promote preventive care in the community. For more information, please refer to: https://www.studenthealth.gov.hk/english/resources/resources_forms/appendixs.html

(b) Cancer Screening

(i) **Cervical Screening Programme:** This programme encourages women aged 25 to 64 who have had sexual experience to have regular cervical screening as an effective way of preventing cervical cancer. The Government promotes cervical screening in collaboration with the healthcare sector to facilitate and encourage women to have regular cervical screening to prevent cervical cancer. To facilitate sharing of information among healthcare providers, the Cervical Screening Information System (CSIS) (www.csis.gov.hk) has been established. It is a computerised registry for keeping and processing related data, including participants' personal information, screening results and next recommended screening date. For more information, please refer to: https://www.cervicalscreening.gov.hk/en/index.html

(ii) **Colorectal Cancer Screening Programme:** This programme subsidise asymptomatic Hong Kong residents aged between 50 and 75 to receive screening service in private sector for prevention of colorectal cancer. Participants will undergo faecal occult blood test (FOBT) as first line screening followed by colonoscopy examination for cases with positive FOBT result. For more information, please refer to : https://www.colonscreen.gov.hk/en/public/index.html

(iii) **Breast Cancer Screening Pilot Programme:** Launched in 2021, this pilot programme provides risk-based breast cancer screening services for eligible female members in the three Women Health Centres and the 18 Elderly Health Centres of the Department of Health. Women with increased risk of breast cancer are recommended to consider mammography (MMG) screening every two years. For more information, please refer to :
Women Health Service https://s.fhs.gov.hk/kdzgl and Elderly Health Service https://www.elderly.gov.hk/eindex.html.

(c) Immunisation

(i) **Hong Kong Childhood Immunisation Programme (HKCIP)**: This programme provides free immunisations to eligible children based on recommendations from the Scientific Committee on Vaccine Preventable Diseases (SCVPD). Families can discuss additional vaccine options with their family doctors for personal protection. For more information, please refer to: https://www.chp.gov.hk/en/static/24008.html

(ii) **Vaccination Subsidy Scheme**: This scheme provides subsidisation for eligible Hong Kong residents to receive seasonal influenza vaccinations and pneumococcal vaccinations, aiming to reduce the morbidity and mortality related to these diseases. For more information, please refer to: https://www.chp.gov.hk/en/features/17980.html

Chapter 7. Other Health Prevention Care Activities to be Considered

Apart from the government subsidised preventive care services and programmes, there are other preventive care activities that are suitable for individual's own benefit. Citizens are encouraged to approach their family doctors and District Health Centre / Express near where they live or work to seek professional advice and recommendations on other suitable preventive care activities, including **non-government subsidised items**, according to individual healthcare needs and / or risk factors.

Chapter 8. Conclusion

By incorporating the concept of family doctors and adopting a holistic life course approach, individuals can better understand the complex interplay of factors that influence health across the lifespan. This approach enables tailored interventions to optimise health and well-being for each individual and the population as a whole.

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Annex Ia: Life Course Preventive Care Plan – Children

- Government subsidised programme/ scheme
- Non- Government subsidised items

Activity/ Topic	Age Group										Guidelines & References
	0 month	1 month	2 months	4 months	6 months	12 months	18 months	2 -10 years	11 – 12 years	13-18 years	
Immunisation											
	BCG										Recommendation by Scientific Committee on Vaccine Preventable Diseases
	1st HBV	2nd HBV			3rd HBV						
			1st RV	2nd RV	3rd RV*						
			1st PCV13	2nd PCV13		Booster PCV13					
			1st DTaP-IPV	2nd DTaP-IPV	3rd DTaP-IPV		Booster DTaP-IPV	Booster DTaP-IPV (P.1)	Booster DTaP-IPV (P.6)		Hong Kong Childhood Immunisation Programme (HKCIP)
			1st Hib	2nd Hib	3rd Hib		Booster Hib (15 – 18 months)				Vaccination Schemes
					Seasonal Influenza Vaccine						
					COVID-19 Vaccine						COVID-19 Vaccination Programme
						1st MMR	2nd MMRV				
						1st Varicella					
									1st HPV (P.5) & 2nd HPV (P.6)		
Practice of Healthy Lifestyle											
Smoking	Ask about passive smoking and help parents/ family members to quit smoking										
									Advise against smoking and offer smoking cessation intervention for smokers		
Alcohol										Early detection of at-risk drinking	
Physical Activity (PA)	Interactive floor-based play with at least 30 minutes of tummy time spread throughout the day while awake						Advise at least 3 hours of PA spread throughout the day	Accumulate an average of at least 60 minutes of moderate- to vigorous-intensity PA per day			
Screen Time							Limit daily screen time to ≤1 hour	Limit daily screen time to no more than 2 hours		Avoid prolonged screen time	
Nutrition	Promote exclusive breastfeeding for first 6 months and continuation of breastfeeding up to 2 years or beyond Proper use of infant formula if breast milk cannot be offered										
					Appropriate introduction of solid food and transitional feeding			Encourage healthy balanced diet that primarily relies on whole grains, fruits and vegetables, low-fat or non-fat dairy products, legumes, fish, and lean meat			
Growth and Development											
	Perform serial height and weight measurements										Developmental Surveillance Scheme in Maternal and Child Health Centres (MCHCs)
									Screen for obesity (6 years old onwards)		
	Provide parent education on childcare, child development, and positive parenting Perform health and developmental surveillance in collaboration with parents/ care-givers (0 – 5 years old)								Puberty assessment and sex education		
	Screen for hearing problems (below 4 months old)							Screen for hearing problems (P.1)		Screen for hearing problems (S.2)	Student Health Service, Department of Health
								Assess visual acuity (Pre-school and P.1-S.6)			

■BCG - Bacillus Calmette-Guérin ■DTaP-IPV - Diphtheria, tetanus, acellular pertusis and inactivated poliovirus vaccine ■HBV - Hepatitis B vaccine ■Hib – Haemophilus influenzae type b vaccine ■HPV - Human papillomavirus vaccine ■MMR - Measles, mumps and rubella vaccine ■MMRV - Measles, mumps, rubella and varicella vaccine ■PCV13 - 13-valent pneumococcal conjugate vaccine ■RV - Rotavirus vaccine *Administration of the third dose depends on the brand of rotavirus vaccine used for previous dose

Please note that the above list is not exhaustive; Other preventive care activities may also be considered.

Annex Ib: Life Course Preventive Care Plan – Men

- Government subsidised programme/ scheme
- Non- Government subsidised items

Activity/ Topic	Age group (years)										Individual Risk Assessment	Resources
	19 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 – 54	55 - 59	60 - 64	≥65		
Immunisation												
	Seasonal Influenza Vaccine										<u>High risk condition(s) recommended for seasonal influenza vaccine and pneumococcal vaccine</u>: - History of invasive pneumococcal disease, cerebrospinal fluid leakage or cochlear implant; - Chronic cardiovascular (except hypertension without complications), lung, liver or kidney diseases; - Metabolic diseases including diabetes mellitus or obesity (BMI 30kg/m^2 or above); - Immunocompromised states, due to conditions such as asplenia, HIV infection/ Acquired Immune Deficiency Syndrome or cancer/steroid treatment; and - Chronic neurological conditions that can increase the risk for aspiration or compromise respiratory functions, handling of respiratory secretions or, self-care ability	Recommendation by Scientific Committee on Vaccine Preventable Diseases Vaccination Schemes COVID-19 Vaccination Programme
	COVID-19 Vaccine											
										Pneumococcal Vaccine		
							Herpes Zoster Vaccine					
Practice of Healthy Lifestyle												
Smoking	Advise against smoking and offer smoking cessation intervention for smokers											
Alcohol	Early detection of at-risk drinking											
Physical Activity (PA)	Aerobic activities, at moderate intensity at least 150 minutes a week or at vigorous intensity at least 75 minutes a week (performed on at least 3 days per week); Muscle strengthening activities at least 2 days a week											
Weight Management	Screen for overweight and obesity and offer appropriate intervention to optimise body weight											
Prevention of Chronic Disease												
Hypertension	Blood pressure measurement at least once every 2 years										<u>High risk factors for metabolic diseases and hypertension</u>: - Smoking history; - Sedentary lifestyle; - Overweight/ obesity; - Central obesity (waist circumference ≥90cm); - Pre-diabetes; - Family history of diabetes or hypertension; and - Family history of heart disease	Chronic Disease Co-Care (CDCC) Pilot Scheme
Diabetes Mellitus (DM)						Screen for DM at least once every 3 years, more frequent when risk factor(s) present						
Hyperlipidaemia							Aged 50 – 75 years Screen for hyperlipidaemia at least once every 3 years, more frequent when risk factor(s) present					
Cancer Screening												
Colorectal Cancer							Aged 50 - 75 years (a) annual or biennial faecal occult blood test (“FOBT”); or (b) sigmoidoscopy every 5 years; or (c) colonoscopy every 10 years				<u>Increased risk for Colorectal Cancer (CRC)</u>: - Carriers of mutated gene of Lynch Syndrome; - Carriers of mutated gene of Familial adenomatous polyposis; and - Individuals with one first-degree relative diagnosed with CRC at or below age 60, or more than one first-degree relative with CRC irrespective of age at diagnosis, and without hereditary bowel syndromes <u>Increased risk for Prostate Cancer</u>: - African American men; and - Those with one or more first-degree relatives diagnosed with prostate cancer before age 65, should consider seeking advice from doctors regarding the need for and approach of screening	Summary of Cancer Expert Working Group on Cancer Prevention and Screening (CEWG) Recommendations on Cancer Screening
Prostate Cancer						Aged 45 – 70 years Asymptomatic men considering screening are encouraged to discuss with their family doctor and make informed decision						

Please note that the above list is not exhaustive; Other preventive care activities may also be considered.

Annex Ic: Life Course Preventive Care Plan - Women

- Government subsidised programme/ scheme
- Non- Government subsidised items

Activity/ Topic	Age Group (Years)										Individual Risk Assessment	Resources
	19 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 – 54	55 - 59	60 - 64	≥65		
Immunisation												
	Seasonal Influenza Vaccine										<u>High risk condition(s) recommended for seasonal influenza vaccine and pneumococcal vaccine</u>: - History of invasive pneumococcal disease, cerebrospinal fluid leakage or cochlear implant; - Chronic cardiovascular (except hypertension without complications), lung, liver or kidney diseases; - Metabolic diseases including diabetes mellitus or obesity (BMI 30kg/m^2 or above); - Immunocompromised states, due to conditions such as asplenia, HIV infection/ Acquired Immune Deficiency Syndrome or cancer/steroid treatment; and - Chronic neurological conditions that can increase the risk for aspiration or compromise respiratory functions, handling of respiratory secretions or, self-care ability	Recommendation by Scientific Committee on Vaccine Preventable Diseases Vaccination Schemes COVID-19 Vaccination Programme
	COVID-19 Vaccine											
										Pneumococcal Vaccine		
							Herpes Zoster Vaccine					
Practice of Healthy Lifestyle												
Smoking	Advise against smoking and offer smoking cessation for smokers											
Alcohol	Early detection of at-risk drinking											
Physical Activity (PA)	Aerobic activities, at moderate intensity at least 150 minutes a week or at vigorous intensity at least 75 minutes a week (performed on at least 3 days per week); Muscle strengthening activities at least 2 days a week											
Weight Management	Screen for overweight and obesity and offer appropriate intervention to optimise body weight											
Prevention of Chronic Disease												
Hypertension	Blood pressure measurement at least once every 2 years										<u>High risk factors for metabolic diseases and Hypertension</u>: - Smoking history; - Sedentary lifestyle; - Overweight/ obesity; - Central obesity (waist circumference ≥80cm); - Pre-diabetes; - History of polycystic ovary syndrome; - History of gestational diabetes; - History of pre-eclampsia during pregnancy; - History of delivery of baby weighing ≥4kg; - Family history of diabetes or hypertension; and - Family history of heart disease	Chronic Disease Co-Care (CDCC) Pilot Scheme
Diabetes Mellitus (DM)						Screen for DM at least once every 3 years, more frequent when risk factor(s) present						
Hyperlipidaemia							Aged 50 – 75 years Screen for hyperlipidaemia at least once every 3 years, more frequent when risk factor(s) present					
Cancer Screening												
Colorectal Cancer							Aged 50 - 75 years (a) annual or biennial faecal occult blood test ("FOBT"); or (b) sigmoidoscopy every 5 years; or (c) colonoscopy every 10 years				<u>Increased risk for Colorectal Cancer (CRC)</u>: - Carriers of mutated gene of Lynch Syndrome; - Carriers of mutated gene of Familial adenomatous polyposis; - Individuals with one first-degree relative diagnosed with CRC at or below age 60, or more than one first-degree relative with CRC irrespective of age at diagnosis, and without hereditary bowel syndromes <u>Increased risk for Cervical Cancer</u>: - Women aged 21 to 24 years who ever had sexual experience and with risk factors for HPV infection or cervical cancer are considered at increased risk <u>Increased risk for Breast Cancer</u>: - Women at moderate risk: family history of only one first-degree female relative with breast cancer diagnosed at or below age 50; or two first-degree female relatives diagnosed with breast cancer after age 50 years; - Women at high risk: e.g. confirmed carriers of BRCA1/2 deleterious mutations, strong family history of breast or ovarian cancer etc.	Summary of Cancer Expert Working Group on Cancer Prevention and Screening (CEWG) Recommendations on Cancer Screening
Cervical Cancer		**Women aged 25-64 who ever had sexual experience should have regular cervical screening**										
		Cytology every 3 years after 2 consecutive normal annual screenings	(a) cytology every 3 years after 2 consecutive normal annual screenings; or (b) human papillomavirus (HPV) testing every 5 years; or (c) co-testing (cytology and HPV testing) every 5 years							May discontinue if routine screenings within 10 years are normal; screening should be done if ever have sexual experience but never had cervical screening		
Breast cancer						Aged 44 – 69 years Women should use the online breast cancer risk assessment tool* (www.cancer.gov.hk/bctool) to estimate their risk. Those found to be at increased risk should be advised for mammography screening every 2 years						

*Factors considered on the risk assessment tool include: History of breast cancer among first-degree relative, a prior diagnosis of benign breast disease, nulliparity and late age of first live birth, early age of menarche, high BMI and physical inactivity

Please note that the above list is not exhaustive; Other preventive care activities may also be considered.