REPRODUCTIVE, MATERNAL, NEWBORN, CHILD AND ADOLESCENT + HEALTH OF AGEING (RMNCAH+A) STRATEGY

Ministry of Health, Royal Government of Bhutan

2025-2029

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FOREWORD

The Ministry of Health is pleased to present the Integrated Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCAH) Strategy, a pivotal step towards realizing our national commitment to improving the health and well-being of women, children, and adolescents. This strategy represents a historic milestone as it is the first time that RMNCAH has been integrated into a unified framework, reflecting a comprehensive and cohesive approach to health service delivery. Furthermore, it adopts a life course approach, encompassing not only the health of women, children, and adolescents but also focusing on ageing populations, thereby addressing health needs across all stages of life.

The Integrated RMNCAH Strategy is a culmination of extensive consultations with diverse stakeholders, including government agencies, development partners, health professionals, and community representatives. It reflects our collective aspiration to ensure equitable access to quality health services, addressing critical gaps and emerging challenges in maternal, newborn, child, adolescent, and ageing health.

This strategy integrates evidence-based interventions with innovative approaches to strengthen health systems and enhance service delivery across the continuum of care. It emphasizes the importance of multisectoral collaboration, community engagement, and digital health solutions to deliver impactful, sustainable outcomes.

As we embark on implementing this strategy, the Ministry of Health reaffirms its commitment to prioritizing resources and fostering partnerships for successful execution. We call upon all stakeholders to unite in action, recognizing that the health of women, children, adolescents, and ageing populations is foundational to the prosperity and well-being of our nation.

On behalf of the Ministry of Health, I extend my deepest gratitude to all individuals and organizations that contributed to the development of this strategy. Together, let us work towards a healthier and brighter future for every woman, child, adolescent, and ageing individual in Bhutan.

(Pemba Wangchuk)
Secretary

ACKNOWLEDGEMENT

The Department of Public Health (DoPH) extends its sincere gratitude to all individuals and organizations that have contributed to the development of the Integrated RMNCAH Strategy. Special thanks go to the technical teams within the Ministry for their relentless efforts and thorough reviews throughout the process. We gratefully acknowledge the invaluable contributions from the National Medical Services (NMS), Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB), and the country offices of UNFPA, WHO, and UNICEF. We are especially thankful to the WHO SEARO team for their guidance and support in computing the UHC Service Coverage Index (SCI) and the RMNCAH index.

We also wish to express our appreciation to all participants of the three consultative meetings for their insights, feedback, and unwavering commitment. The collaborative efforts of these individuals and organizations have been instrumental in shaping a strategy that aims to improve health outcomes for women, children, adolescents, and the ageing population in Bhutan.

We further acknowledge the valuable contributions of Dr. Saramma Thomas Mathai, UNFPA consultant, for her role in drafting the strategy, revising multiple versions, and supporting its overall refinement and formatting. We also extend our sincere appreciation to UNFPA, WHO, and UNICEF for their continued technical and financial support throughout the development of this strategy.

This strategy is a testament to what we can achieve through collective effort, and we look forward to continued collaboration in its implementation.

List of Abbreviations

AFHS	- Adolescent Friendly Health Services
AHB	- Annual Health Bulletin
ANC	- Antenatal Care
BCDST	- Bhutan Child Development Screening Tools
BHCSQA	- Bhutan Healthcare Standards for Quality Assurance
BENAP	- Bhutan Every Newborn Action Plan
CBSS	- Community Based Support System
C4CD	- Care for Child Development
CMO	- Chief Medical Officer
CPR	- Contraceptive Prevalence Rate
CS	- Caesarean Section
CSE	- Comprehensive Sexuality Education
CRVS	- Civil Registration and Vital Statistics
DHIS	- District Health Information Software
DPHO	- District Public Health Officer
ECCD	- Early Childhood Care and Development
ECP	- Elderly Care Programme
EmONC	- Emergency Obstetric and Neonatal Care
ENAP	- Every Newborn Action Plan
EPIS	- Electronic Patient Information System
EPMM	- Ending Preventable Maternal Mortality
FONPH	- Faculty of Nursing and Public Health
FYP	- Five Year Plan
GIS	- Geographic Information System
GBV	- Gender-Based Violence
HIV	- Human Immuno-deficiency Virus
HMIS	- Health Management Information System

HPV	- Human Papilloma Virus
ICD	- International Classification of Diseases
iCTG	- Internet based Cardiotocography
IMNCI	- Integrated Management of Newborn and Childhood Illnesses
IUCD	- Intra-uterine Contraceptive Device
IVF	- In-Vitro Fertilization
JDWNRH	- Jigme Dorji Wangchuk National Referral Hospital
JICA	- Japanese International Cooperation Agency
KGUMSB	- Khesar Gyalpo University of Medical Sciences, Bhutan
KMC	- Kangaroo Mother Care
LGBTIQ	- Lesbian, Gay, Bisexual, Transvestite, Intersex, Queer
MBBS	- Bachelor of Medicine and Bachelor of Surgery
MCH	- Maternal and Child Health
MHPC	- Medical and Health Professional Council
MISP	- Minimum Initial Services Package
MOESD	- Ministry of Education and Skills Development
MOH	- Ministry of Health
MM	- Maternal Mortality
MMR	- Maternal Mortality Ratio
MMS	- Multiple Micro-nutrient Supplements
MPNDSR	- Maternal, Perinatal and Newborn Death Surveillance and Response
MSTF	- Multi-Sectoral Task Force
MTP	- Medical Termination of Pregnancy
NCD	- Non-communicable Diseases
NCHS	- National Child Health Strategy
NCWC	- National Commission of Women and Children
NHS	- National Health Survey
NICU	- Neonatal Intensive Care Unit

NMR	- Neonatal Mortality Rate
NRHS	- National Reproductive Health Strategy
NSPAAH	- National Strategic Programme for Action for Adolescent Health
OSCC	- One Stop Crisis Centre
PHC	- Primary Health Centre
PM	- Perinatal Mortality
PMTCT	- Prevention of Mother to Child Transmission
PNC	- Postnatal Care
POCQI	- Point of Care Quality Improvement
PPD	- Policy and Planning Division
PPH	- Post Partum Haemorrhage
PSA	- Protein Specific Antigen
PWD	- Persons with Disability
RENEW	- Respect Educate Nurture and Empower Women
RGOB	- Royal Government of Bhutan
RMNCAH+A	- Reproductive Maternal Newborn, Child and Adolescent Health and Health of Ageing
SDGs	- Sustainable Development Goals
SCI	- Service Coverage Indicator
SDI	- Service Delivery Indicators
SNCU	- Sick Newborn Care Unit
STI	- Sexually Transmitted Infections
SRHR	- Sexual and Reproductive Health and Rights
TAG	- Technical Advisory Group
TOR	- Terms of Reference
UHC	- Universal Health Coverage
UHC SCI	- Universal Health Coverage Service Coverage Index
VHW	- Village Health Worker

1. Introduction

1.1. Country context

The Kingdom of Bhutan has a total resident population of 775,000 Population which is expected to reach 883,866 by 2047 with 57 % living in urban areas[1]. The annual population growth rate is expected to fall to 0.3 % in 2047 from the current rate of 1%; hence it is expected that the population growth will not be rapid. The life expectancy is 72.8 years and 69.9 years for females and males respectively[2] . Over 40% of the population constitutes young people below 24 years. With the share of the older population rising above 65 years (projected to increase from 6 % to 17.3 % by 2050) and the declining fertility rate at 2.0[3] (National Health Survey (NHS) 2023), the window for the demographic dividend is expected to close within the next three decades. The old-age dependency ratio is expected to increase from 11.2 % to 26.2 % in 2050. The surge in rural-to-urban migration over the past decade continues to place pressure on social services and on ensuring affordable adequate living standards for the urban population. The rapid economic growth (annual average of 7.5 %) and notable achievements in investing in socio-economic development outcomes have qualified Bhutan to graduate from the group of Least Developed Countries to Lower Middle Income Country and is the seventh country to achieve this milestone[4].

The administrative system of Bhutan consists of Central and Local Governments. The Central Government comprises of Ministries, Departments and Autonomous bodies. The Local Government comprises of 20 Dzongkhag Tshogdu (district council), 205 Gewog Tshogde (block or sub-district council) and four Thromde Tshogde (municipal council).

The Royal Government of Bhutan (RGoB) is committed to achieving Universal Health Coverage (UHC), with the right to health care for all, as mandated by the Constitution. The health goals of the successive Five-Year Plans (FYPs) have focused on Universal Health Coverage (UHC) by providing access to quality health care services based on the principles of primary health care. Health expenditure as percentage of GDP for the financial years 2019-20 is 4.5%[5].

1 NSB. Population Projections Bhutan 2017-2047

2 NSB. Population Projections Bhutan 2017-2047

3 MOH. Fifth National Health Survey 2023

4 UNSDCF for Bhutan, 2024-28

5 MOH. Policy brief health care financing in Bhutan 2018-2020: Evidence from the National Health Accounts

Bhutan has made significant progress with regard to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) status; however, there are significant differentials between districts.

Table 1 shows current country level estimates and global estimates for Bhutan of RMNCAH indicators of Sustainable Development Goals (SDG), Ending Preventable Maternal Mortality (EPMM) and Every Newborn Action Plan (ENAP), all of which the RGOB is committed to.

The Maternal Mortality Ratio (MMR) is 53/100000 live births (NHS 2023). The UN Estimate is 60 /100000 live births (2022) and the current value of MMR of Bhutan falls between the range of uncertainty interval 40 - 82 of UN estimate[6] . According to estimates based on WHO SEARO calculations, Bhutan has achieved 46.7% reduction of MMR between 2010 and 2020 (UN estimates) and is expected to reach an MMR of 39 by 2030 if the current level of annual reduction in maternal deaths continues[7]. With this trend, Bhutan also will be graduating to Stage 4 of obstetric transition as as described in the footnote[8]. Leading causes of death are pre-eclampsia/eclampsia, post-partum haemorrhage (PPH), sepsis, ectopic pregnancy and non-obstetric causes such as diabetes, heart disease, hypertension, etc.

Bhutan's stillbirth rate is 1.3 per 1000 total births (Number of stillbirths is 5, NHS 2023) which could be under-reported. Stillbirth data is likely to be underreported due to mis-classification or poor reporting due to limited knowledge and technical abilities of health service providers to report births and stillbirths. While interpreting the data, it is advisable to take into consideration the hospital data on stillbirths and the findings of the Maternal, Perinatal and Neonatal Death Surveillance and Response (MPNDSR) reviews. It is likely that the stillbirth rates have reduced in number due to reduced maternal deaths and improved quality of maternal health services.

The Neonatal Mortality Rate (NMR) is 6.9 /1000 live births and post-neonatal mortality rate is 8.3 per 1000 live births (NHS 2023), indicating that the majority of the deaths took place during the post-neonatal period. The leading causes of

6 WHO, UNICEF, UNFPA, World Bank Group and UNDESA. Trends in maternal mortality 2000-2020

7 WHO SEARO. MMR estimates for SEAR countries, 2023

8 Obstetric transition is a concept around the secular trend of countries gradually shifting from a pattern of high maternal mortality to low maternal mortality, and from direct obstetric causes of maternal mortality to indirect causes. The five stages of obstetric transition are (Stage I – MMR >1000, Stage II (MMR 999-300), Stage III (MMR 299-50), Stage IV (MMR<50), and Stage V (aspirational-all avoidable maternal deaths prevented) Source: Souza JP, Tuncalp O, Vogel JP, Bohren M, et al. Obstetric transition: the pathway towards ending preventable maternal deaths. BCOG.2014,121 Suppl 1: 1-4

death are prematurity, congenital malformations, birth asphyxia and sepsis[9]. Early neonatal death rate is 3.6 per 1000 live births (11 deaths) and it appears that there may be under-reporting, as usually, the majority of the deaths take place in the first seven days of life. The Annual Health Bulletin (AHB) data as well as MPNDSR reviews show predominance of early neonatal deaths. Infant mortality rate is 15.2 /1000 live births (NHS 2023). Under-five Child Mortality Rate (CMR) is 19.5 per 1000 live births (NHS 2023). Leading causes of death are neonatal causes (55%), followed by pneumonia, diarrhoea and others.

With regard to other global indicators such as ENAP and EPMM indicators, Bhutan has surpassed the global targets (see Table 1). Deliveries by skilled birth attendants is 98.5% (NHS 2023) and institutional deliveries is 98%. The proportion who have had 4 Antenatal Clinic (ANC) visits is 87.2% and 8 clinic visits is 38% (NHS 2023). The proportion of deliveries by caesarean section is 29.3% which is significantly high, compared to the WHO recommended rate of 10-15%. The proportion of mothers and newborns who had their postnatal care within 48 hours of delivery are 69.5% and 69.9% (NHS 2023), surpassing the global target. The proportion of children breastfed within one hour of birth is 81.8 % (NHS 2023).

The prevalence of stunting is 17.9 % and wasting is 5.1 % (NHS 2023). The proportion of children under five with symptoms of acute respiratory infection seeking care is 64.7% and those with diarrhoea seeking care is 52.6%.

The Contraceptive Prevalence Rate (CPR) for modern methods of contraception for currently married women or in union is 70.1 %, for all women is 55.6% and for sexually active unmarried is 49.9% (NHS 2023). The unmet need for family planning is 8.5 % with 0.5% for spacing and 8% for limiting. The percentage of women married or in union whose demand for modern methods of contraception satisfied is 84.8%.

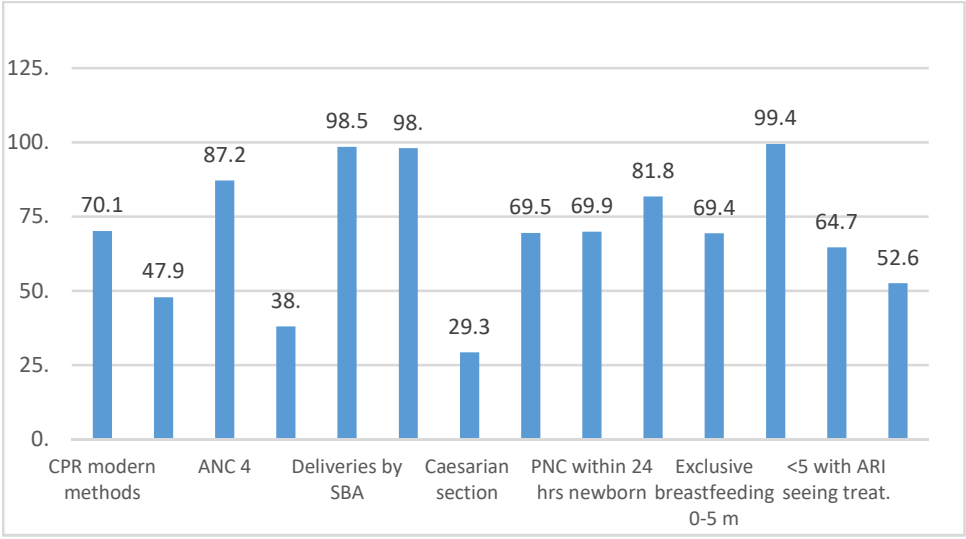
The adolescent fertility rate is 18.6 (NHS 2023). The lowest prevalence of CPR for modern methods is among adolescents (15-19 years) married or in union and is 43.5 % (NHS 2023). The contraceptive prevalence rate for modern methods among sexually active unmarried adolescents is 80.3%. The unmet need for contraception is higher among married adolescents (13.7%), higher compared to other age groups.

UHC indicators include service coverage of essential interventions and financial risk (catastrophic spending on health). The UHC coverage indicators, computed from the tracer indicators of coverage of essential services, include reproductive health indicators such as demand satisfied with a modern method of contraception among

9 MoH. Bhutan Every Newborn Action Plan 2016-23.

women aged 15-44 years and four or more ANC visits or births attended by skilled health personnel. The 2023 Bhutan's UHC Service Coverage Index (UHC SCI) and RMNCAH sub-index was computed by latest household survey and estimates[10]. The 2023 UHC SCI Index Bhutan is estimated at 59.8 and RMNCAH sub-index 83.2 (2023).

Chart 1: Continuum of RMNCAH care coverage 2023



10 The computation of UHC SCI index and RMNCAH sub-index have been guided by the Health Information Systems, Health Systems Division, WHO SEARO.

Table 1: Country and UN estimates of RMNCAH global indicators

Global RMNCAH Indicators	Country estimates NHS 2023	UN estimates for Bhutan	Global target
MMR/100000 live births (SDG, EPMM, ENAP indicator)	53	60* (40-82)	2/3rd reduction of 2010 UN estimate of MMR by 2030 (EPMM/ENAP target)[11] (2/3rd reduction of 2010 estimate 117 will be 39)
NMR/1000 live births (SDG, EPMM, ENAP Indicator)	6.9	13** (17-25)	12 or less
Stillbirth rate /1000 total births (EPMM, ENAP indicator)	1.3	9*** (6.5-12.4)	12 or less
Under-five mortality (SDG indicator)	19.5	24** (13-43)	25
ANC 4+ (%) (EPMM, ENAP indicator)	87.2	Not available	>70% national coverage
Deliveries by skilled birth attendants (%) (SDG, EPMM, ENAP indicator)	98.5	Not available	>80% national coverage

11 As per EPMM/ENAP recommendations, countries with MMR of less than 140/100,000 are expected to achieve a 2/3rd reduction in MMR by 2030.

Global RMNCAH Indicators	Country estimates NHS 2023	UN estimates for Bhutan	Global target
Postnatal care within first 48 hours (Women) (%) (EPMM, ENAP indicator)	69.5	Not available	>60% national average
Postnatal care within first 48 hours (newborn) (%) (EPMM, ENAP indicator)	69.9	Not available	>60% national average
Small and sick newborns' access to care (ENAP, EPMM indicator)	National and regional hospitals and 5 district hospitals with a paediatrician [12]	Not available	80% districts with 1 newborn care unit (WHO level 2)
Proportion of population covered by Emergency Obstetric and Neonatal Care (EmONC) facility (within 2 hours travel time) (%)(EPMM, ENAP indicator)	Not available; EmONC NA done in 2017 reported that 97.8% of deliveries took place in EmONC facilities.	Not available	50% of the population have physical access to EmONC facility within 2 hours of travel time
Proportion of women aged 15-49 who make their own informed and empowered decisions regarding sexual relations, contraceptive use, and reproductive health care (%) (SDG, EPMM, ENAP indicator)	Not available	No target	No target specified

12 National referral hospital and regional referral hospitals and district hospitals in Samtse, Wangdue, Phuentsholing, Trashigang and Dewathang

Global RMNCAH Indicators	Country estimates NHS 2023	UN estimates for Bhutan	Global target
Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods (%) (SDG indicator)	85	Not available	>75% considered good
Adolescent birth rate (SDG indicator) 10-14 years (per 1000 women in the age group) 15-19 years (per1000 women in the age group)	No pregnancy reported below 15 years 18.6 (15-19 years)	Not available	Should be ideally zero
Coverage of essential health services (SDG indicator)	59.8[+]	Not available	More than 80% coverage of essential health services
Health worker density and distribution (focus on nurses and midwives) (SDG Indicator) Proportion of doctors/10000 population Proportion of nurses/10000 population	4.64[$] 21.07[$]	Not available	33.3 nurses/ midwives/ 10,000 population 18.5 (WHO SEARO Human Resources division 2018)

Global RMNCAH Indicators	Country estimates NHS 2023	UN estimates for Bhutan	Global target
Proportion of children under five: Stunted % Wasted % (SDG indicator)	17.9 5.1	Not available	Should be zero
Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex (SDG indicator)	Not available	Not available	
Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation (SDG indicator)	39.7% (Life-time) 23.6 % (past 12 months) Comparison of 2017 and 2023 data shows there is 6.4% decrease in all forms of violence#.	Not available	

* WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. Trends in maternal mortality 2000-2020 (Figures within brackets are uncertainty intervals)

** UNIGME. Levels and trends in child mortality 2023 (Figures within brackets are uncertainty intervals)

*** UNIGME. Never forgotten. The situation of stillbirths around the globe 2022 (Figures within brackets are uncertainty intervals).

\+ Computation done with assistance of HMIS, Health Systems Division, WHO SEARO.

$ Annual Health Bulletin 2022

\# Strategies have been developed to eliminate all forms of violence.

The prevalence of anaemia in 6-59 months is 44.7 % with moderate anaemia in 21% (NHS 2023). 40.9% of non-pregnant women 15-49 years suffer from anaemia with moderate anaemia in 14.9%. Anaemia among pregnant women 15-49 years is 33.3% with moderate anaemia in 18.7%. The prevalence among adolescent girls 15-19 years is 36.5% with moderate anaemia in 16.2%. 2.1% pregnant and 1.3% non-pregnant had severe anaemia.

The age-standardized prevalence of Human Papillomavirus (HPV) infection among the general female population is 26%, varying from 33% in women under 25 years old to 19% in women aged 45 years and older[13]. Cervical cancer is the leading cause of death among Bhutanese women, with age-standardized incidence rate per 100,000 women of 13 and age-standardized mortality rate per 100,000 women of 7.5[14]. Bhutan is a success story with regard to progress towards elimination of cervical cancer and has had an impact in reducing the prevalence of the disease through primary prevention and secondary prevention. Both cervical and breast cancer were priority areas under the Flagship Programme for elimination of cancers and more details are provided under the domain on reproductive cancers.

The prevalence of Human Immunodeficiency Virus (HIV) per 1000 population is less than 0.1% with infection concentrated most among the reproductive age group[15]. The increase in the number of new infections and increasing prevalence of HIV among low risk females are concerns. It is also reported that the prevalence of syphilis is increasing among women. The integrated biological and behavioural survey of 2016 reported low comprehensive knowledge about HIV, infrequent condom usage and engagement in risky sexual behaviour within the surveyed population (NHS 2023 does not provide any information on HIV/AIDS).

Despite the progress of RMNCAH indicators, particularly reduction in MMR, stillbirths and NMR and service coverage, there are several health and social challenges that affect the RMNCAH along the continuum of care. The quality of care remains inadequate as evident from prevalence of maternal near miss ratio of 6.7 per 1000 live births and potential life-threatening conditions of 12.8 per 1000 live births[16]. Poor quality of maternal care services has implications for newborn survival and health as well as growth in childhood. Despite the progress in infrastructure and access to skilled care, the recently conducted Service Delivery Indicator (SDI) health survey,

13 MOH. Draft NACP IV 2023.

14 WHO SEARO. Presentation at the International Symposium on Cervical Cancer Elimination, Thimphu, November 2023 (Globocon2020)

15 MOH. Draft NACP IV 2023

16 MOH. Maternal Near-miss report 2021

reported few critical gaps in the infrastructure, functioning of facilities and skills of providers (specific reference to skill gaps are mentioned under various domains of the strategy)[17].

There is also evidence of increasing prevalence of Non-Communicable Diseases (NCDs) that will have implications across the life cycle. NCDs are highlighted in various sections of the strategy.

Gender equality is enshrined within the Constitution of the Kingdom of Bhutan 2008. Although there is relative gender parity across all ages, structural and cultural norms continue to obstruct the full realization of gender equality. Bhutan is ranked 103 out 146 of countries in the Global Gender Gap, registering positive progress in rank by 23 points compared to 2022[18]. With regard to physical violence, 60.1 % children have experienced physical violence with 16.3 % reporting severe physical punishment (NHS 2023). Women who reported physical violence by partner is 16.4 % with 6.9 % reporting sexual violence. 39.7 % women have experienced some form of physical, sexual, emotional and economic related violence.

The constitution guarantees and protects fundamental rights and freedom in consonance with international normative frameworks and ensures protection of children and women as well as those with disabilities. An estimated 2.1 % of the population is living with disabilities[19]. Based on the vulnerability assessment, 14 groups have been identified and the plan ensures access to health and education and other economic and social services[20]. The outcomes of the 13th FYP incorporates human rights principles in all its priority areas.

Bhutan has made progress in enacting laws, policies, regulations and strategies related to sexual and reproductive health, newborn, child, adolescents and young people, HIV, viral hepatitis and Sexually Transmitted Infections (STIs), gender, domestic violence prevention act, child care and protection act, policy on Persons With Disability (PWD) and policy for the senior citizens of Bhutan. In 2021, Bhutan decriminalised homosexuality but legal recognition of all gender identities and their rights are concerns among the Lesbian, Gay, Bisexual, Transvestite, Intersex, Queer

17 MOH, WB, et al, . Service delivery indicators health survey for Bhutan 2022-23.

18 World Economic Forum. Global gender gap report 2023. Insight report, June 2023.

19 GNHC. National policy on persons with disability, 2019.

20 The vulnerable groups include people who beg; children in conflict with law; elderly in need of support; female workers working at Drayangs; persons practicing risky sexual behaviour: persons using drugs and alcohol; persons with disability; orphans; out of school children; people living with HIV/AIDS; single parents and their children; unemployed youth; victims of domestic violence and vulnerable urban dwellers.

(LGBTIQ) communities. However, findings from various assessments indicate that the legal and policy instruments are fragmented or lack proper implementation, especially at grassroots level. Insufficient human resource capacities and inadequate resources at national and subnational levels hinder transforming national policies into functioning plans. Inequity in access to health services is an issue due to geographical, dispersed population settlements, rapid urbanization, rural-urban migration and socio-economic and cultural factors. Inequity is also related to lack of knowledge of the rights of rights-holders, specifically vulnerable people such as PWD, illiterate, rural women and young people. In addition, assessments and reviews conducted point out the low level of awareness of service providers regarding the policies and strategies.

Bhutan's challenges in data availability, availability of disaggregated data and data harmonization are key concerns, particularly data on sexual and reproductive health and adolescent health. Another concern is that the Civil Registration and Vital Statistics (CRVS) system does not include important RMNCAH indicators such as MMR, stillbirths, NMR and under-five mortality.

Bhutan is particularly vulnerable to climate-induced disaster and natural hazards and its dependence on climate-sensitive sectors of economic activity[21]. Development imperatives and growing demands for water, energy and food have placed increasing pressure on Bhutan's ecosystem and resources. Rapid urbanization has further compounded the situation by increasing population density and increasing use of fossil fuels and waste generation. In recent years, climate-related disasters have increased in number and magnitude. While considerable progress has been made in building community resilience, key barriers to effective risk management include limitations on data, financial resources and national capacity. Bhutan had successfully responded to the COVID-19 pandemic by ensuring minimal disruption of RMNCAH services. Bhutan's COVID-19 vaccination coverage is high.

Despite the challenges listed above, Bhutan's progress in human development has also been significant with remarkable progress in achieving a number of its international commitments and the progress has been sustained through the recent COVID-19 pandemic. Guided by the philosophy of Gross National Happiness (GNH), the FYPs have been focusing on achieving the SDGs and the country is progressing well to achieve the SDGs related to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH). While the mortality related indicators are on track, moderate progress is noted with ANC 8+ visits, postnatal visits to mother and newborn, percentage of children breast fed up 0-5 months, percentage of under-

21 UN Bhutan. UNSDCF Bhutan 2024-28.

five with stunting, anaemia among different age groups, the number of new HIV infections and adolescent birth rate.

2. Rationale for the RMNCAH+ Healthy Ageing (RMNCAH+A) strategy, life course approach, purpose and process of development of strategy and guiding principles

2.1. Rationale for the RMNCAH+A strategy

The following points support the rationale for the RMNCAH+A strategy.

- The 13th FYP health outcome is "By 2029, more Bhutanese enjoy improved health and wellbeing". The key performance indicators to measure the achievement are 'health status index and mental health status index'. It is well known that a person's physical and mental health and wellbeing are shaped throughout the life by the wider determinants of health that are protective factors (social, economic and environmental) and risk factors (behavioural risk factors that accumulate across life stage and generations). Evidence shows that the current approaches in health programmes, focusing on single diseases or interventions for a specific age group/stage in life will not help to achieve optimal health and wellbeing. A life course approach is being promoted to enable individuals and societies to achieve health and wellbeing and as it covers the preconception period to old age. A life course approach considers the critical stages in an individual's life, transitions and settings where huge differences can be made in promoting or restoring health and wellbeing.
- Successful improvements of health at key life stages require a continuum of interventions across the life course along with efforts to strengthen the health systems and addressing broader determinants of health. An RMNCAH+A strategy enables the development of life course interventions along a continuum of care that minimizes risks and enhances protective factors and if implemented properly should help to optimize trajectories of health in early decades of life, promote mental health and health and wellbeing in adult and ageing population. The interventions that enhance protective factors also contributes to improving human capital and life expectancy. Thus, the development of a comprehensive RMNCAH + A strategy and its implementation has a critical role in achieving the 13th FYP health outcomes.
- Draft national health policy 2021 promotes provision of comprehensive and integrated maternal and child, adolescent, and SRH care services through the continuum of care approach.
- An RMNCAH+A strategy, enabling the implementation of life course approach along the continuum of care and strengthening of health system as needed,

helps to improve the quality of services and achieve UHC, thus contributing to achieving the SDG 3 goal of health and well-being. Through the approach, the strategy should contribute to achieving many of the indicators of SDG 5 on gender equality, of SDG 10 on reducing inequities, SDG 4 on quality education, of SDG 6 on clean water, sanitation and of SDG 13 on climate change, etc.

- Epidemiological shifts in disease patterns and increasing proportion of ageing population calls for approaches such as people-centred, integrated care and life course approaches that enables to modify or prevent cumulative risks across at critical periods along the life course and also help to achieve healthy ageing. Epidemiological shifts / evolving health needs of people include rising prevalence of NCDs due to lifestyle changes and its linkages to diseases, particularly obesity and NCDs, all of which are linked to health trajectories in early decades of life.
- Graduation from Least Developed Country to Lower Middle Income Country requires increase in human capital index. RMNCAH services have a major role to play in developing human capital by implementing evidence-based interventions at critical junctures in the life course and thus contributing to the present generations and to the future generations.
- Strengthening the effectiveness and efficiency of the newly created Family Health Unit under the NCD Division of MOH requires an integrated strategy incorporating the thematic areas covered such as SRH, newborn, child and adolescents. The RMNCAH+A strategy, through its life course and continuum of care approach will help to consolidate the achievements of the various strategies related to SRH, newborn health, child health and adolescent health, fill the gaps and incorporate SRH services for elderly at individual level, across levels of health care, building on the existing Primary Health Care system.

2.2. Life course approach

Why is life course approach important for Bhutan?
Life course approach and continuum of evidence-based interventions across the life course at critical life stages, is critical for improving the health status index and life expectancy, mental health status index and human capital index as described under the rationale for the strategy. Bhutan has made significant progress with regard to indicators related to survival of mothers, newborns and children through various standalone/ siloed evidence-based approaches listed in strategies related to RMNCAH. With regard to indicators related to thrive such as stunting, adolescent fertility, coverage index of essential RMNCAH services, etc. more progress is needed. RGOB has already adopted elements of the life course approach under child health strategy such as elements of nurturing care framework that spans across education and social sectors. Human capital is accrued over the life course, beginning prior to conception, extending throughout childhood, adolescence and beyond. The life course approach optimizes the functional ability of individuals throughout life. Maintaining functional ability in ageing populations will help to reduce health care costs and dependency.

Life course approach strengthens UHC as it includes all people of all ages, identifies and delivers high-quality, person-centred health services for each life stage and critical periods according to needs. Life course approach goes beyond survival approach and supporting individuals to thrive. It also promotes prevention and requires empowering people to take actions.

2.3. Purpose of the RMNCAH+ Healthy ageing strategy

The purpose of the RMNCAH+ A strategy is to provide strategic guidance to the national and district level managers to implement the life course approach and continuum of evidence-based interventions along the life course in achieving the human capital to its fullest potential. The strategy expands the scope of the standard RMNCAH services to address the cumulative effects on health in the subsequent stages of life through evidence-based interventions that minimize impact on the next generation. The strategy highlights the importance of empowering people and communities to take action at critical periods of life to enable them to achieve human capital to its fullest potential.

2.4. Process of development of the strategy

Consultations were held with relevant programme officers of MOH (Public Health, Health Services), , staff of Jigme Wangchuk National Referral Hospital (JDWNRH), staff of Khesar Gyalpo University of Medical Sciences, Bhutan (KGUMSB), Members of Faculty of Nursing and Public Health (FoNPH), staff of the PEMA centre member of National Commission for Women and Children (NCWC), selected District Officials and representatives of NGOs (Respect, Educate, Nurture and Empower Women (RENEW), Disabled People's Organization, UNICEF, UNFPA and WHO. Ministry of Education and Skills Development (MOESD), National Medical Services, Medical and Health Professional Council (MHPC) and Regional Referral Hospital staff representatives did not attend. The draft strategy was also presented to the Health Secretary.

2.5. Guiding principles and approaches

The strategy is rooted in the principles of human rights as enunciated in the Constitution of Bhutan and 13th FYP as well as the vision and mission of MOH. It is guided by the guiding principles laid in the Draft Health Policy of 2021. It is also guided by principles of sustainable development.

- Right to highest attainable standard of health that includes service availability to meet the needs of the people across the life course, accessibility, acceptability, and quality of services[22].
- Universal health coverage ensuring equity and 'leaving no one behind'.
- Accountability at all levels of health care ensures that the duty bearers (health managers and health care providers) meet their obligations to provide respectful care to rights holders.
- Integrated service delivery, providing full range of high impact health interventions throughout the life course, avoiding fragmentation, improving cost-effectiveness and efficiency and across locations such as home, health facilities and hospital.
- Primary health care approach that promotes equitable, highest possible level of health and well-being along the continuum from health promotion and disease prevention to treatment, rehabilitation and palliative care and as close as feasible to people's every day environment. Engaging and empowering individuals, families and communities for increased social participation and enhanced self-care and self-reliance in health is a key component.

22 Accessibility -physical and financial access, information access, non-discriminatory; acceptable - respect for medical ethics, culturally appropriate and gender sensitive; quality – safe, effective, people-centred, timely, equitable leaving no-one behind and efficient.

- Multisectoral engagement particularly education, women and child welfare and protection, academia, regulatory authorities and judiciary
- Strategic partnership with non-health government agencies, private sector, non-governmental organizations, international development partners and academia for the purpose of inclusion of evidence-based strategies and best practices.

3. Vision, mission, goal and strategic outcome of Reproductive, Maternal, Newborn, Child and Adolescent Health and Health of Ageing population (RMNCAH+A) Strategy

RMNCAH+A strategy rests on Royal Government of Bhutan's (RGOB's) commitment to uphold human rights of its people and to be inclusive so that no one is left behind, SDGs and other global commitments in SRH and child health and contributes to the 13th FYP priorities in health. *Recognizing that the survival, health and wellbeing of women, children and adolescents cannot be achieved through single interventions,* the RMNCAH+ A strategy is integrated, built upon the continuum of care across the life course concept, encompassing all interventions aimed at improving RMNCAH including SRH and well-being of ageing population, to be implemented through a primary health care approach.

The strategy builds on the successful and high impact interventions that are still critical for sustaining achievements and improving RMNCAH, paying special attention to interventions that have a long-term impact on later stages of life, responds to the changing health priorities and environment induced challenges that impact RMNCAH and health of ageing population. Equity and human rights and gender equality issues will be integrated into various core services.

The RMNCAH+A strategy focuses on optimizing health trajectories across the life course, connecting health and development in early years of life with healthy ageing. It also focuses on strengthening health system components to support the delivery of the services across the life course along a continuum of care. The strategy also focuses on empowering and engaging individuals, families and communities to prevent and manage disease.

Vision, mission, goal and strategic outcomes

Vision

The vision of the strategy is set in the goal of the 13th FYP "a healthy, prosperous and secure Bhutan" and its health sector outcome "By 2029, more Bhutanese enjoy improved health and wellbeing" as envisaged under Healthy *Drukyul* Initiative.

Every woman, man, child and adolescent and elderly in Bhutan, realize their right to health and well-being across the life-course, to achieve their full potential, in every setting, 'leaving no one behind', thus contributing to the achievement of national development goals and SDG targets.

Mission

To ensure universal access to integrated, high impact, quality RMNCAH services and services for ageing population to meet their life course needs, along the continuum of care, in an equitable and efficient manner and to empower and engage individuals and families for care for improved utilization.

Goal

Accelerated progress towards ending preventable deaths among women, newborn, children and adolescents and preventable stillbirths and improving health and well-being across the life course, particularly, at critical life course transitions. *(through enabling policies, integrated and people centred health systems, in partnership with individuals and families).*

Strategic outcomes

There are four strategic outcomes that are inter-related and mutually reinforcing and contribute to 13th FYP health outcome of *"improved health and wellbeing for all Bhutanese".* The strategic outcomes are linked to several outputs identified by the MOH in the health sector section of the 13th FYP.

Strategic Outcome 1: Evidence-based, high quality RMNCAH + A services equitably delivered, safe guarding rights, along the life cycle, through the continuum of care approach to meet the needs of the population at critical life course transitions, including during humanitarian crisis/pandemics.

(Linked to 13th FYP health output 3 on access and delivery of quality health, health related services and products that has a key activity on RMNCAH), output 2 on control and elimination of priority diseases achieved and 6 on regulatory, monitoring and health security system strengthened)

Strategic Outcome 2: Resilient health systems built to support integrated, people-centred and quality RMNCAH+A services across the life course to all populations to achieve UHC.

(Linked to 13th FYP health output 3 access and delivery of quality health, health related services and products, output 4 on adequacy and competency of health workforce ensured, output 5 on innovative governance and sustainable financing systems in place, 6 on regulatory, monitoring and health security system strengthened, output 7 on information technology harnessed to enhance health systems efficiency)

Strategic Outcome 3: Individuals, families and communities are empowered and engaged in RMNCAH+A through promotion of health literacy, self-care and demand for services.

(Linked to 13th FYP health output 1 on more Bhutanese practice healthy life style)

Strategic Outcome 4: South-South and triangular cooperation achieved on RMNCAH and health of ageing population between countries in South Asia and South-East Asia.

Under each strategic outcome, a set of strategic domains that are priorities to achieve the outcomes are identified. The strategic domains vary according to the outcomes. Under each strategic domain, key actions /interventions are identified. Some of the domains include sub-groups as they cover more than one critical point in life course. The framework of the domains is described under each outcome (see Diagram 1 and Table 3 and also illustrated in Diagram 2).

Table 2: National RMNCAH Targets

Indicator	Current level NHS 2023	National Target
MMR/100000 live births (SDG, EPMM, ENAP indicator)	53	40
NMR/1000 live births (SDG, EPMM, ENAP Indicator)	6.9	5
Stillbirth rate /1000 total births (EPMM, ENAP indicator)	1.3	2
Under-five mortality (SDG indicator)	19.5	15
Proportion of who attended ANC 4+ (%) (EPMM, ENAP indicator)	87.2	>90%
Proportion of women who attended ANC 8+ (%)	38	>50%

Indicator	Current level NHS 2023	National Target
Deliveries by skilled birth attendants (%) (SDG, EPMM, ENAP indicator)	98.5	Sustain and maintain >98%
Institutional delivery (%)	98	Sustain and maintain >98%
Postnatal care within first 48 hours (Women) (%) (EPMM, ENAP indicator)	69.5	>90%
Postnatal care within first 48 hours (newborn) (%) (EPMM, ENAP indicator)	69.9	>90%
Proportion of newborns breastfed within an hour of birth	81.8	>85%
Small and sick newborns' access to care (ENAP, EPMM indicator)	National and regional hospitals and 5 district hospitals with a paediatrician	10
Proportion of deliveries by caesarean sections (%)	29.3	<15%
Proportion of population covered by Emergency Obstetric and Neonatal Care (EmONC) facility (2 hours travel time) (%) (EPMM, ENAP indicator)	Not available; EmONC NA done in 2017 reported that 97.8% of deliveries took place in EmONC facilities	TBC
Proportion of women aged 15-49 who make their own informed and empowered decisions regarding sexual relations, contraceptive use, and reproductive health care (%) (SDG, EPMM, ENAP indicator)	Not available	TBC

Indicator	Current level NHS 2023	National Target
Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods (%) (SDG indicator)	85	TBC
Adolescent birth rate (SDG indicator) 10-14 years (per 1000 women in the age group) 15-19 years (per1000 women in the age group)	< 15 years- NA 18.6 (15-19 years)	15 (15-19 years)
Coverage of essential health services (%) (SDG indicator)	59.8	67
Health worker density and distribution (focus on nurses and midwives) (SDG Indicator) Proportion of doctors/10000 population Proportion of nurses/10000 population	4.64 21.07 (AHB 2022)	TBC
Proportion of children under five: Stunting (%) Wasted (%)	17.9 5.1	TBC
Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex (SDG indicator)	NA	NA

Indicator	Current level NHS 2023	National Target
Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation (SDG indicator)	39. 7 % (Life time) 23.6 (Past 12 months) (6.4% decrease in all forms of violence)	30(Life time) 20 (Past 12 months)
Proportion of women who attended ANC in the first trimester	47.9	>60%
Proportion of newborns who are low birth weight (2.5 KG) (%)	6.9	5

4. Strategic domains and key actions

The section provides details of strategic domains and key actions. Diagrams 1,2 and Table 3 provide an overview.

Diagram 1: Strategic domains

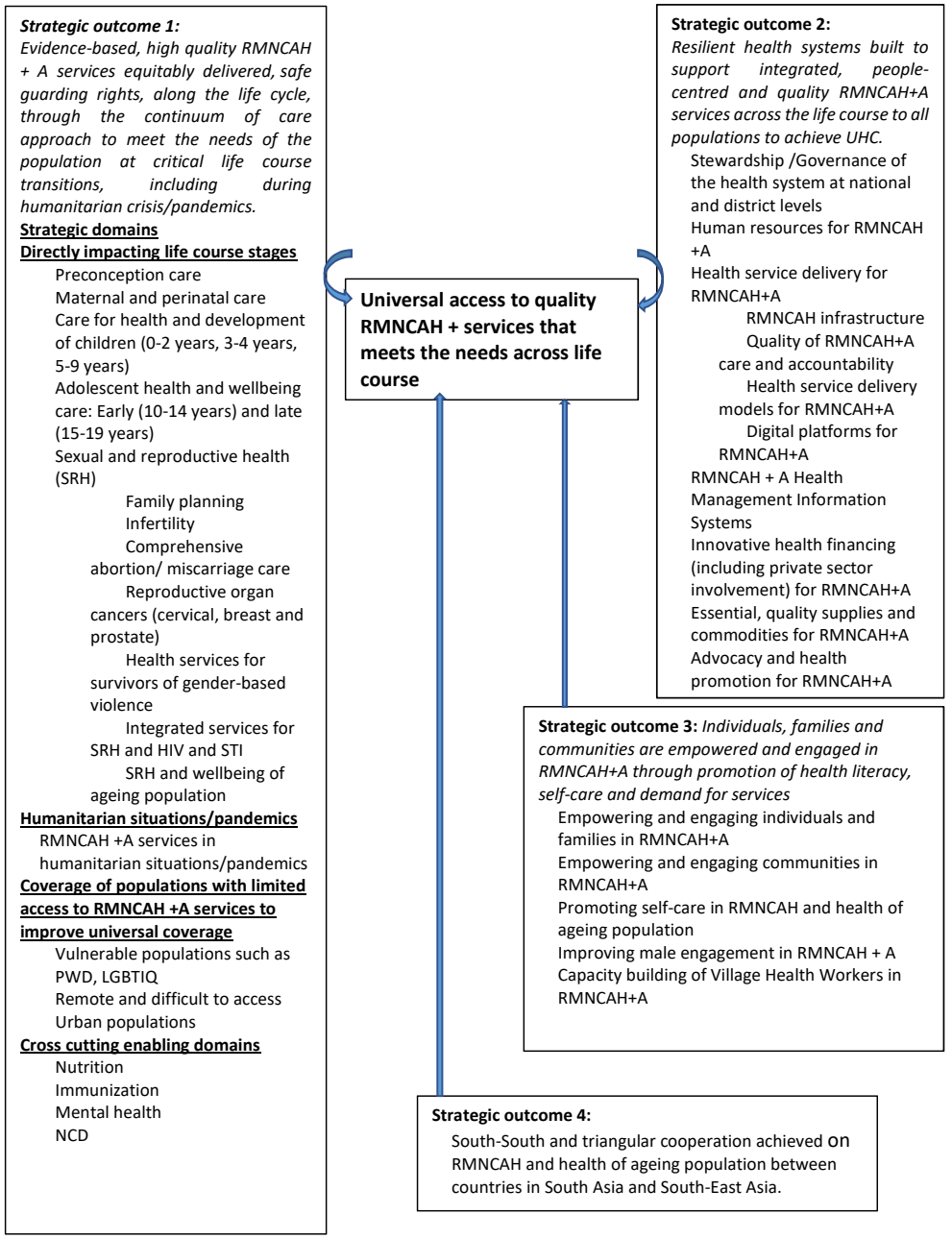


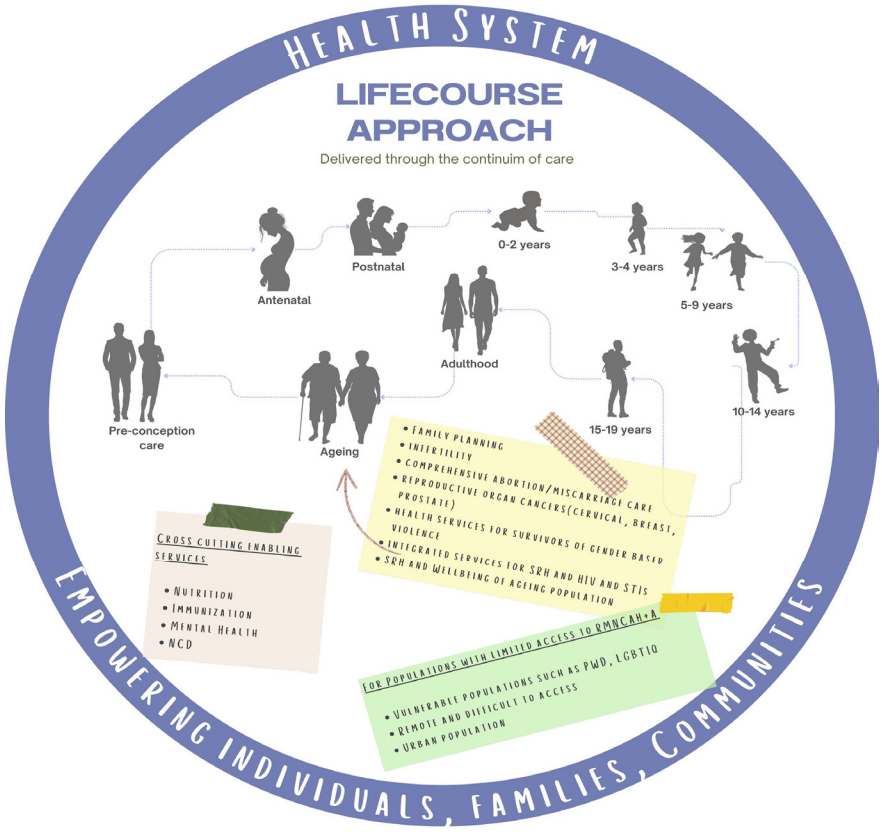
Table 3: Strategic outcomes and domains

Strategic Outcome	Strategic domains
Strategic Outcome 1: Evidence-based, high quality RMNCAH + A services equitably delivered, safe guarding rights, along the life cycle, through the continuum of care approach to meet the needs of the population at critical life course transitions, including during humanitarian crisis/ pandemics.	**Directly impacting life course stages** • Preconception care • Maternal and perinatal care Care for health and development of children ☐ *Infant and toddler 0-2 years* ☐ *Pres-school 3-4 years* ☐ *Children 5-9 years* • Adolescent health and wellbeing • Sexual and reproductive health (SRH) ☐ *Family planning* ☐ *Infertility* ☐ *Comprehensive abortion/miscarriage care* ☐ *Reproductive organ cancers (cervical, breast and prostate)* ☐ *Health services for survivors of gender-based violence* ☐ *Integrated services for SRH and HIV and STIs* ☐ *SRH and wellbeing of ageing population* **Related humanitarian situations/pandemics** • RMNCAH +A services in humanitarian situations/pandemics **For populations with limited access to RMNCAH +A services to improve universal coverage** • Vulnerable populations such as PWD, LGBTIQ • Remote and difficult to access • Urban populations **Cross cutting enabling services that are critical for well-being and development** • Nutrition • Immunization • Mental health • NCD

Strategic Outcome	Strategic domains
Strategic Outcome 2: Resilient health systems built to support integrated, people-centred and quality RMNCAH+A services across the life course to all populations to achieve UHC.	• Stewardship /Governance of the health system at national and district level • Human resources for RMNCAH +A • Health service delivery for RMNCAH+A ☐ *RMNCAH infrastructure* ☐ *Quality of RMNCAH+A care and accountability* ☐ *Health service delivery models for RMNCAH+A* ☐ *Use of digital platforms for delivery of RMNCAH+A services* • RMNCAH+A Health Management Information Systems • Innovative health financing (including private sector involvement) • Essential, quality supplies and commodities for RMNCAH+A • Advocacy and health promotion for RMNCAH+A
Strategic Outcome 3: Individuals, families and communities are empowered and engaged in RMNCAH+A through promotion of health literacy, self-care and demand for services.	• Empowering and engaging individuals and families in RMNCAH+A • Empowering and engaging communities in RMNCAH+A • Promoting self-care in RMNCAH and health of ageing population • Improving male engagement in RMNCAH+A • Capacity building of Village Health Workers in RMNCAH+A

Strategic Outcome	Strategic domains
Strategic Outcome 4: South-South and triangular cooperation achieved on RMNCAH and health of ageing between countries in South Asia and South-East Asia.	• Identify areas that are eligible for south-south collaboration and triangular cooperation South-South and triangular cooperation achieved on RMNCAH and health of ageing population between countries in South Asia and South-East Asia. • Document best practices

Diagram 2: Life course approach delivered through the continuum of care approach



Source: Mathai S T, Prakash M (based on several publications of WHO and Lancet, BMJ)

Strategic Outcome 1: Evidence-based, high quality RMNCAH + A services equitably delivered, safe guarding rights, along the life cycle, through the continuum of care approach to meet the needs of the population at critical life course transitions, including during humanitarian crisis/pandemics.

Under Outcome 1, the **strategic domains** cover services/care at critical points in life course, along the continuum of care, from preconception to pregnancy, birth, childhood and adolescence, adulthood and ageing. The outcome also covers the access to RMNCAH+A services in disasters or pandemics and to groups that have less access services, thus ensuring that services at critical points in life course are not interrupted. Cross-cutting domains that have an impact across various life stages are also included under the outcome. The key actions listed under each domain is expected to contribute to survival, development, growth and wellbeing.

a. DOMAINS DIRECTLY IMPACTING LIFE COURSE STAGES

The key interventions/actions listed under each domain are to support maternal, child and adolescent survival, health and human capital development, over the life course and contribute to healthy adulthood and ageing. These actions were selected based on existing services and their coverage, ease of integration and gaps identified during the assessment of the implementation of the various strategies related to RMNCAH (prior to the development of the current strategy) as well as the focus of the 13th FYP and National Health Policy 2021.

Domain	PRECONCEPTION CARE
Importance in life course: The objective of the preconception care package is to provide opportunities for optimizing maternal health and development of children even before conception takes place as well as benefits to adolescents and adults[23]. The preconception package is a critical intervention of the life course approach and plays a role in prevention/modification of risks across the life course. Besides contributing to prevention of maternal and perinatal mortality, it contributes to prevention of premature births, low birth weight and congenital malformations through screening for infections, nutrition supplements and immunizations. The care helps in early prevention of obesity, type 2 diabetes, cardiovascular diseases, mental health, etc. later in life.	

23 Preconception care is the provision of biomedical, behavioural and social health interventions to women and couples before conception occurs. It aims at improving their health status, reducing behaviours and individual and environmental factors that contribute to poor maternal and child health outcomes. It also contributes to better health and well-being in adolescence and adulthood.

Domain	PRECONCEPTION CARE

Current programme and coverage

- The current pre-conception care programme focuses on pre-pregnancy and in-between pregnancy and is implemented in JDWNRH.
- Preconception care guidelines and form for participants in the programme were developed.
- Assessment of preconception care in JDWNRH in 2022 showed that more than 60 % of pregnant are aware and more than 98% had positive attitude. However, the participation was poor.
- 36.5% adolescent girls 15-19 years were anaemic with 14.9% having moderate anaemia (NHS 2023).

Institutionalizing pre-conception care

KEY ACTIONS:

- *Develop a package for preconception care based on the reviews of the current programme.* The package should define what constitutes preconception period, identify entry points, identify implementation mechanisms.
- *Implement the package nation-wide on a staggered scale* after building the capacity and capability of the health system and conduct implementation research after one year of implementation for improving the quality and coverage. The topic should be part of the training of nursing and public health as well as Bachelors in Medicine and Bachelors in Surgery (MBBS) degree course.
- *Assess nutritional status (Body Mass Index), screen for anaemia and other medical problems* and provide relevant advice and manage especially anaemia and obesity.
- *Promote the concept of preconception care in ANC, in schools and adolescent clinics.*
- *Institute a system of certification of pre-marriage counselling that includes attendance at the preconception care clinic.*

Domain	MATERNAL AND PERINATAL CARE

Importance in life course

Maternal under-nutrition, micronutrient deficiencies, anaemia, infections during pregnancy cause low birth weight and congenital malformations (in folic acid deficiency, syphilis, rubella, cytomegalovirus), which have long term implications for development in childhood. Obesity in mothers is likely to increase the risk of obesity in children. Consumption of alcohol, smoking and chewing betel nut can lead to premature birth, low birth weight and damage to brain and lungs (smoking) and learning disorders (alcohol), etc. Premature babies are at risk of respiratory distress syndrome, intraventricular haemorrhage, necrotising colitis and developmental delays and cerebral palsy. Poor quality of intrapartum care can cause birth asphyxia which has immediate and long-term implications for survival and development. Postpartum depression in mothers could affect nurturing care of newborn and affect survival and growth. Nurturing care (keeping baby and mother together – skin to skin contact and breast feeding) is critical for all newborns, especially for small and sick ones, to ensure that their development and mental health does not suffer. This domain also helps to accelerate the achievement of indicators of MOH's policy on "Accelerating maternal and child health programme- 1000 plus golden days".

Bhutan has done well in achieving progress in maternal and perinatal care as evident from the various indicators related to mortality, stillbirths and service delivery indicators. The section focuses on quality gaps in implementation of evidence-based Antenatal Care (ANC), intrapartum care, including prevention of still births and postnatal care of mother and newborn. It also focuses on EmONC and caesarean sections as well as care of the small and sick newborns. The proposed EmONC needs assessment under quality assurance will help to identify more gaps that need to be filled.

Priority areas

- ☐ *ANTENATAL CARE FOR A POSITIVE PREGNANCY EXPERIENCE*
- ☐ *INTRAPARTUM CARE FOR A POSITIVE CHILDBIRTH EXPERIENCE*
- ☐ *ACCESS TO QUALITY EMONC AND CAESAREAN SECTION*
- ☐ *MATERNAL AND NEWBORN CARE FOR A POSITIVE POSTNATAL EXPERIENCE*
- ☐ *CARE OF THE SMALL AND SICK NEWBORN*
- ☐ *QUALITY OF MATERNAL AND PERINATAL CARE*

Priority area: i. ANTENATAL CARE FOR A POSITIVE PREGNANCY EXPERIENCE

Current practices and coverage

- Eight ANC visits are recommended in the midwifery standards.
- ANC coverage of 4 visits is 87.2% and eight visits is 38%. The proportion that had ANC in the first trimester is 47.9%. ANC 4+ is less than 80% in Lhuntse, Punakha, Pema Gatshel and Samtse.
- During ANC, more than 98% of pregnant women had blood pressure check, urine examination, foetal heart check and received counselling.
- Screening for syphilis, HIV and viral hepatitis is done; no data on the coverage is available from NHS 2023. However, there are gaps in recording clinical and routine laboratory examinations such as Haemoglobin, urine, fundal height and provision of folic acid in the first trimester (considered as services not provided).
- Ultrasound scans are done four-five times during pregnancy (contrary to WHO recommendation of one scan for anomalies) which is reported by the technician.
- Screening for bacteriuria, STIs other than syphilis such as chlamydia, mycoplasma, etc. are not practised. Screening for toxoplasma and cytomegalovirus are also not included.
- Screening for abuse and violence is carried out during ANC as per the Maternal and Child Health (MCH) handbook.
- Screening for mental health during ANC is currently carried out in JDWNRH and there are plans to expand to regional referral hospitals and other bigger facilities.
- The ANC assessment done in 2021 also identified other gaps in quality of ANC such as skills and practices of providers such as poor infection control, poor skills in recognition of complications particularly malpresentations, eclampsia, diagnosis of rhesus incompatibility, referrals for dental care, breast examination and advice, etc. Enquiring about violence was least practised.
- Anaemia among pregnant women is reported to be 33.3 % with 16.2 % with moderate anaemia (NHS 2023).
- Data on Multiple Micro-nutrient Supplementation (MMS) is not available as the intervention has been introduced recently.

Priority area: i. ANTENATAL CARE FOR A POSITIVE PREGNANCY EXPERIENCE

In addition to the regular *ANC package* of eight visits (including nutrition supplementation and tetanus toxoid) as recommended in the midwifery standards and MCH handbook, the following actions are recommended. The actions are based on the need to strengthen or expand the interventions. *These may be further supplemented based on the findings from the proposed EmONC needs assessment under the priority area quality of care. Focus should be on the districts with less than 80% coverage as listed under current coverage.*

The recently published SDI survey reported that very few providers had the ability to screen for depression.

KEY ACTIONS:

- ☐ *Review and update the ANC care as per WHO recommendations in midwifery standards and MCH handbook and include in the training of health assistants, nurses and doctors.*

Expand and strengthen preventive measures

- ☐ *Expand the current strategy to prevent eclampsia in 'women at risk' by provision of Aspirin and Calcium initiating at 12 weeks of gestation and continuing till 36 weeks in all health facilities.*
- ☐ *Improve the prevention of anaemia through the review of the current guidelines on prevention and treatment of anaemia in the context of Multiple Micro-nutrient Supplementation (MMS) during pregnancy and lactation. Monitor the quality of haemoglobin estimation.*
- ☐ *Initiate screening for asymptomatic bacteriuria, STIs other than syphilis especially gonorrhoea, chlamydia and mycoplasma with upgrading of laboratory facilities in referral hospitals and district hospitals (to reduce premature births, low birth weight and pelvic inflammatory disease).*

Improve quality of maternal and foetal assessment

- ☐ *Improve the recognition/diagnosis and appropriate management/referral of the following:*
  - ◆ Obstetric and non-obstetric problems such as malpresentations, gestational diabetes, hypertension, heart disease, etc., especially at PHC and district hospital level. Periodic monitoring of MCH records should be done.

Priority area: i. ANTENATAL CARE FOR A POSITIVE PREGNANCY EXPERIENCE

- Early identification of mothers at risk of premature labour and appropriate management.
- Screening for maternal mental health and intimate partner violence, earlier in pregnancy (A major gap identified in SDI survey).
- Monitoring weight during pregnancy.

☐ *Improve the quality of reporting of ultrasound scans by ultra-sonographers (sample check of scans and reports to be done by specialists) (to be continued even after the planned capacity building of the ultra-sonographers).*

☐ *Improve the early identification and appropriate management of foetal distress during antenatal period as per national guidelines.*

- Improve the skills of midwives and non-specialist doctors in diagnosing foetal distress using doppler or pinard stethoscope. In facilities where mobile (internet based cardiotocography (iCTG)) is available, recommend its use for diagnosing foetal distress and providing appropriate management as per standard operating procedure for ICTG (intermittent auscultation for one minute and tracing for 15-20 minutes if indicated).

(The availability of uninterrupted internet connectivity in the majority of the health facilities may affect the use of the technology for timely support (SDI survey).

Promote good practices

☐ *Promote early ANC in first trimester through different channels of communication especially in districts with lower coverage of ANC as listed under current coverage (as discussed under various domains under Outcome 3)*

☐ *Continue/include in ANC education the importance of family planning, breast care for enabling feeding, skin to skin contact and Kangaroo Mother Care (KMC), Care for Child Development plus (C4CD plus) actions during ANC and birth preparedness and complication readiness.*

☐ *Promote traditional medicine as applicable.*

Priority area: ii. INTRAPARTUM CARE FOR A POSITIVE CHILDBIRTH EXPERIENCE

Current practices and coverage

- Deliveries by skilled birth attendants is 98.5 % (NHS 2023) and surpasses the EPMM AND ENAP targets as mentioned in an earlier section. All districts report coverage above 80%.
- Deliveries in institutions is 98% (NHS 2023).
- Immediate care of newborn - is practised in all the facilities; 81.1% practised skin-skin contact (NHS 2023). The quality of care is a concern.
- Number of newborns breastfed within one hour is 81.8%.
- Companionship during labour, maintenance of nutrition and fluids, respectful care are practised.
- Labour care guide not being used widely.

The key actions focus on gaps identified during the various assessments done in the past such as EmoNC needs assessment (2018) and maternal near miss (2019) review and implementation of the midwifery guidelines. As mentioned under Chapter I, while the obstetric causes of death continue to be major causes of maternal deaths, there is a significant increase in non-obstetric causes of death The increase in non-obstetric causes is proportional to the increase in NCDs in the general population), These facts have been considered while identifying the actions. The findings also reiterate the importance of preconception care and quality ANC care. *The key actions may be further supplemented after the proposed EmONC needs assessment listed under the priority area quality of care.*

The SDI survey found that majority of the health service providers did not know the steps in management of PPH. The SDI survey reported that less than half of the providers interviewed could perform the steps in management of birth asphyxia.

Priority area: ii. INTRAPARTUM CARE FOR A POSITIVE CHILDBIRTH EXPERIENCE

KEY ACTIONS DURING LABOUR AND DELIVERY

Improve the standards of intrapartum care

- ☐ *Review the WHO Labour care guide and intrapartum care guide and adapt as needed in all facilities and include in the training of health assistants, nurses and doctors. Respectful maternity care is an important component of care and should be emphasized.*
- ☐ *Monitor the use of partographs and actions taken.*
- ☐ *Review the current guidelines for management of post-term pregnancies and revise to ensure healthy outcomes.*

Upgrade the skills in intrapartum care

- ☐ *Review and update the current PPH guidelines and midwifery standards as per the current WHO guidelines and build capacity of health assistants, nurses, midwives and medical officers to implement the same (SDI survey report reported the gap in skills).*
- ☐ *Strengthen the capabilities to manage preterm premature delivery as per national protocols with special focus on infection prevention in mother and care of the newborn with KMC and breast feeding.*
- ☐ *Improve capabilities for prevention and accurate management of eclampsia at the PHC level especially with regard to providing loading dose of Magnesium Sulfate (limiting to intramuscular injections based on in-country review).*
- ☐ *Improve the early identification and appropriate management of foetal distress during labour as per national guidelines.*
  - ◆ Improve the skills of midwives and non-specialist doctors on interpretation of iCTG during intrapartum period, where available. The monitoring may be intermittent of continuous, as indicated in the labour room protocol for high-risk pregnancies.
- ☐ *Strengthen the skills of PHC providers in intrapartum care including recognition of complications and newborn care and resuscitation to expand access to skilled care at birth. This action should contribute to increasing credibility of the providers, utilization of the PHC institutions, reducing inequity and reducing overcrowding in referral hospitals.*

Priority area: ii. INTRAPARTUM CARE FOR A POSITIVE CHILDBIRTH EXPERIENCE

Maternity waiting homes and midwife-led continuity of care models should be considered for ensuring timely skilled care and is discussed under the domain related to care in remote and difficult to access areas and under Output 2 related to health systems.

KEY ACTIONS FOR CARE OF THE NEWBORN

Though immediate newborn care is practised in almost all deliveries, some actions are highlighted.

- ☐ *No mother and baby should be separated after birth.*

Upgrade the skills in immediate newborn care

- ☐ *Develop guidelines /update the midwifery standards and MCH handbook on immediate care of newborn and build the capacity of the medical officers and other staff) in the care of newborns who breathe spontaneously after birth and those who do not breathe spontaneously. This should be part of the Druk Sokchop course discussed elsewhere under EmONC.*
- ☐ *For all newborns who breathe spontaneously after birth, initiate nurturing care through uninterrupted skin to skin contact between mother and baby and breast feeding within an hour of birth, as practised in the country. KMC should be practised in all premature and low birth weight babies.*
- ☐ *For all newborns who do not breathe spontaneously, after establishing breathing, continue nurturing care (uninterrupted skin to skin contact and breast feeding (see also under priority area on sick and small newborns).*
- ☐ *Improve and sustain implementation of evidence-based newborn care standards in all health facilities and advanced neonatal resuscitation for all hospital settings.*

Nurturing care is critical as it provides the newborn with nurturing environment in the first minutes and hours after birth and is needed for the brain and body to grow and develop.

KEY ACTIONS TO SUPPORT WOMEN WHO EXPERIENCE STILLBIRTHS AND THEIR FAMILIES

- ☐ *Develop and implement national guidelines for prevention and management of stillbirths. Quality, respectful and supportive bereavement care should be part of the guidelines and build capacity for the same.*

Priority area: ii. INTRAPARTUM CARE FOR A POSITIVE CHILDBIRTH EXPERIENCE

- ◆ Provide respectful and sensitive management of labour and ongoing physical care of the women diagnosed with stillbirth.
- ◆ Treat any maternal condition as needed.

☐ *Promote reporting of deaths under the Civil Registration and Vital Statistics (CRVS) by education of providers and families.*

Priority area iii. ACCESS TO QUALITY EMONC AND CAESAREAN SECTION

Current practices and coverage

- Access to EmoNC services: Data not available. EmONC NA done in 2017 reported that 97.8% of deliveries took place in EmONC facilities.
- Caesarean section rate is 29.3%
- Robson classification system is a global standard for assessing, monitoring and comparing Caesarean Section (CS) rates within health care facilities and between health care facilities over time. In Bhutan, the classification was introduced in one hospital and now the plans are underway to implement it nation-wide. *This is important especially in the context of increasing CS rates.*
- District hospitals have a focal person for EmONC.

Timely EmONC prevents mortality and morbidity of mothers and newborns. However, delays in recognition and management in health facilities or the poor quality of services can lead to deaths of mothers, stillbirths and newborn deaths or morbidities in mothers and newborns. The morbidities could have long term implications in health and wellbeing.

While CS is a life-saving intervention for mothers and newborns and prevention of intra-partum stillbirths when medically indicated. However, an increase in CSs beyond a certain threshold may increase the maternal and perinatal morbidity (short and long term) that can extend many years beyond the current delivery and affect the health of woman, the child and future pregnancies. Increase in CS rates has been noted in Bhutan and is of concern.

Priority area iii. ACCESS TO QUALITY EMONC AND CAESAREAN SECTION

KEY ACTIONS: EMONC

- ☐ *Improve access to basic EmONC services in all district hospitals and general hospitals and access to comprehensive EmONC services in all district hospitals and general hospitals with a specialist and in referral hospitals (based on the Cluster Hospital concept for emergency obstetric and neonatal care).*
  - ◆ Map the availability of the services by conducting an EmONC needs assessment based on the revised global guide on EmONC monitoring and planning. The assessment will further strengthen the rationale for cluster hospitals and identification of location of possible Sick Newborn Care Units (SNCUs).
  - ◆ Plot functional CEmONC and BEmONC facilities using Geographic Information System (GIS) and Access modelling tools to assess to functional CEMONC and BEmONC facilities (travel time to facility)[24] and take appropriate actions to improve access. *The action will help to rationalize or improve the cluster hospital concept.*
  - ◆ *Consider developing maternal and neonatal intensive care units in JDWNRH and other hospitals for immediate KMC for low-birth-weight babies (2-2.5 kg). (Also discussed under the domain on care of small and sick newborn and the domain on health service delivery under Outcome 2).*
  - ◆ Define service standards for EmONC services based on the Revised global guide on EmONC monitoring and planning and build capacity of facilities with equipment, supplies and skilled health care providers as per standards *(see also under the priority area quality of care)*. These standards should be included in the midwifery standards.
  - ◆ Establish a sustainable system of competency-based training programme to build the competencies of the doctors, nurses and health assistants in the revised EmONC standards using the *Druk Sockhop* Programme platform. The training should be part of basic training and in-service training of doctors, nurses and health assistants. *The course should be made mandatory for all health workers prior to posting in hospitals.*

24 GeoHealth group / Institute of Global Health - http://www.unige.ch/geohealth

Priority area iii. ACCESS TO QUALITY EMONC AND CAESAREAN SECTION

- Continue with the standardized 'Low Dose High Frequency' mode of training for the entire team of providers at the point of care on selected topics as needed (such kind of training helps to keep the skills of providers updated and help to monitor the quality of services). In the long run, it could be merged with the *Druk Sockhop* programme as the programme covers in-service training as well.
- Revise the current EmONC reporting system to establish a separate system or integrate into routine reporting system to monitor quality indicators in relation to EmONC

☐ *Strengthen PHCs to provide emergency obstetric and newborn life support as included under Druk Sockhop programme.*

KEY ACTIONS to reduce unnecessary caesarean section

☐ *Introduce Robson's classification system as a gold standard to monitor and compare CS rates at facility level in a standardized, reliable, consistent and action -oriented manner.*

- Ensure accuracy in recording indications and other details.
- Train all staff including doctors and staff responsible for patient information system (should become part of e-PIS training).

☐ *Focus on implementation of WHO recommendations on non-clinical interventions to reduce unnecessary caesarean sections including creating awareness about unnecessary caesarean sections at individual and community level (during ANC).*

Priority area iv. MATERNAL AND NEWBORN CARE FOR A POSITIVE POSTNATAL EXPERIENCE

Current practices and coverage

- PNC coverage of mother and newborn within 24 hours of delivery for mothers and newborns is 69.5% and 69.9% respectively (NHS 2023). Many districts such as Haa, Gasa, Chhukha, Punakha and Thimphu reported coverage of less than 60% PNC mother and newborn within 24 hours of delivery; lowest is in Haa followed by Gasa.
- PNC coverage of mother and newborn at 3 days as recommended (as per MCH handbook and accelerating maternal health policy) and the coverage is 79.1% and 78.6% (explanation for discrepancy between check-up for mother and baby is due to errors in reporting).
- Number of mothers and newborns discharged after 24 hours from the health facility- the data is not available but the policy states keeping the mother and baby after normal delivery for at least 24 hours. The PNC coverage within 24 hours gives some indication of the coverage.
- As noted under intrapartum care, the coverage of immediate breastfeeding after birth is high (81.8%). Lactation management unit is operational in JDWNRH and Regional Referral Hospitals. It was expanded to cluster hospitals too, but is reported that they are not very functional.

Full complement of postnatal services is reported to be provided to mothers and infants till six weeks after delivery as per the recommended schedule of visits in the MCH handbook and accelerating maternal health policy (PNC schedule is first visit within 24 hours, 3rd day, 1-2 weeks, 3 weeks and six weeks); however, few areas need strengthening as listed below.

KEY ACTIONS FOR MATERNAL CARE 0-7 days post-partum

Improve the standards of postnatal care

- ☐ *Update the postnatal care section of midwifery standards and MCH handbook based on WHO's recommendations of 2022 and build capacity to implement the same.*
- ☐ *Reinforce the policy of keeping mother and newborn in the facility for 24 hours.*

Priority area iv. MATERNAL AND NEWBORN CARE FOR A POSITIVE POSTNATAL EXPERIENCE

- ☐ *Develop breastfeeding and lactation management guidelines and build capacity of providers. Consider expanding and improving the quality of the current lactation management clinic, operational in national and regional Referral Hospitals and cluster hospitals to district hospitals in collaboration with Nutrition Unit (as planned under the 13th FYP)*

Maternal assessment

- ☐ *Conduct physiological assessment of the mother before discharge from the hospital and at every postnatal visit and take appropriate action (as per the midwifery standards and MCH handbook)*
- ☐ *Screen for maternal mental health especially post-partum depression and intimate partner violence by referring to ANC notes and assessments.*
- ☐ *Check haemoglobin and take appropriate action.*

Preventive care

- ☐ *Counsel for family planning including for implant (if it is available in country) and provide an appropriate method.*
- ☐ *Reinforce prevention messages as in the midwifery standards and MCH handbook and provide MMS as per national guidelines on nutrition.*
- ☐ *Promote use of traditional medicine as applicable.*
- ☐ *Advice to continue PNC visits of mother and newborn as per national guidelines (1-2 weeks, 3 weeks and 6 weeks (as per MCH handbook and accelerating maternal health policy).*

KEY ACTIONS FOR NEWBORN CARE (0-7 days)

Nurturing care

Importance of nurturing care immediately after birth was discussed under intrapartum care.

- ☐ *Continue nurturing care through continued skin-skin care and exclusive breast feeding.*

Priority area iv. MATERNAL AND NEWBORN CARE FOR A POSITIVE POSTNATAL EXPERIENCE

Newborn assessment

- ☐ *Practice all assessments and elements of essential newborn care as per updated national guidelines on essential newborn care.*
- ☐ *Screen for congenital anomalies, hearing and eye abnormalities as per the capacity of the facility and staff capability and take appropriate action.*
- ☐ *Screen for hyper-bilirubinaemia by transcutaneous bilirubinometer at discharge as per the capacity of the facility and staff capability and take appropriate action.*
- ☐ *Initiate developmental activities and responsive care based on national C4CD+guidelines.*

Follow up actions

- ☐ *Promote family and community-based actions for newborn care as advised in the Bhutan Every Newborn Action Plan (BENAP).*

KEY ACTIONS TO SUPPORT WOMEN WHO HAD STILLBIRTHS OR EARLY NEONATAL DEATHS AND THEIR FAMILIES

- ☐ *Provide compassionate, sensitive and comprehensive postnatal care for mothers who have experienced stillbirths or early neonatal deaths.*
  - ◆ Initiate lactation management as early as possible as well as care of breasts.
  - ◆ Counsel on birth spacing and the importance of the same.
  - ◆ Continue treatments for any maternal condition as needed.
  - ◆ Build the skills of providers to provide quality, respectful and supportive bereavement care.
- ☐ *Promote reporting of deaths under the CRVS by education of providers and families.*

Priority area: v. CARE OF SMALL AND SICK AND NEWBORNS

Current situation

The BENAP had identified several gaps in care of sick and small newborns that included poor capacity of district hospitals and general hospitals to manage sick and small newborns (in terms of critical equipment, critical drugs, trained providers, transportation of the baby, etc.). There are no standardized SNCUs in district hospitals. NICUs are available in regional referral and national referral hospitals.

KEY ACTIONS:

The actions listed below are for facility-based births as majority of the deliveries are institutional deliveries, taking place in district/referral hospitals. The BENAP clearly lists care to be provided at various levels of health care.

The following highlight critical actions are for ensuring survival and optimal development of small and sick newborns.

Improve standards of care small and sick newborns

- ☐ *Develop national standards and guidelines for care of small and sick newborns including creating a data base and guidelines for follow up care in hospital and care at home (as planned). The guidelines should include a section on referral and care during referral.*
- ☐ *Build capacity of the system and capability of providers to implement the same.*

Referral

- ☐ *ALL SMALL AND SICK NEWBORNS should be referred to appropriate facilities as per the BENAP and guidelines. CARE SHOULD BE TAKEN NOT TO SEPARATE THE MOTHER AND BABY to continue nurturing care.*
- ☐ *Establish maternal and newborn intensive care units in JDWNRH and other hospitals as per the cluster hospital plan (also discussed under EmONC and also under and the domain on health service delivery under Outcome 2).*

Priority area: v. CARE OF SMALL AND SICK AND NEWBORNS

ENSURE THE FOLLOWING ACTIONS ARE CARRIED OUT IN ALL THE FACILITIES

In SNCUs /NICUs

- ☐ *Initiate/continue kangaroo care even in NICUs.*
- ☐ *Continue breast feeding if the baby is sucking or feed expressed breast milk.*

In NICUs

- ☐ *Provide probiotic supplementation in preterm and low birth weight newborns to prevent necrotising enterocolitis and sepsis.*
  - ◆ Probiotics should be included under the essential list of medicines (See domain on essential quality supplies and commodities under Outcome 2).
- ☐ *Provide supplementation with calcium phosphate, zinc, multivitamins and iron, routinely to all preterm and low birth weight infants.*
  - ◆ The formulation with the above nutrients should be included in the essential list of medicines *(See also domain on essential quality supplies and commodities under Outcome 2).*
- ☐ *Provide special attention to newborns with congenital anomalies.*
- ☐ *Provide topical emollient therapy for preterm infants to prevent infection.*

Follow up care

- ☐ *Establish comprehensive high risk follow up clinics and KMC ambulatory clinics in all hospitals where there is a paediatrician.*
- ☐ *Establish family centred models of care with focus on feeding, infection prevention, nurturing and responsive care (see health system domain health care service delivery for RMNCAH).*

Priority area vi. QUALITY OF MATERNAL AND PERINATAL CARE

Current situation

The nation-wide EmONC needs assessment in 2018 identified several gaps with regard to infrastructure, availability of critical drugs, skills of providers, referral mechanisms, etc. The Maternal near miss reviews were conducted in the referral hospitals 2018-20 identified quality of maternal health care, capacity building and referral mechanisms as main gaps. The assessment of quality of ANC done in 2022 also indicated poor quality of ANC services as described under priority area ANC.

In addition to the existing quality assurance actions described under Outcome 2 on health service delivery, the following actions are critical for improving maternal and perinatal care.

KEY ACTIONS:

Update the current standards for maternal and perinatal care for improving the quality of maternal and perinatal services

- ☐ *Review and update existing Midwifery standards to be aligned with WHO new recommendations on ANC, Intrapartum and Postnatal care (PNC) and the revised BENAP and other newborn care guidelines with the involvement of obstetricians and neonatologists.*
  - ◆ Enable the implementation of the standards through capacity building of providers by inclusion in the current training of MBBS and nursing and public health professionals.
  - ◆ Conduct annual review of EmONC focal and use the opportunity to update the providers on the above key actions.

Strengthen the ongoing quality improvement mechanisms for maternal and perinatal care

- ☐ *Strengthen maternal 'near miss case reviews' as part of the process of assessing quality of obstetric care within institutions, to begin with in referral hospitals and subsequently in district hospitals and general hospitals.*
- ☐ *Introduce neonatal 'near miss case reviews' as part of addressing quality of newborn care.*
- ☐ *Improve the quality of the Maternal, Perinatal and Neonatal Death and Surveillance and Response (MPNDSR)*

Priority area vi. QUALITY OF MATERNAL AND PERINATAL CARE

- Review the MPNDSR guidelines for its alignment with WHO's implementation tools for MPNDSR reviews including definitions and the processes followed[25]. Expand the review to include stillbirths.
- Build capacity for MPNDSR review by creating a pool of experts by adapting the WHO SEARO training materials. The capacity of the institutional MPNDSR committees also should built.
- Strengthen the MPNDSR reviews at district level with reviews being conducted at specified intervals. Capacity should be built at district level by the national experts. The information from the districts should be reviewed jointly by the districts and national focal points annually.

☐ *Strengthen ongoing monitoring of congenital anomalies (in collaboration with WHO SEARO) and take actions on preventive care.*

- Develop capacity for national monitoring of congenital anomalies and creating a national data base.

Domain	CARE FOR HEALTH AND DEVELOPMENT OF CHILDREN

Importance in life course:
Nurturing care protects the children from the worst effects of all adversity and produced life long and inter-generational benefits for health, productivity and social cohesion. Nurturing comprises of five interrelated and indivisible components: good health, adequate nutrition, safety and security, responsive care giving and opportunities for early learning. Nurturing care starts in utero with ANC care and quality intrapartum care giving a positive birthing experience, minimising mortality and morbidity in mother and newborn, enabling mothers to provide nutrition, safety and care to their newborns. Nurturing care happens when every interaction with a child is maximised and good nutrition is provided to help the child to thrive to the full potential (human capital). Breast feeding and supplementary nutrition also improves weight for age and prevents stunting and reduces infant mortality. Appropriate stimuli from care givers is critical for full development of sensory functions such as hearing, seeing, speaking and understanding the environment.

25 WHO, UNICEF. Maternal and Perinatal Death Surveillance and Response: **Materials to Support Implementation**

Domain	CARE FOR HEALTH AND DEVELOPMENT OF CHILDREN

During infancy and toddlerhood- a period of considerable plasticity- nurturing care interventions can mitigate consequences of adversities and improve resilience, developmental trajectories and human capital. The emotional relationship between infants and parents develops during infancy and through responsive care giving infants learn to modulate their behaviours and emotions to accommodate to household situations. The responsive care also helps to build self-regulatory skills that lays the foundation for future relationships and increase agency during adolescence. Health, nutrition and safety continue to be important aspects of care giving.

During the pre-school ages, while plasticity continues at a reduced level, early brain development consolidates. With appropriate support, the negative effects associated with developmental delays or disabilities can be minimized or overcome. Self-regulatory skills and prosocial behaviours increase during this period. Health, nutrition and safety continue to be important during infancy and toddlerhood and pre-school ages – in preventing malnutrition, obesity, infections, unintentional injuries, etc.

The age group 5-9 years, called the middle childhood, is the period of transition from dependent pre-school period to young individuals with an active role in their family and community structures. This is the period when the child is more prone to unintentional injuries and nutritional problems (leading to stunting or obesity) and developmental problems in terms of cognition, language and social skills manifest. Nurturing care and stimulating environments can minimize the risks. Most children are in primary school and the quality of schooling and the nutritional meals provided in schools affect their physical growth. This age group is also a 'sensitive period' because of the active role that experiences play in brain development. Positive and negative experiences affect mental health development.

Early Childhood Care and Development (ECCD) has been a core area of the FYPs of the RGOB since the Ninth FYP and continues to be a priority in the 13th FYP. Recognizing the importance of nurturing care and development, the MOH has initiated the C4CD plus programme (beginning in ANC period) and screening of children for development using Bhutan Child Development Screening Tool (BCDST) which have been incorporated in the MCH handbook. The MOE has developed policies and standards for ECCD including for those with disabilities. In its latest policy directive "Accelerating Mother and Child Health Program- A thousand golden days initiative", early childhood development is a focus especially of children from disadvantaged families.

Domain	CARE FOR HEALTH AND DEVELOPMENT OF CHILDREN

PRIORITY AREAS

- ☐ **CARE FOR HEALTH AND DEVELOPMENT OF INFANTS AND TODDLERS (0-2 YEARS)**
- ☐ **CARE FOR HEALTH AND DEVELOPMENT OF PRE-SCHOOL CHILDREN (3-4 YEARS)**
- ☐ **CARE FOR HEALTH AND DEVELOPMENT OF CHILDREN 5-9 YEARS (MIDDLE CHILDHOOD)**

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF INFANTS AND TODDLERS (0-2 YEARS)

Current practices and coverage

- Postnatal coverage is recommended within 1-2 weeks, 3 weeks and six weeks (as per MCH handbook and accelerating maternal health policy) (in addition to the visits within 24 hours and 3 days as listed under postnatal care 0-7 days). The coverage at 1-2 weeks is 93% for mothers and 92.3% for newborns. Similarly, the coverage at 3 weeks for mother and newborn is 92.6% and at 6 weeks is 88.1% for mother and 87.8% for newborn (NHS 2023).
- Number of newborns who have had exclusive breast feeding at 0-5 months is 69.4%.
- 36.4% children under five suffered from fever, 17.7% from diarrhoea and 2.5% from acute respiratory infections and percentages seeking care for fever, diarrhoea and acute respiratory infection are 60.9%, 52.6 % and 64.7% respectively (NHS 2023).
- 53.2% children with diarrhoea were treated with ORS, 42.5% with Zinc and 33% were treated with ORS and Zinc (NHS 2023).
- Of concern is the feeding and fluids given during diarrhoea: While 37.6% gave more fluids, 35.1% gave the same amount as usual and the rest gave less amount of fluids. Similarly, extra food was given only by 18.9% while 34.4% maintained the same amount of food. The rest reduced the amount of food or did not provide any food. It appears that more health education is needed with regard to management of diarrhoea.
- 17.9 % of the children under five are stunted and 8.8% children under five are underweight (NHS 2023). 5.1% children under five are wasted. Prevalence of stunting among 12-23 months is 19% (second in prevalence).

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF INFANTS AND TODDLERS (0-2 YEARS)

- Children 1-2 years also experienced some form of violent discipline particularly physical and psychosocial, which could affect growth and development and emotional development, which could affect growth and development as well as mental and emotional development (NHS 2023).
- Proportion of children 12-23 months who had all basic vaccination is 94.4% and all those who received age appropriate vaccination is 89.0% and pneumococcal vaccine 1 is 95.4%, 2 is 99.9% and 3 is 97.4% (NHS 2023).
- RGOB has already implemented elements of nurturing care through its Early Childhood Care and Development (ECCD) related policies under MOE and MOH that include health check-up, nutritional supplements such as Sprinkle and opportunities for early learning[26].
- The MOH's C4CD plus programme and screening for child development using the BCDST have been incorporated in the MCH handbook and tracked through the MCH tracking system. The C4CD plus programme, implemented in the MCH clinics by health workers, focusing on care givers and their children till the age of three. The support for this intervention was by Save The Children. Based on the evaluation findings, in collaboration with Save the Children, the MOH has developed a guide for health assistants – "C4CD plus". All the health assistants have been trained. The C4CD plus course module is also incorporated in pre-service training of diploma in community health since 2023. The MOH also has developed guidelines for feeding.
- Data on coverage of ECCD, sprinkle programme and C4CD programme is not available.
- Recently there is some evidence of Lead poisoning among children especially from southern Bhutan. A nationwide survey of Lead levels among children is being undertaken currently by MOH with support from UNICEF. No guidelines have been developed for screening for Lead. There is also evidence of other toxins such as Mercury, Cadmium and Arsenic in the environment but there is no evidence of children being affected.

26 MoE. UNICEF: An evaluation of the early childhood care and development programme in Bhutan.2020.

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF INFANTS AND TODDLERS (0-2 YEARS)

KEY ACTIONS

- As listed under the section on importance in life course, the period of infancy and toddlerhood covers rapid brain development and development of emotional relationship with the parents and self-regulatory skills. Health and nutrition are critical for reducing mortality and morbidity and malnutrition.
- The following key actions are to prevent, mitigate and improve developmental trajectories and human capital.

Maternal care

- ☐ Continue postnatal care of mother as per MCH handbooks with emphasis on visits at 1-2 weeks, 3 weeks and 6 weeks (within 24 hours and 3 days is covered under the domain on maternal and perinatal care)

Update the current standards for quality of child care

- ☐ *Review and update the following strategies and guidelines as well as related training and educational materials:*
- ☐ *National Child Health Strategy*
- ☐ *IMNCI guidelines*
- ☐ *Infant and Young Child Feeding guides*

Sustain and improve nutritional status

Guided by the lactation management guidelines, Infant and young child feeding and IMNCI guidelines,

- ☐ *Improve nutrition by continuing exclusive breast feeding for six months, initiating supplementary feeding and fortifying the complementary foods with Sprinkle as recommended. Emphasise the importance of feeding and fluids during diarrhoea.*
- ☐ *Strengthen quality and coverage of supplementary nutrients such as Sprinkle and Vitamin A.*
- ☐ *Sustain regular growth monitoring through weight and height for age and head circumference measurements for identification of infants and toddlers failing to thrive- malnutrition and stunting.*

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF INFANTS AND TODDLERS (0-2 YEARS)

Reduce preventable childhood mortality and morbidity

Guided by IMNCI guidelines,

- ☐ *Sustain high level coverage of age appropriate vaccination as per national schedule.*
- ☐ *Reduce preventable mortality and morbidity as per national IMNCI guidelines:*
- ☐ *Recognise and manage cases of acute respiratory infection early as well as prevention and management of diarrhoea through continued breast feeding and hygienic preparation of foods.*
- ☐ *Strengthen management of diarrhoea in the community especially increased provision of fluids and food.*
- ☐ *Improve the coverage of deworming every six months.*
- ☐ *Educate families about the importance of hand washing, improving water supply and sanitation in the home as a key intervention to prevent childhood morbidities.*
- ☐ *Introduce screening for lead poisoning and appropriate action.*

Strengthen and improve quality of nurturing care

Nurturing care is critical to optimize cognitive, motor. Language and socioemotional development. Besides good nutrition and good health, the other elements of nurturing care framework such as promotion of responsive care giving, early learning interventions, safety and security are critical for early childhood development. Safe and clean environment are also critical for health and development.

- ☐ *Sustain the C4CD activities and screening for development using the BCDST in MCH clinics, promoting parental involvement and skills in recognition of developmental problems.*
- ☐ *Improve the quality of screening by BCDST, its coverage and identification and management of developmental problems such as impaired vision, hearing, autism and cerebral palsy.*
- ☐ *Improve and scale up the current system of follow up of preterm and low birth weight babies as well as children with disabilities up to 2 years of age.*

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF INFANTS AND TODDLERS (0-2 YEARS)

- ☐ *Enhance the skills of parents and families in security and safety of infants and toddlers, particularly protection from unintentional injuries, physical and emotional abuse, environmental hazards, etc. and providing first aid.*
- ☐ *Sustain the education of parents and families on the importance of nurturing care.*

Care of children with special needs

- ☐ *Develop collaborative social protection mechanism for children with disability, underprivileged, underserved and vulnerable children identified under the Child Protection Act 2011. Follow up care should be part of the mechanisms established.*

Improve Infant death surveillance and response and reporting

- ☐ *Improve quality of infant death investigation, surveillance and response.*
- ☐ *Strengthen the capacity of the health system to provide quality, respectful, bereavement care to parents and family.*
- ☐ *Promote reporting of deaths under the CRVS by education of providers and families.*

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF PRE-SCHOOL CHILDREN (3-4 YEARS)

Current practices and coverage

- Currently not much information is available on the health status of this age group except for morbidities, published in the Annual Health Bulletin. Diarrhoea, dysentery and respiratory infections are the most common morbidities, but as stated earlier, it is difficult to estimate the proportion affected. Data from NHS 2023 on prevalence and health seeking behaviour of children with diarrhoea and acute respiratory infection is provided under the domain on health and development of children 0-2 years.
- Maximum prevalence of stunting and wasting is in this age group (NHS 2023).

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF PRE-SCHOOL CHILDREN (3-4 YEARS)

- Anaemia among children 6-59 months is a concern as 44.7% children are anaemic with 21% suffering from moderate anaemia. Anaemia causes delayed growth and development and increases the risk of infection (iron deficiency in particular).
- Children 3-4 years also experienced some form of violent discipline particularly physical and psychosocial, which could affect growth and development as well as mental and emotional development (NHS 2023).
- Children 3-4 years are provided access to early childhood development through ECCD services. As per annual education sector statistics, there are 525 ECCD centres in the country (442 government and 83 private).
- Health care and nutrition services such as growth monitoring, MMS, deworming, Vitamin A supplementation, treatment of childhood illnesses, etc. are expected to be provided in the health facilities. However, there are concerns about attendance of well children in health facilities, especially with regard to nomadic and mobile populations.
- Currently there is no health check-up in ECCD centres as the children are expected to receive the same from health facilities and is also not included in the currently developed annual school health screening.
- Proportion of 24-35 months children who received all basic vaccinations is 100%, age appropriate vaccinations is 82.6% and MMR 2 is 95.2% (NHS 2023).

With appropriate support at this age, many young children can overcome or lessen effects of developmental delays or disabilities experienced earlier in life. Protection from sexual and emotional abuse are critical in protecting children's brains, improving early development and laying the foundation for lifelong health and well wellbeing.

KEY ACTIONS:

Policy support

- ☐ *Develop a guideline regarding mandatory health check-up in collaboration with MOESD for all the children who attend the ECCD centres.*

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF PRE-SCHOOL CHILDREN (3-4 YEARS)

Health and nutrition

Though the national policies on child health and the MCH handbook lays down the type and frequency of visits for health and nutrition care in facilities, the number of children 3-4 years visiting health facilities for preventive care is fewer. The following key actions are to fill the current gaps.

- ☐ *Use every opportunity of contact with family to promote health and nutrition care of 3-4 year old children*
  - ◆ Sustain and scale up proven health interventions to reduce preventable mortality and morbidity such as management of acute respiratory infection and diarrhoea. Emphasise the importance of additional fluids and food during diarrhoea.
  - ◆ Promote feeding as per recommendations in the MCH handbook and monitoring height and weight for age.
  - ◆ Promote continued use of Sprinkles in the food, Vitamin A supplementation and Deworming as prescribed in the MCH Handbook.
- ☐ *Sustain high coverage of age-appropriate vaccination.*
- ☐ *Initiate screening for lead poisoning and other toxins such as arsenic, mercury, etc. as per national recommendations and take appropriate actions.*
- ☐ *Sustain the C4CD activities and screening for development and establish a two way communication mechanism with the ECCD centres to assist children with problems.*

Coverage and quality of services in ECCD centres

KEY ACTIONS FOR MOESD

- ☐ *Improve the quality and coverage of ECCD centres. Some of the recommendations are from the evaluation of the ECCD programme referred to under the domain on 0-2 years.*

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF PRE-SCHOOL CHILDREN (3-4 YEARS)

- ☐ *Develop standards for ECCD centres that includes safety and security concerns such as prevention of unintentional injuries, protection from sexual and emotional abuse, access to safe and clean water and sanitation and hygienic practices.*
- ☐ *Build capacity of ECCD facilitators in the use of BCDST, identification of children with cognitive disability (most common)[27] and other forms of disability and taking appropriate action. Actions should involve parents.*
- ☐ *Build capacity of ECCD facilitators to provide first aid to children attending the centres.*
- ☐ *Institute screening for mental health in collaboration with the PEMA Centre.*
- ☐ *Develop a system of sharing information between health facilities and ECCD centres (as listed under the section above on health and nutrition)*
- ☐ *Improve education of parents and families on the importance of nurturing care and screening for development and participation in ECCD centres as listed above, through WhatsApp groups and other social media.*
- ☐ *Emphasise the importance of preventing any form of physical and psychological violence.*

Care of children with special needs

- ☐ *As listed under care of infants and toddlers. develop collaborative mechanisms for childhood development and social protection with special focus on children with special needs.*

Improve child death surveillance and response and reporting

- ☐ *Improve quality of child death investigation, surveillance and response.*
- ☐ *Strengthen the capacity of the health system to provide bereavement care to parents and family.*
- ☐ *Promote reporting of deaths under the CRVS through education of providers and families.*

27 MOH. National child health strategy.

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF CHILDREN 5-9 YEARS (MIDDLE CHILDHOOD)

Current practices and coverage

- Currently not much information is available on this age group except for morbidities and mortality, published in the Annual Health Bulletin. One of the major causes of death among children 5-9 years is injuries. Diarrhoea, respiratory tract infections, anaemia and accidents are few of the causes of morbidity. Few cases of Streptococcus A infection is reported. It is difficult to estimate the proportion affected.
- Children 5-9 years also experienced some form of violent discipline particularly physical and psychosocial, which could affect mental and emotional development (NHS 2023).
- The age group of children 5- 9 years (middle childhood) also have least scheduled health check-ups except for visits for boosters to previous immunizations as per national immunization schedule. Hence, the contact with health system is minimal.
- The coverage and quality of primary school health services is not at par with middle and senior school health services and differs between districts. Recently annual school health screening guidelines for all levels of schools including primary schools were developed and approved in 2023. The guidelines are to guide the schools to conduct comprehensive school health screening.
- No data on coverage of immunization for this age group is available in the NHS.

KEY ACTIONS:

As mentioned under the importance in life course, the age group is more prone to eating disorders, infections and unintentional injuries. In addition to the ongoing nurturing care, children in this age group need to develop resilience, self-esteem and socio-emotional skills and wellbeing.

The following key actions are recommended for improving the quality and coverage of school health services, particularly in primary schools as per the guidelines on annual school health check-up.

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF CHILDREN 5-9 YEARS (MIDDLE CHILDHOOD)

Strengthening collaboration between MOH and MOESD for school health in primary schools

- ☐ *Based on the guidelines for collaboration between MOH and MOESD for regular and structured school health check-up in primary schools, collaboratively between MOH and MOESD, orient the concerned MOH and MOESD officials.*
- ☐ *Promote comprehensive health promoting schools (as recommended in the National Health Promotion Strategic Plan of 2015-23). This involves a whole school approach where besides students and teachers, parents and communities will be involved and educated on health and behavioural issues affecting this age group.*

Preventive health care

- ☐ *Institutionalize preventive care for behavioural and biomedical screening*
  - ◆ Promote physical activity for improving physical, psychological and mental capabilities.
  - ◆ Promote education on safety and security especially prevention of injury.
  - ◆ Screen for rheumatic heart problems, vision, obesity, malnutrition, anaemia, etc.
  - ◆ Institute screening for mental health of children by mental health counsellors in collaboration with the PEMA Centre. Screening for any form of physical and psychological violence should be part of the process.
  - ◆ Promote nurturing care and prevention of any form of physical and psychological violence.
  - ◆ Screen for lead poisoning and other toxins such as arsenic, mercury, etc. as per national recommendations and take appropriate actions.
- ☐ *Consider initiating life-saving skills education in schools.*
- ☐ *Provide immunization as per national schedule.*
- ☐ *Continue nutrition supplements such as iron and folic acid that are provided once a week in schools.*

Priority area: CARE FOR HEALTH AND DEVELOPMENT OF CHILDREN 5-9 YEARS (MIDDLE CHILDHOOD)
Care of children with special needs *As listed under care of infants and toddlers, develop collaborative mechanisms for childhood development and social protection with special focus on children with special needs.*

Domain	CARE FOR HEALTH AND WELL BEING OF ADOLESCENTS

Importance in life course:
Adolescence is one of the critical points across the life course when the transition from childhood to adulthood takes place. It is marked by puberty, associated growth and sexual maturation, neural reorganization and expanded cognitive capacities, social and behavioural changes, increased autonomy and decision making and awareness about gender norms. This phase in life also presents emergent risks and conditions such as NCDs, mental health conditions, injuries, risks of tobacco and alcohol use, adolescent pregnancy, STIs and HIV and increased vulnerability to Gender Based Violence (GBV). Risks of adolescent pregnancy to the mother and off spring and their future growth is well known. Anxiety and depression are more common in older age adolescents while behavioural disorders are more common among young adolescents[28]; suicide is more common older adolescents. Though vulnerability to violence is high during adolescence, with appropriate inputs key drivers of violence can be pre-empted. Early menarche and delayed marriages expand the period of adolescence (as in the case of Bhutan) and places adolescence centrally in the creation of health and human capital. Thus, the life course trajectories of health capital and wellbeing are largely set during adolescence and calls for a broader set of interventions starting with SRH and addressing evidence-based interventions that address mental, psychosocial and neurocognitive development. Investments in adolescents will help to achieve the triple dividend- improving health and wellbeing now, enhancing throughout the life-course; contributing to the health and well-being of future generations.

28 WHO. Mental health of adolescents- Key facts November 2021.

Domain	CARE FOR HEALTH AND WELL BEING OF ADOLESCENTS

Current practices and coverage

Adolescents 10-14 years

- Currently not much information is available on this age group except for morbidities reported in the Annual Health Bulletin. Besides diarrhoea and respiratory infection, genital ulcers, urethral discharge and Streptococcus Group A infection (very few), depression and anxiety were reported in the Annual Health Bulletin 2022.
- Children 10-14 years also experienced violent discipline particularly physical and psychosocial, which could affect mental and emotional development (NHS 2023).

Adolescents 15-19 years

- As mentioned in chapter 1, the adolescent fertility rate is 18.6 (NHS 2023). The lowest prevalence of CPR is among adolescents (married) is 43.5% (NHS 2023). The unmet need for contraception is higher among adolescent is 13.7% which is higher compared to other age groups (NHS 2023).
- Annual Health Bulletin 2022 reported genital ulcers, urethral discharge, abortions and pregnancy related complications in this age group. Anxiety and depression were also reported.
- Reports from the PEMA Centre show that during the last three years, 6-7 suicides happen in a month.
- The data on GBV shows that the proportion of women affected by non-partner violence (physical and sexual) is highest among the 15-19 years (NHS 2023).
- The prevalence of anaemia among adolescent girls is 15-19 years is 36.5 %t with moderate anaemia 16.2% (NHS 2023).
- AFHS clinics have been established in district hospitals with one of the health workers holding additional responsibility. These clinics also received referrals from schools, colleges and youth centres.
- Various studies have reported high prevalence of sexual activity among adolescents, including those below 14 years (evident also from the data on admissions for pregnancy related complications discussed in the earlier section), teenage pregnancies, lower use of contraception and higher unmet need for contraception compared to other age groups, higher incidence of

Domain	CARE FOR HEALTH AND WELL BEING OF ADOLESCENTS

HIV, and limited knowledge on HIV prevention and sexuality among students underscores the need for enhanced information and health services for adolescents[29]. The above findings also raise issues about the quality of Comprehensive Sexuality Education (CSE) in schools and the barriers in using Adolescent Friendly Health Services (AFHS) in health facilities.

Ensuring positive development and holistic well-being of adolescents

'Adolescent well-being' is defined as the support, confidence and resources to thrive in contexts of secure and healthy relationships[30].

HIGH LEVEL ACTIONS AIMED AT POLITICAL LEADERSHIP

- ☐ *Improve understanding about adolescence as a time for second opportunity for developing the full potential of human capital and the triple dividend from investing in adolescence. Providing optimal social, emotional and nutritional environments in adolescence has the potential to reverse or reduce early life disadvantage and benefits across the life course and into next generation.*
- ☐ *Broaden the understanding of the importance of adolescent period, in determining the trends in emerging issues such as NCD, mental health and reproductive, maternal, newborn and child health and to include adolescence in the related policies and strategies.*
- ☐ *Facilitate support for widening access to age-appropriate and quality CSE in schools which will further support healthy behaviours among adolescents especially the younger adolescents.*

KEY ACTIONS FOR HEALTH AND WELLBEING (EARLY ADOLESCENCE) (10-14 YEARS):

The actions listed below for early adolescents are also applicable to older adolescents also. They have been listed separately as these are most relevant for young adolescents and not much attention is paid in the current adolescent health programmes.

29 UNFPA. Thematic report on young people's dynamics in Bhutan 2020.

30 Defined by the WHO, the PMNCH and UN Major Groups for Children and Youth.

Domain	CARE FOR HEALTH AND WELL BEING OF ADOLESCENTS

Preventive actions

- ☐ *Create awareness about sexual development, sexuality, prevention of pregnancy and sexual abuse at home and in schools through CSE to prepare the very young adolescents to make informed decisions about sexual health and lay the foundation for positive SRH outcomes.*
- ☐ *Create awareness about sexual violence, especially about perpetrators within the family. This ACTION IS CRITICAL to prevent impact on their mental health and sexual and reproductive health outcomes.*
- ☐ *Improve access of young adolescents (10-14 years) by expanding the scope of the current AFHS services and access to STI and HIV services through appropriate referral mechanisms.*
- ☐ *Improve access to HPV vaccination among girls and boys.*
- ☐ *Provide a safe and supportive environment at home and in schools for young adolescents as young adolescents are most vulnerable to violence.*
- ☐ *Target parents and communities with information listed above on key issues and actions to gain their involvement and support; thus, improving the effectiveness of the programmes. Family nurturance is an important intervention in human capital building. Importance of avoiding physical and psychological violence for mental and emotional wellbeing of the child should be part of the information as well as limited screen time.*

KEY ACTIONS FOR HEALTH AND WELLBEING 15-19 YEARS:

Majority of the actions listed below are also applicate to the age group 10-14 years.

Preventive actions

- ☐ *Mental health: Prevent and provide early and effective treatment for mental health problems:*
  - Through school- based interventions by strengthening the mental health component of the school health.
  - Through AFHS clinics by expanding the scope of the clinics in referral hospitals and district hospitals to include mental health services under the guidance of the PEMA Centre.

Domain	CARE FOR HEALTH AND WELL BEING OF ADOLESCENTS

- At home by encouraging families to create protective and supportive environments are important to prevent mental health problems. This requires creating awareness about the implications of mental health problems for achieving the full potential and mental health in adulthood.

☐ Nutrition: *Identify, manage /refer nutritional deficiencies and obesity through school health services and AFHS clinics. Currently these issues do not receive much focus.*

- Introduce BMI measurement as part of regular check-up and initiate weight management activities including education on implications for NCD; screen anaemia and other micronutrient deficiencies and provide appropriate management especially for girls.

☐ Unintended pregnancy: *Prevent unintended pregnancy through age appropriate sexuality education, awareness creation about services for pregnancy, provision of adequate contraceptives for adolescents and education about prevention of early marriage.*

☐ *Screen for vision and hearing problems and provide appropriate treatment*

☐ *Prevent infections:*

- Through timely provision of tetanus toxoid and HPV vaccinations as per national immunization schedule.
- Screen for rheumatic fever and take appropriate action.

☐ *Prevent unintentional injuries and accidents through education in schools.*

☐ *Promote awareness and participation in preconception care clinics through school and AFHS platforms.*

Universal coverage of school health and AFHS

☐ *Review and revise the scope of the current school health programme to include relevant actions listed preventive actions (above).*

- Review the coverage and quality of school health programmes and its frequency in primary and secondary schools in collaboration with MOESD, in the context of the recent guideline on annual school health check-up.
- Promote comprehensive health promoting schools (as recommended in the National Health Promotion Strategic Plan of 2015-23) (described under the domain on health of children 5-9 years).

Domain	CARE FOR HEALTH AND WELL BEING OF ADOLESCENTS

- ☐ *Improve the quality, coverage and scope of AFHS and make the facilities more adolescent responsive*
  - ◆ Review the programme standards, manuals, scope of services, age groups covered (especially 10-14 years) and geographical coverage of functioning services and quality.
  - ◆ Build capacity of AFHS focal to be adolescent competent to carry out the updated list of tasks and incorporate adolescence as a core topic in the curriculum of MBBS and nursing and public health.
  - ◆ Strengthen the services and supplies and educational materials to reflect the change in scope of services as well as information on healthy life style.
  - ◆ Ensure adequate financing for implementation of the adolescent responsive package.

Intersectoral partnerships

Collaborations between MOH and various departments /divisions of MOESD and Commission for Religious Organizations of Bhutan need to be strengthened to achieve the following.

KEY ACTIONS TO IMPROVE ADOLESCENT HEALTH AND BEHAVIOUR THROUGH MOESD

- ☐ *Promotion of health and wellbeing in schools through the concept of 'health promoting schools'.*
- ☐ *Improve the quality and coverage of CSE in schools as it is a key preventive action as listed above, monitor the quality of implementation of the same and behavioural changes, introduce gender-transformative approach as part of the comprehensive sexuality education to raise awareness about harmful gender norms (if not already included).*
- ☐ *Improve CSE for out of school youth through the programme coordination and youth division of MOESD.*
- ☐ *In collaboration with integrated youth centres, strengthen the referral of participants to health facilities for care.*

Domain	CARE FOR HEALTH AND WELL BEING OF ADOLESCENTS

- ☐ *In all facilities, create awareness about sexual exploitation, abuse and harassment and the ACT related to the same, especially among youth in underage and unprotected unions, youth in vulnerable occupations, youth at risk of trafficking, youth in conflict with the law, etc.*
- ☐ *Create awareness about violence and where to seek care and the importance of following the advice provided (details provided under the domain on GBV).*
- ☐ *Collaborate with Y-PEER in colleges and Druk Adolescents' Initiatives for Sexual Awareness Network (DAISAN) in schools for increasing awareness about SRH, gender equality, GBV, youth-adult relationships, etc.*

KEY ACTIONS TO IMPROVE ADOLESCENT HEALTH AND WELL-BEING THROUGH COMMISSION FOR RELIGIOUS ORGANIZATIONS

- ☐ *In collaboration with the Commission for Religious Organizations and the Central Monastic body, review the current life skills-based sexuality education and revise as needed.*

SEXUAL AND REPRODUCTIVE HEALTH CARE AND RIGHTS

The domains covered under this group include:

- ☐ **FAMILY PLANNING /BIRTH SPACING CARE**
- ☐ **INFERTILITY CARE**
- ☐ **COMPREHENSIVE ABORTION /MISCARRIAGE CARE**
- ☐ **CARE OF REPRODUCTIVE ORGAN CANCERS**
- ☐ **HEALTH CARE FOR SURVIVORS OF GENDER BASED VIOLENCE**
- ☐ **INTEGRATED SERVICES FOR SRH AND HIV AND STI**

Domain	FAMILY PLANNING/BIRTH SPACING CARE

Importance in life course:
Family planning is a life-saving intervention as it reduces mortality and morbidity from high risk pregnancies and unintended pregnancies. In addition, by helping to space births, family planning helps to reduce stillbirths, neonatal, infant and child mortality as well as low birth weight, preterm birth and stunting. Thus, family planning improves the health of women and children. The role of family planning in promoting health of adolescents, along a critical period in life course, was discussed earlier. By reducing the number of births, family planning helps to reduce the risk of folate depletion. Use of barrier methods, prevents transmission of STIs, HIV, viral hepatitis, etc. Family planning is considered an important intervention in ensuring health in later stages of life as with fewer pregnancies, parents can focus on the health and development of newborns and children to their full potential.

Low fertility situations also suggest that the duration /period of childbearing is shortened but the period of contraceptive use becomes longer as the childbearing period remains the same. Research and experience from low fertility countries have shown that the proportion of pregnancies unplanned is highest when fertility transition progresses and that family planning programmes are ever more needed and strengthened to provide quality services to meet the diversified needs of the people in reproductive health and family planning[31,32].

It is also a right of every individual to decide on their reproductive goals.

Current practices and coverage

- The CPR for modern methods of contraception has increased (70.1%) and the unmet need for family planning has reduced significantly (8.5%) (NHS 2023 and under Chapter 1).
- The most commonly used modern contraceptive is injectable (22.1%), followed by male condoms (18.4%), female sterilization (4.5%) and oral contraceptive pills (6.8%).
- Demand satisfied for modern methods of contraception is 84.8%.

31 Bongaarts J, Hodgson D. Fertility transition in the developing world.2022.

32 Gu B. Family planning program under low fertility: where to go. China population and development studies (2021) China Population and Development Studies (2021) 5:61–68.

Domain	FAMILY PLANNING/BIRTH SPACING CARE

- Implant - a long acting spacing method has recently been introduced in the country.
- Family planning is important in the context of early puberty and late marriages, that leads to a prolonged period of exposure to unprepared sex and unintended pregnancy and probably increased risk of induced abortions.
- Data on menarche is not available.

KEY ACTIONS:

- ☐ *Sustain the coverage of family planning services, choices and improving quality (especially follow up of discontinuing clients)*
- ☐ *Broaden the choice to include effective and long-acting reversible contraceptive methods for spacing. The current coverage of IUCD is low; active promotion of implants should be done. Besides effectiveness in preventing pregnancy, the method is recommended for adolescents and unmarried.*
- ☐ *Improve linkages with STI and HIV services by screening for STIs and HIV in family planning clinics and take appropriate action. Integration with family planning is described under the domain of integrated services for SRH and HIV and STIs.*
- ☐ *Provide competency-based training in family planning to medical students.*
- ☐ *Expand the family planning guidelines to include services for LGBTIQ (PWD already included).*
- ☐ *Strengthen advocacy on importance of continuing family planning in low fertility settings to support women's reproductive intentions and choices, spacing of births for better maternal and neonatal and child survival and health.*

Domain	INFERTILITY CARE

Current practices and coverage
Current status

- Progress has been made with introduction of treatment protocols and development of facilities for intrauterine insemination- IUI- in referral hospitals; guidelines have been developed.
- Further progress requires changes in laws related to sperm/egg donation, surrogacy and establishing full infrastructure for in-vitro fertilization.
- During discussions with specialists, success with the various treatments for infertility was reported.

KEY ACTIONS:

- ☐ *Review the current infertility services for quality improvement and success rates.*
- ☐ *Review the current guidelines and update as per global guidelines including for in-vitro fertilization (IVF).*
- ☐ *Develop IVF services in JDWNRH and expand to regional referral hospitals in a phased manner.*
  - ◆ Develop guidelines for the procedure and service.
  - ◆ Build infrastructure needed for the initiation of in-vitro fertilization.
  - ◆ Build capacity of staff (consider international training).
- ☐ *Develop legislative and regulatory frameworks for regulating Assisted Reproductive Technology including those related to sperm and egg donation, surrogacy, etc.*
- ☐ *Initiate studies on prevalence of primary and secondary infertility.*
- ☐ *Strengthen screening and prevention of STIs as these are major causes of infertility.*

Domain	COMPREHENSIVE ABORTION /MISCARRIAGE CARE

Importance in life course
Medical Termination of Pregnancy (MTP) is restricted in Bhutan. However, there is evidence of induced abortions, presented as complications. Complications of abortions is a major cause for secondary infertility and also other complications such as ectopic pregnancies and chronic pelvic inflammatory diseases. The contribution of abortion to maternal deaths is not known.

Current practices and coverage
No data is available on abortions from in NHS 2023.

KEY ACTIONS:

- ☐ Review of existing guidelines for MTP.
- ☐ Gather information on the reasons for MTP (induced within the country or outside the country).
- ☐ Advocate for expanding current indications for MTP to include foetal anomalies with Judiciary and parliamentarians.
- ☐ Ensure easy access to safe abortions within the limits of the existing MTP guidelines.
- ☐ Strengthen post-MTP care by informing women about likely complications and actions to be taken and counsel for family planning and provide appropriate methods to prevent immediate conception (return to fertility is usually within three weeks of abortion).

Domain	CARE OF REPRODUCTIVE ORGAN CANCERS

Importance in life course
Early sexual debut in adolescence when the cervix is immature and is more susceptible to HPV infection, the primary cause of cervical cancer and its persistence increases the risk of cervical cancer in later stages of life. However, prevention is possible through the life course approach to prevention and control through HPV vaccine in early adolescence, regular screening for cervical cancer during adulthood and treatment of precancerous lesions.

Increased birth weight, obesity during adolescence and pregnancy, smoking, etc. are associated with increased risk of breast cancer.

Domain	CARE OF REPRODUCTIVE ORGAN CANCERS

Current practices and coverage

Cervical cancer

- 87.1 % of women aged 30-49 years (NHS 2023) have been screened for cervical cancer and is more than the global target; the data on second test is not available (Global target is 70 % of women are screened by 35 years and again by 45 years).
- Screening is done using HPV DNA test.
- Immediate treatment is provided for those with pre-cancerous lesions.
- With regard to the global target for HPV vaccination among girls (90 %), it is reported that the country has achieved more than the global target among girls 10-13 years (98.9%). Boys between 10-13 years have also been immunized (98.9%). School platforms are used for providing vaccination.
- Treatment of women with disease is reported to be more than 90% (above the global target 90%)

Breast cancer

- As per cancer incidence and mortality report in Bhutan (2014-2018), the age adjusted rate of breast cancer per 100,000 population is 6.8. However, the program is still waiting for the new data 2019-2022.
- 54.34 % of women have been screened for breast cancer (NHS 2023).

Prostate cancer

No of new cases registered for prostate cancer annually per 100,000 is 2.0 (as reported in the cancer incidence and mortality report of 2014 to 2018).

Domain	CARE OF REPRODUCTIVE ORGAN CANCERS

The following key actions cover three main cancers- cervical cancer, breast cancer and prostate cancer.

i. CERVICAL CANCER

The key actions recommended below are in the context of the achievements stated above.

KEY ACTIONS:

- ☐ *Continue focus on cervical cancer prevention by sustaining the achievements of global indicators related to primary and tertiary prevention and strive to achieve the global indicator related to screening of eligible women. Plan for risk based cervical screening based on screening history.*
- ☐ Strengthen the screening programme with HPV DNA test, aiming to achieve the global target of 70 % of women are screened by a high-performance test by age 35 years and again by 45 years.
  - ◆ Ensure regular supplies for screening as well as referral for treating precancerous lesions.
  - ◆ Follow WHO recommendations on those tested positive and negative on HPV DNA test[33].
- ☐ In addition to primary prevention through HPV vaccination, develop a comprehensive prevention strategy linking CSE, delaying age of sexual activity, use of condoms, avoiding tobacco use and male circumcision.
- ☐ *Strengthen treatment facilities for those diagnosed with cervical cancer.*
- ☐ *Conduct studies to measure the impact of HPV vaccination while continuing to advocate for single doses of HPV Vaccine based on recent evidence from other countries.*
- ☐ *Draft lessons learned from Bhutan's experience on cervical cancer elimination.*

ii. BREAST CANCER

Screening through self-breast examination and mammograms were initiated but the coverage is not universal.

33 WHO SEARO. Regional implementation framework for elimination of cervical cancer as a public health problem 2021-2030.

Domain	CARE OF REPRODUCTIVE ORGAN CANCERS

KEY ACTIONS:

- ☐ *Continue breast cancer awareness through promotion of self-screening, clinical examination and mammograms as part of the national flagship programme on cancer prevention and appropriate management*[34].
- ☐ *Strengthen the skills of health assistants for clinical breast examination and referral to minimize the delay in treatment.*
- ☐ *Strengthen infrastructure for mammograms and build capacity for quality screening and accurate reporting.*
- ☐ *Create awareness in the community about breast cancer along with cancer of the cervix and where to seek care to minimize the pre-diagnostic delay.*

FOR BOTH CERVICAL AND BREAST CANCER

- ☐ *Further strengthen the cervical and breast cancer screening activities through continued collaboration with the 'Cancer Screening in Five Continents Project' (CanScreen5)* of the International Agency for Research on Cancer (IARC). The project covers cervical cancer, breast cancer and colorectal cancer[35] (currently a clinician is being trained under the project).

iii. PROSTATE CANCER

Prostate cancer is not recognized as an important cancer in Bhutan, maybe because of under diagnosis.

KEY ACTIONS

- ☐ *Develop a strategy for prostate cancer screening and management , based on global latest evidence.*
- ☐ *Build on the data from the data from the cancer registry by actively following up with surgical units in the country.*
- ☐ *Widen the availability of Prostate-specific Antigen (PSA) test up to district levels.*

34 MOH. Bhutan Cancer Control Strategy 2019-25.

35 https://canscreen5.iarc.fr . The project is designed to assist countries to collect and use cancer screening data in a consistent manner on a regular basis using an effective information system.

Domain	CARE OF REPRODUCTIVE ORGAN CANCERS

Importance in life course

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- ☐ *Conduct studies to measure the impact of HPV vaccination while continuing to advocate for single doses of HPV Vaccine based on recent evidence from other countries.*
- ☐ *Draft lessons learned from Bhutan's experience on cervical cancer elimination.*

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- ☐ *Strengthen the skills of health assistants for clinical breast examinatio n and referral to minimize the delay in treatment.*
- ☐ *Strengthen infrastructure for mammograms and build capacity for quality screening and accurate reporting.*
- ☐ *Create awareness in the community about breast cancer along with cancer of the cervix and where to seek care to minimize the pre-diagnostic delay.*

FOR BOTH CERVICAL AND BREAST CANCER

- ☐ *Further strengthen the cervical and breast cancer screening activities through continued collaboration with the 'Cancer Screening in Five Continents Project' (CanScreen5) of the International Agency for Research on Cancer (IARC). The project covers cervical cancer, breast cancer and colorectal cancer (currently a clinician is being trained under the project).*

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- ☐ *Build on the data from the data from the cancer registry by actively following up with surgical units in the country.*
- ☐ *Widen the availability of Prostate-specific Antigen (PSA) test up to district levels.*

Domain	HEALTH CARE /SERVICES FOR SURVIVORS OF GENDER BASED VIOLENCE

Importance in life course

Violence occurs across the life course, starting from childhood when children are exposed to violence such as psychological aggression and/or physical punishment. Longitudinal impacts of violence are serious, as it has implications for psychological distress and well-being, involvement in crime and deviance and educational and social attainment. In homes where a mother is a victim of GBV places children and adolescents on a potential trajectory of violence including intimate partner violence. Vulnerability to violence is high in adolescence and poses a considerable threat to their safety and wellbeing over the course of their lives. In addition to injury or death, violence during adolescence negatively affects adolescent brain development and health and social development as well as increasing the likelihood of poor educational outcomes, early and unwanted pregnancy, STIs, mental health disorders, difficulties in emotional and social norms, risk taking, substance abuse, and obesity. There are multiple intersections between violence against children and against women, including risk factors and social norms, occurring intergenerationally. Interventions to prevent violence during adolescence can pre-empt drivers of violence in their present and future lives and prevent violence against children and women.

Current practices and coverage:

- With regard to physical violence, 82% of children 1-14 years experienced some form of violence with 60.1 % children experiencing physical violence (18.3% severe form) and 73.5 % experiencing psychological violence in the one month prior to the survey (NHS 2023).
- Women who reported physical violence by partner in the is 16.4 % with 6.9 % reporting sexual violence. (2023) 39.7 % women have experienced some form of physical, sexual, emotional and economic related violence (NHS 2023). The data shows that the proportion of women affected by violence physical and sexual is highest among the 15-19 years and 20-30 years and is higher with regard to partner violence.
- MOH has developed guidelines for managing victims of GBV in health facilities and designated focal persons have been appointed in district hospitals.
- JDWNRH runs a One Stop Crisis Centres (OSCC) and plans to expand to regional hospitals.

Domain	HEALTH CARE /SERVICES FOR SURVIVORS OF GENDER BASED VIOLENCE

KEY ACTIONS:

Sustain, strengthen and expand the current health sector response to GBV

- ☐ *Sustain the widely implemented health services response to GBV among women and adolescents (including sustaining the forensic focal responsibilities) and expanding its scope to include children as evident from the high level of physical and psychological violent discipline experienced by children and young adolescents.*
  - ◆ Review the current implementation of the programme on health sector response to GBV, with special focus on management and coverage of adolescent survivors, efficiency and quality of referrals to forensic focal or specialists.
  - ◆ Enhance the capability of the health system to provide quality care to survivors, especially adolescents and children. This includes an adequate number of skilled providers at district, referral hospitals and JDWNRH.
  - ◆ Consider expansion of services to other general hospitals.
  - ◆ Improve availability of data on GBV against adolescents, particularly younger adolescents and also violence against children.

Strengthen collaboration between key institutions

- ☐ *With the development of the PEMA Centre and its mandate on care of survivors of GBV, define referral mechanisms between the health centres providing care to survivors and the PEMA Centre.*
- ☐ *Strengthen referral systems between Multi-Sectoral Task Force (MSTF) and health facilities at district level especially in districts that have reported high levels of violence.*
- ☐ *In collaboration with NCWC, create opportunities for collaboration to tackle multiple forms of violence, better coordination between health services, school-based strategies and parenting programmes. Review the current guidance in schools on identification and management of survivors of GBV and referrals.*
- ☐ *Continue collaboration with Respect, Educate, Nurture and Empower Women (RENEW) and NCWC in sensitively managing victims of GBV.*

Domain	HEALTH CARE /SERVICES FOR SURVIVORS OF GENDER BASED VIOLENCE

Create awareness about sexual exploitation

- ☐ *Create awareness about sexual exploitation, abuse and harassment in schools and colleges as also recommended under care for health and well-being of adolescents.*

Review the current Child Care and Protection Act

- ☐ *Review the current Child Care and Protection Act. The Act refers very briefly to sexual exploitation under prostitution.*

Domain	INTEGRATED SERVICES FOR SRH AND HIV AND STI

Importance in life course

Pregnancy and childbirth are critical periods in life course when the risk of transmission of STIs and HIV to foetus or newborn is high, which may cause a stillbirth or congenital malformation and infection in the newborn with subsequent problems. Hence, integrating STIs and HIV services into pregnancy and childbirth are critical for prevention. The risk of STIs and HIV are high during adolescence and also adulthood and linking SRH services with STI and HIV services will mitigate the impact of the infections. Family planning services provide opportunities for linking SRH and HIV/STI services and also for prevention of transmission through dual protection with condoms. High risk sexual behaviours initiated in adolescence are likely to influence behaviour in subsequent stages of life. Integration of SRH and HIV linkages across the life course is important to prevent infections in various stages of life. Linkages work both ways, by integrating STI and HIV issues into SRH programmes across the life course and by integrating SRH issues into STI and HIV programmes. Such integration should contribute to mitigating the impact of the HIV epidemic.

Domain	INTEGRATED SERVICES FOR SRH AND HIV AND STI

Current practices and coverage

- SRH and HIV and STI services are not well integrated except in the case of screening during pregnancy and prevention of mother to child transmission. The services are also not well integrated with family planning services.
- The lack of availability of SRH services for HIV positive and LGBTIQ community is a concern.
- The draft of the National AIDS control strategy 2024-29 recognises the need for integration.
- The NHS did not collect any information on knowledge about HIV or coverage of pregnant women tested with triple antigens.

KEY ACTIONS:

- ☐ *Review the current National AIDS Control Programme strategy for the following:*
  - inclusion of SRH services especially for People Living with HIV and STIs and high-risk behaviour groups.
  - inclusion of promotion of prevention of STIs and HIV in women of reproductive age when they visit the clinics for their own needs or for child health under the section on Prevention of Mother to Child Transmission (PMTCT).
- ☐ *Review the current guidelines on maternal health and adolescent to incorporate STI and HIV screening and services as needed (family planning guidelines include screening for STI and HIV).*
- ☐ *Strengthen integration of SRH and STI and HIV services*
  - Actively promote family planning counselling and referral services in HIV care and treatment centres and STI clinics.
  - Strengthen the scope of screening for STIs other than syphilis in ANC and for STIs and HIV in family planning clinics.
  - Integrate PMTCT of HIV into maternal health guidelines.
- ☐ *Promote dual use of condoms in family planning clinics, HIV care and treatment centres and STI clinics.*

Domain	SRH CARE FOR AGEING POPULATION

Importance in life course

Ageing is a critical period in life course. In the life course model, ageing is placed in the context of the attainment of peak function earlier in life. The rate of decline in function depends on the peak attained in earlier life and conditions in later life. Early identification and appropriate management of diabetes, hypertension, mental health issues and weight gain will help to reduce risks in later life and improve health in old age. Similarly, during childhood and youth, positive lifestyle promotion in schools and communities and development of emotional skills is likely to reduce NCDs, mental and SRH problems later in life. *The paradigm shift of sexual activity in later life is driven by desire and libido than by procreation due to the physiological changes of age.*

The above statements point to the importance of health and well-being from birth through childhood and adolescence and adulthood that determines the physical capacity and health during ageing.

Current status

- The proportion of population aged 60 years and above is projected to increase to 27% by 2050.
- A National Policy for Senior Citizens was launched in 2023. The Policy covers a range of issues including health and wellbeing (briefly covers SRH) and mental health.
- A Royal Society for Senior Citizens was established in 2011 to cater to the issues of the increasing ageing population in Bhutan.
- Hypertension, diabetes and cancers are the main morbidities reported[36].

36 MOH. Annual health bulletin 2022.

The strategy will ONLY focus on SRH aspects of ageing population.

KEY ACTIONS:

- ☐ *Develop an action plan to support and expand the objective related to SRH services for elderly under the National Policy for Senior Citizens. Explore the possibility of redefining the comprehensive package of services to include SRH (redefining the package is a recommendation in the draft national health policy 2021).*
- ☐ *As discussed in earlier sections under various domains, consider adding and reiterating the need for health and well-being during pregnancy, childhood and adolescence as critical actions for maintaining physical and mental capacity during old age, in the National Policy for Senior Citizens.*
- ☐ *Initiate screening for reproductive cancers among ageing population (prostatic cancer in males, breast cancer in women, etc.)*
- ☐ *Diagnose and manage sexual and reproductive health problems of the ageing population including issues related to menopause.*
- ☐ *Advocate on the need to give attention to SRH issues of ageing population and advocate for starting Healthy Ageing clinics starting with referral hospitals and district hospitals with plans to expand to PHCs, in collaboration with the geriatric care activities. Such clinics will provide opportunities for screening for reproductive organ cancers, sexual and reproductive health problems, etc.*

b. RMNCAH+ A CARE IN HUMANITARIAN SITUATIONS/PANDEMICS

Domain	RMNCAH +A CARE IN HUMANITARIAN SITUATIONS/ PANDEMICS
Importance in life course During disasters, besides the direct impact of mortality and morbidity on the reproductive age group, children, adolescent and ageing population, interruption of services can affect physical and mental development of children and adolescents and their health. Mental health of people across all ages, especially children and adolescents are affected by humanitarian situations and pandemics as was evident from the COVID-19 pandemic. Such impact can lead to problems in critical junctures in the life course as was discussed in the earlier sections. Such situations also widen inequity and gender disparity.	
Current status • During the COVID-19 pandemic, the RGOB ensured that there was minimal disruption of RMNCAH services. • Provided counselling, especially to adolescents, those who were depressed and victims of GBV. • Also provided appropriate services in person, ensuring infection prevention. • All ECCD services could not be continued; however, efforts were made to connect with parents through digital media. • The MOH's Health Emergency and Disaster Contingency Plan, based on the Disaster Management Act 2013, focuses on building capacity for disaster preparedness and response. *Reproductive health is mentioned briefly under building community capacity.* • The National COVID-19 response plan also did not include RMNCAH; however, despite the omissions in the national policy/strategy, the RMNCAH response plans developed by MOH and partners did ensure that there was minimal disruption of services.	

Domain	RMNCAH +A CARE IN HUMANITARIAN SITUATIONS/ PANDEMICS

KEY ACTIONS:

- ☐ *Integrate of RMNCAH +A care in national disaster contingency and health emergency plans, as visualised in draft National Health Policy 2021. RMNCAH should be integrated into the following activities mentioned in the National Health Policy (draft 2021):*
  - ◆ Business continuity plans: Include RMNCAH+A care and these should be periodically reviewed and tested (as mentioned in the health plan).
  - ◆ Supply systems: Ensure regional stores and supply systems have adequate critical supplies for RMNCAH+A care to supply to overcome the disruption of supplies especially in remote and difficult to access areas.
  - ◆ Surge capacities: Ensure adequate surge capacities and human resources to respond to emergencies, particularly those with skills in provision of RMNCAH services.
  - ◆ Formal allocation of funding: Allocate funds in the regular budget for implementation of contingency plans during humanitarian crisis with special allocation for RMNCAH+A.
- ☐ *Build capacity for Minimum Initial Services Plan (MISP) that covers adolescents and adults and capacity +A services and its impact (as was done during COVID).*
- ☐ *Monitor disruption of RMNCAH+A services including services for survivors of GBV and supplies and mental health services and take appropriate action.*
- ☐ *Continue MPNDSR activities as during humanitarian crisis/epidemics, increase in maternal, neonatal and childhood deaths are noted.*
- ☐ *Initiate dialogues on climate change and its impact on RMNCAH and ageing population and incorporate strategies in national contingency plans as well as in response plans.*

c. POPULATIONS WITH LIMITED ACCESS TO RMNCAH +A SERVICES TO IMPROVE UNIVERSAL COVERAGE

The domains covered under this section include:

- ☐ ***RMNCAH+A CARE FOR VULNERABLE POPULATIONS SUCH AS PWD, LGBTIQ***
- ☐ ***RMNCAH+A CARE FOR REMOTE AND DIFFICULT TO ACCESS POPULATIONS***
- ☐ ***RMNCAH +A CARE FOR URBAN POPULATIONS***

Domain	RMNCAH + A CARE FOR VULNERABLE POPULATIONS

Current status

i. PWD

- RGOB has identified 14 categories of vulnerable populations as described in Chapter 1.
- MOH has developed a five-year national strategy and action plan 2017-21 for disability prevention and rehabilitation[37].
- 21% of the children had some kind of disability in terms of gross motor skills, fine motor skills, vision, hearing, speech, cognition, behaviour and/or seizures. While the majority of the children were found to have mild disabilities, 3 % had more moderate and severe disabilities such as , latter included cognitive, gross motor skills, behavioural, speech, hearing and vision impairments. These disabilities in children affect their full potential. Besides maternal and perinatal factors, rising incidence of accidents, NCD related disabilities, etc. are on the increase.
- The family planning guidelines includes a section on PWD.

37 MOH. Five year national strategy and action plan 2017-21 for disability prevention and rehabilitation.

Domain	RMNCAH + A CARE FOR VULNERABLE POPULATIONS

ii. LGBTIQ

- A consultation was held with the LGBTIQ community in collaboration with NGOs such as RENEW and few of the needs were identified. In addition, a needs assessment study done on LGBTIQ community identified some of the difficulties faced by the community such as accessing STI tests. Sigma and discrimination towards the community are major barriers in accessing services. The community would like access to human replacement therapy and sex reassignment surgery, etc[38].

Special attention to developmental needs of children with disability has been referred to in the *domain related to health and well-being of children.* Care of the vulnerable groups are mentioned, as relevant, under various domains.

This section focuses on PWD and LGBTIQ.

i. PWD

KEY ACTIONS:

The key actions listed below are limited to RMNCAH.

- ☐ *Prevention of congenital malformations was discussed under maternal and perinatal care.*
- ☐ *Develop a package for SRH and child health needs of people with disability (maternal, newborn, child and adolescent) building on the existing recommendations. Build capacity for the same.*
- ☐ *Improve access to health facilities by creating enabling infrastructure in the facilities (such as ramps) and within facilities (for example, modified examination tables). Also, a finding of SDI survey.*
- ☐ *Improve access to information and communications as appropriate for PWD.*
- ☐ *Strengthen collaboration with NGOs that are working with PWDs.*
- ☐ *Promote self-care for selected interventions as per the national guidance if available (see details under self-care in Outcome 3).*

38 RENEW, IPPF, DFAT: A need assessment study on LGBTQI+ community in Bhutan 2022.

Domain	RMNCAH + A CARE FOR VULNERABLE POPULATIONS

ii. LGBTIQ

KEY ACTIONS:

- ☐ *Identify SRH needs of LGBTIQ communities building on the information gathered by NGOs such as RENEW and organizations of LGBTIQ and organise more consultations with the community.*
- ☐ *Based on the consultations, identify services needed for the LGBTIQ community, based on the technical capability available in the country.*
- ☐ *Building on past experience with such services and. initiate selected services in JDWNRH that are friendly, free of stigma and discrimination.*
- ☐ *Promote self-care for selected interventions as per the national guidance if available (see details under self-care in Outcome 3).*

Domain	RMNCAH+A CARE FOR REMOTE AND DIFFICULT TO ACCESS POPULATIONS

Current status

- A study on access to remote and difficult to access areas was done by the community health department of JDWNRH. Access was not an issue except during rains or floods. Pregnant and elderly did find problems in reaching facilities due to the difficulty in climbing and this could be a barrier in accessing services and monitoring foetal heart.
- No strategy or plan currently exists for improving access to care of remote and difficult to access populations.

Domain	RMNCAH+A CARE FOR REMOTE AND DIFFICULT TO ACCESS POPULATIONS

KEY ACTIONS:

- ☐ *Map the access to MNCH services, particularly emergency care In remote and difficult to access areas. Based on the assessment, consider the following:*
- ☐ *Consider developing Midwife-led continuity of care units with facilities for iCTG and ambulance services.*
  - The unit staff should be skilled in performing a host of RMNCAH services such as basic EmONC, family planning, cervical cancer screening, etc. As mentioned under human resources (Outcome 2), the MHPC need to change the regulations to enable the practice at least in remote areas.
- ☐ *Consider developing maternity waiting homes, based on a need's assessment, to see whether the maternity waiting home will solve the problem of common causes of maternal and neonatal mortality and morbidity.*

The following should be considered:

- The facility chosen as maternity waiting home should be located mid-way between the community and a facility that can provide at least basic EmONC.
- It should have regular supply of electricity and water.
- The facility can function as an outreach clinic site.
- The facility should be under the responsibility of the community health worker of the area.
- Identify mode of transport in case of emergency and which facility to be referred to (midwife-led continuity of care centres could be an option for referral).

- ☐ *Promote self-care for selected interventions as per the national guidance (see details under self-care in Outcome 3).*

Domain	RMNCAH+A CARE FOR URBAN POPULATIONS

Current status

- A HEALTHY CITY ACTION PLAN: a multi-stakeholder framework for action 2022 - 2026 for THIMPHU THROMDE is available. One of the strategic objectives is to provide protection for women, children and the physically challenged and eliminate physical, mental and emotional abuse and violence against women and children. The document does not provide information on health facilities.
- Currently there is not accurate data on the unreached populations in the urban area, particularly in Thimphu and Phuentsholing.
- The urban population is difficult to reach through current outreach activities.

KEY ACTIONS:

- ☐ *Review of the current plans for urban health and smart city initiative. Develop a plan for the four Thromdes- Thimphu, Gelephu, Phuentsholing and Samdrup Jongkhar.*
- ☐ *Map out settlements and map facilities available and expand access to RMNCAH services.*
- ☐ *Promote health education across the life course as recommended in the national health promotion policy and also about water and sanitation.*
- ☐ *Disaggregate the health survey data for urban population.*

d. CROSS CUTTING ENABLING SERVICES THAT ARE CRITICAL FOR WELL-BEING AND DEVELOPMENT

THE DOMAINS COVERED UNDER THIS SECTION INCLUDE:

- ☐ ***NUTRITION***
- ☐ ***IMMUNIZATION***
- ☐ ***MENTAL HEALTH***
- ☐ ***NON-COMMUNICABLE DISEASES***

Domain	NUTRITION

Importance in life course

AImportance of nutrition in health and well-being across the life course has been discussed under various domains. Tackling malnutrition in all its forms requires that nutritional needs are addressed at key life stages through the entire life-course. Nutritional insults during certain life stages can have both short-term and long-term implications, including intergenerational effects as has been discussed under various domains. Adopting a life-course approach to nutrition requires understanding of key nutritionally sensitive life stages and the linkages between them, addressing multiple forms of malnutrition during the life-course simultaneously (e.g. undernutrition during pregnancy and early children and later overweight). Addressing nutrition through the life-course also requires a more holistic view and integrated provision of health and nutrition services by health-care systems in all settings.

Current coverage:

- Anaemia among non- pregnant women is reported to be 40.9% with 20.1% with moderate anaemia (NHS 2023).
- Highest level of anaemia was among children 6-59 m, followed by non-pregnant and adolescents.
- Anaemia among pregnant women, adolescent girls and pregnant women. Significant proportion are moderately anaemic as noted under specific domains.

Domain	NUTRITION

- Among deficiencies of micronutrients among adolescents and women, Vitamin D tops the list followed by ferritin and folic acid deficiency. Ferritin deficiency is more than 40% and is considered a public health issue. Ferritin and folic acid deficiency also has serious implications during pregnancy and lactation has serious implications for the growth of the foetus and breastfeeding newborn.

KEY ACTIONS:

- ☐ *Aligned with the national nutrition policy, reinforce the need for adequate nutrition during pregnancy, postnatal period, infancy and toddlerhood.*
- ☐ *Improve some of the ongoing critical interventions such as breast feeding immediately after birth, exclusive breast feeding for six months, nutritional care of preterm and low birth weight including supplements (as noted under care of sick and small newborns under the domain maternal and perinatal care), complementary feeding, MMS as appropriate, growth monitoring and assessment and iron supplementation during childhood (as needed) and adolescence.*
- ☐ *Monitor the adequacy of iron in MMS to prevent anaemia in pregnancy and childhood.*
- ☐ *Strengthen activities that prevent obesity especially during childhood and adolescence through healthy eating habits and exercises.*

Domain	IMMUNIZATION

Importance in life course

The importance of age-specific immunization at critical stages in life has been emphasized under various domains. A life course approach to immunization means that persons should receive all recommended vaccine doses along their life course to reap the maximum benefits of preventing vaccine-preventable diseases at different ages, across generations, and within their communities.

Current coverage

- Percentage of children aged 12-23 months who received age appropriate vaccinations is 99.4%.
- Percentage of children aged 24-35 months who received all basic age-appropriate vaccination is 100%.

Domain	IMMUNIZATION

KEY ACTIONS:

- ☐ *Sustain the high coverage of childhood immunization, improve the coverage of HPV vaccination among adolescents, tetanus toxoid during pregnancy and adolescence and other immunizations as per the national policy on immunization.*

Domain	MENTAL HEALTH

Importance in life course

A life course influence of mental health across development, from in utero exposures through childhood and adolescence was discussed under various domains. Nurturing care has a positive influence not only on development but also on mental development. Poor mental health at young age affects an individual's mental health through the life course and can negatively impact human capital development. School going age and early adolescence are at highest risk of experiencing mental health issues. Screening for early identification of mental health issues to provide timely intervention will minimize the risk of developing mental health conditions during late adolescence and adulthood.

Current coverage

- Mental health services are integrated in all the health facilities across the country. Clinical counsellors are placed in 10 Dzongkhag hospitals. General Duty Medical Officers and Chief Medical Officers provide mental health care services. The plan is to place a clinical counsellor in every hospital. Health centres also collaborate and coordinate services with school counsellors, spread across 149 schools in the country. Health workers from PHCs were trained in providing basic services in 2023. The plan is to train all the health workers at the PHCs on identification, brief intervention and referral. The Psychiatric Department of the JDWNRH is the only specialized mental health service provider in the country with 4 psychiatrists and clinical counsellors (source: the PEMA Secretariat).
- As pointed out earlier under domains on childhood and adolescence, a significant number of children have experienced psychological violence which could affect their emotional development and mental health.
- The prevalence of severe depression is 2.1% among men and 2.5% among women (NHS 2023)

Domain	MENTAL HEALTH

- The prevalence of attempted suicide is 1.2% among men and 2% among women.

Current coverage

- Mental health services are integrated in all the health facilities across the country. Clinical counsellors are placed in 10 Dzongkhag hospitals. General Duty Medical Officers and Chief Medical Officers provide mental health care services. The plan is to place a clinical counsellor in every hospital. Health centres also collaborate and coordinate services with school counsellors, spread across 149 schools in the country. Health workers from PHCs were trained in providing basic services in 2023. The plan is to train all the health workers at the PHCs on identification, brief intervention and referral. The Psychiatric Department of the JDWNRH is the only specialized mental health service provider in the country with 4 psychiatrists and clinical counsellors (source the PEMA Secretariat).
- As pointed out earlier under domains on childhood and adolescence, a significant number of children have experienced psychological violence which could affect their emotional development and mental health.
- The prevalence of severe depression is 2.1% among men and 2.5% among women (NHS 2023)
- The prevalence of attempted suicide is 1.2% among men and 2% among women.

KEY ACTIONS:

- ☐ *Develop a national strategy for preventing /minimising mental health problems during childhood and adolescence, led by the PEMA secretariat as the nodal agency for mental health.*
- ☐ *Focus on mental health during childhood, adolescence, pregnancy and postpartum and elderly as mentioned under the specific domains.*
- ☐ *Institute mechanisms to increase parental involvement in children and adolescents suffering from emotional and mental health problems and emphasise the importance of reducing violent punishment.*

Domain	NON-COMMUNICABLE DISEASES

Importance in life course

Evidence shows that interventions to reduce risk from NCDs should be applied through the life course as discussed under various domains under Outcome 1. As noted under the domains on preconception care and antenatal care, there is increasing evidence that a woman's health and nutritional status before pregnancy is an important predictor of outcomes of her child- health of the child and susceptibility to NCDs later in life. Infancy is an extremely important stage in life for the prevention of NCDs in later life as discussed under the domain of 0-2 years. There is evidence to show that a person's propensity to develop NCDs and obesity may be influenced during foetal development and infancy. Breast feeding not only is important for nurturing care but also plays a critical role in preventing NCDs and vaccinations such as Hepatitis B protects the liver from cancer in later life. Childhood is a formative period for biological development as well as for shaping healthy behaviours. Physical activity and healthy nutrition and screening for exposure to toxins help in prevention of NCDs later in life. Schools provide an opportunity to initiate programmes to obesity through creation of awareness about obesity, substance abuse and its link to NCDs and about preventive care. Adolescent health and development is key to the prevention of adult NCDs. Adolescence is a period in the life course for the initiation of a wide range of healthy behaviours that are associated with the burden of disease in adult life. This approach also marks the strengthening of SRH and its broader linkages to areas within NCDs such as mental health. Adolescence is a period when young people develop habits that will carry over into adulthood and have large implications for their NCD risk. The life course approach to health focuses on prevention and adoption of a life course approach allows identification of markers of risk early as well as phenotypes, with the possibility of nutritional and other lifestyle interventions. The healthy behaviours of adolescent period - healthy nutrition and physical activity- is likely to influence continuing healthy behaviours and reduced substance abuse and improved mental health during adulthood and ageing population. As in adolescent period, mental health needs special attention during adulthood and in older people.

Current practices and coverage

- Prevalence of risk factors such as heavy drinking is 18.4% among males and 7.6% among females (NHS 2023).
- Prevalence of smoking is 21.5% among men and 6% among women.

Domain	NON-COMMUNICABLE DISEASES

- Prevalence of Betel nut chewing is 60.2% among men and 58.7% among women (Betel nut chewing during pregnancy has implications for increasing risk of low birth weight).
- Prevalence of Obesity is 42.2% among men and 49.2% among women (latter increases the risk of NCD in off springs).
- Prevalence of high blood pressure is 32.4 % among men and 27.6% among women but percentage on treatment is significantly low.
- 40% of the population is aware about their raised level of glucose and almost all are taking treatment.
- Significant proportion of people meet WHO recommendations for physical activity.
- Significant proportion of people consume less fruits and vegetables as per WHO recommendations.

KEY ACTIONS:

The domains on preconception care, maternal and perinatal care, childhood and adolescent care already cover key messages to prevent NCDs.

In addition:

- ☐ *Introduce a life course approach to prevention of NCDs in the current national strategy for reducing NCDs.*
- ☐ *Accelerate focus on prevention of obesity under school health.*
- ☐ *Prevention of toxicity due to environmental toxins and screening for heart diseases are already covered under the various domains of childhood.*

Strategic outcome 2: Resilient health systems built to support integrated, people-centred and quality RMNCAH+A services across the life course to all populations to achieve UHC.

Under Outcome 2, t**he strategic domains** are congruent with the health system building blocks to support the delivery of the services across the life course along the continuum of care. Some of the domains have more than one prioritized area to highlight critical actions. Primary health care is identified as the key to achieving UHC and health related SDGs and considered as a cornerstone for sustainable health systems. RMNCAH services are critical components of primary health care. The coverage of RMNCAH+A services is dependent on the functioning of the health system, particularly at the primary level. While relevant health system activities have been covered under each domain under Outcome 1, this outcome covers generic health system actions. Each element of the healthy system is critical for achieving UHC of RMNCAH+A and to ensure that all people receive the health services they need, of sufficient quality, without experiencing financial hardship. Health system strengthening requires a coordinated approach involving strong governance and financing systems, resilient infrastructure, competent and motivated health workforce and access to quality medicines and other technologies. In addition, health information system is vital for decision making and monitoring progress. Though not presented as part of the standard elements of the health system, advocacy and health promotion have been added as they are critical for creating an enabling environment for policy and regulations and for enabling people to increase control over and to improve their health.

Domain	STEWARDSHIP/ GOVERNANCE OF THE HEATLH SYSTEM AT THE NATIONAL AND DISTRICT LEVEL

Current coverage

- District Health Officers were responsible for the district health services under *Dzongda* (district in-charge). Under the revised structure of MOH, the officer is called District Public Health Officer (DPHO), He/she has major responsibility for surveillance and notification of disease outbreaks and in preparedness and response during humanitarian crisis or pandemics. The job functions continue as before with increased focus on implementation of public health programmes including MCH and immunization programmes, monitoring and evaluation, supportive supervision, maintenance of health records and statistics, monitoring adherence to quality, laws and regulations of facilities, liaising with MOH, other sectors in the district, with Chief Medical Officer (CMO), medical officers and health workers and with the community leaders on relevant issues,

- Under the revised structure of MOH, the CMO is responsible for all clinical services in the district including in PHCs and outreach clinics and clinical supervision of staff.
- Currently, there is no RMNCAH technical advisory group at the national or district level to provide technical guidance.
- The Family Health Division has developed monitoring tools for various components of RMNCAH. The tools are not integrated and separate for SRH (includes newborn), child health and adolescents.
- Monitoring tools for SRH status of ageing population is not available.
- Monitoring is done through in-person visits or through on-line discussions.

Health systems governance refers to the processes, structures and institutions that are in place to oversee and manage a country's healthcare system (WHO). Health system stewardship refers to the careful and responsible management of the health system and its functions, well-being of the population, assuring equity and coordinate interaction with the government and society.

The key actions listed below mainly focus on stewardship/governance.

Domain	STEWARDSHIP/ GOVERNANCE OF THE HEATLH SYSTEM AT THE NATIONAL AND DISTRICT LEVEL

KEY ACTIONS:

Capacity building for stewardship and governance

- ☐ *Enhance the capability of at national and subnational levels to carry out stewardship functions with special focus on PHC. PHC oriented health systems are critical for better health outcomes, equity and efficiency.*
- ☐ *Build capacity of the DPHOs to carry out their revised role and responsibilities, especially leadership in surveillance of diseases, quality of services, monitoring data, evaluation, oversight, etc,*
- ☐ *Initiate capacity development of CMOs for managing RMNCAH+A clinical care at all levels of the health system in the district (in the context of the changes in roles and responsibilities of the CMO). Suggest training using WHO SEARO's training manuals on Managing programmes to reduce maternal, newborn and child mortality.*

Coordination and oversight

- ☐ *Develop a coordination mechanism at national and district level.*
  - ◆ Establish a national RMNCAH+A Technical Advisory Group (TAG) and a Technical Working Group at the national level for improving technical guidance for RMNCAH programmes. (Terms of Reference (TOR) to be developed). Besides the NCD division, communicable diseases, immunization, water and sanitation departments under Directorate of Public Health and quality assurance and health financing divisions from Directorate of Health Services, Clinical services under National Medical Services, etc. (ADD as needed). The TAG will have overall oversight responsibility. The terms of reference for both groups need to be developed
  - ◆ Consider developing a RMNCAH TAG at district level aligned to the national level TAG.
  - ◆ Constitute inter-ministerial coordinating committee with MOESD (especially professional council), NCWC, the PEMA secretariat and others as relevant.
  - ◆ Promote multisectoral collaboration especially with MOESD, NCWC, etc. for ECCD, GBV, AFHS, etc.

Domain	STEWARDSHIP/ GOVERNANCE OF THE HEATLH SYSTEM AT THE NATIONAL AND DISTRICT LEVEL

☐ *Strengthen oversight and performance improvement*

- Review the current systems of oversight and performance improvement and develop an integrated RMNCAH monitoring system including RH indicators related to ageing population. The review should include responsible persons and their performance. MPNDSR reviews should be part of the system.
- Build the capacity at the district level (DPHO and CMO) to use the data gathered through routine health information system including District Health Information Software (DHIS 2) for decision making.

Legislation and regulation

☐ *Develop policies (legislative and regulatory) related to private sector engagement in health (see details under the domain on innovative health financing), changes in regulations with regard to midwifery (see under maternal health and the domain on human resources), legislative and regulatory frameworks related to infertility services, MTP, etc. (as discussed under related domains).*

Domain	HUMAN RESOURCES FOR RMNCAH+A

Current coverage

- Health work force of adequate size and skill mix are critical to achieve UHC and health related SDGs. As such Bhutan is short of skilled human resources for RMNCAH which has been worsened by the challenge of retention with the out-migration of the health work force.
- The proportion of doctors/10000 population is 4.64 and nurses/10000 population is 21.07 and proportion of nurses/10000 population as noted in Table 1 (WHO recommended ratio is 33.3 nurses and midwives per 10,000 population). With the rapid out-migration of the health workforce, it is likely that the ratio has worsened.
- The availability of specialist nurses in midwifery and neonatology is very limited.
- Specialist doctors in Anaesthesia are 14 and posted in Referral Hospitals. Nurse anaesthetists (9) provide anaesthesia in Comprehensive EmONC facilities in district hospitals and general hospitals.
- There is only one neonatologist in the country.

KEY ACTIONS:

Increase availability, retention and specialisation of human resources

To improve the availability and retention of competent and regulated health workforce, equitably distributed, to expand access to critical RMNCAH services and optimum primary health care delivery, the following activities will be carried out:

- ☐ *Support the development of National Health Worker Account to identify the types of RMNCAH providers (Specialists, doctors, nurses, nurses with midwifery training and health assistants and those with additional special responsibilities such as AFHS, EmONC and forensic), availability and distribution by facility type.*

  And/ OR

  Map availability of skilled RMNCAH work force and conduct a needs assessment on their current skills in RMNCAH and also in services for ageing population.

Domain	HUMAN RESOURCES FOR RMNCAH+A

☐ *Increase the availability (number) of RMNCAH workforce through:*

- Increased intake capacity of FoNPH and private nursing colleges, adhering to the standards of MHPC.
- Recruitment of retired /not employed health professionals to fill in the vacancies as per rules of Royal Civil Service Commission of Bhutan (rules related to age of retirement will need revision).
- Develop innovative strategies for retention of RMNCAH work force and equitable distribution.

☐ *Optimize the role of health workforce through task shifting:*

- Identify opportunities for task shifting and appropriate providers and enable task shifting by expanding the scope of practice, supported by regulatory changes by MHPC and capacity building.

☐ *Advance the skills of the workforce:*

- Changes in training curriculum of MBBS and nursing public health courses to include the topics listed under various domains such as pre-conception care, adolescent health, family planning, GBV, mental health, care of ageing population, etc. The topics should be presented using the life course and continuum of care approach with emphasis on quality assurance.

- Initiate an accredited course for EmONC for doctors and nurses posted in peripheral facilities as discussed under the domain maternal and perinatal care.
- Continue support to FoNPH for postgraduate degree in midwifery.
- Develop paediatric sub-specialities in critical areas in consultation with MPHPC and KGUMSB.
- Maintain and update skill development by exploring the possibility of rotational posting especially in maternal and perinatal care.

Supportive supervision of RMNCAH taskforce

☐ *Strengthen the supportive supervision of RMNCAH work force in the context of the changes in MOH structural reforms and provide necessary allocation of resources for travel and on-line supervision.*

Domain	HEALTH SERVICE DELIVERY FOR RMNCAH+A

Priority areas

i. RMNCAH INFRASTRUCTURE
ii. QUALITY OF RMNCAH+A CARE
iii. HEALTH SERVICE DELIVERY MODELS
iv. USE OF DIGITAL PLATFORMS FOR DELIVERY OF RMNCAH+A SERVICES

Current status

i. RMNCAH infrastructure

- The MOH has developed a Cluster Hospital plan to provide specialized services efficiently and effectively across the country to increase ensuring equitable access, to reduce the burden of overcrowding in referral hospitals and to provide early diagnosis and care, infrastructure will be developed to provide access to EmONC care. Phase I Cluster Hospital include Bumthang Hospital, Phuentsholing Hospital, Samtse Hospital, Tsirang Hospital, Trashigang Hospital, Wangdue Phodrang Hospital and Dewathang Hospital and Phase II Cluster Hospitals include Pemagatshel, Yebilaptsa Hospital and Paro Hospital.
- The cluster hospital plan does not mention specifically development of NICUs and SNUs.

Domain	HEALTH SERVICE DELIVERY FOR RMNCAH+A

ii. Quality of RMNCAH+A care and accountability

This section is aligned to the domain on quality of maternal and perinatal care which includes very actions related to the domain. The following points describe the ongoing key activities under the quality assurance division of MOH related to RMNCAH+A.

- Bhutan Health Care Standards for Quality Assurance (BHSQA) are national health care standards, applicable to all levels of health facilities. The Standards cover both clinical and managerial requirements for providing quality and safe health care services and its progress is measured through 67 key indicators.
- Point of Care Quality Improvement (POCQI) has been introduced in the neonatal unit of JDWNRH and actions have been taken. It is reported that similar exercises have been carried out in the other two referral hospitals. There are plans to expand POCQI for RMNCAH to referral hospitals and district hospitals by KGUMSB.
- Capacity building has been done by MOH through KGUMSB and has been introduced in the new curriculum of post-graduate students. It is difficult to comment on the effectiveness of the system as it has not been observed.
- The three referral hospitals and district and other general hospitals have infection prevention focal points who are part of the quality assurance system.

iii. Health service delivery models FOR RMNCAH+A

- Outreach clinics: Outreach clinics are conducted from PHCs to various villages under the PHC on a monthly schedule so that the population has access to services closer to home. All RMNCAH services and outpatient services are provided. As mentioned under the domain on ageing, yearly outreach clinics for elderly are held.
- There are no midwife-led continuity of care facilities or maternity waiting homes.

Domain	HEALTH SERVICE DELIVERY FOR RMNCAH+A

iv. Use of digital platforms for delivery of RMNCAH+A services

- The MOH's e-health strategy includes delivery of low risk, low cost eHealth services to a large number of people, such as providing health promotion messages. During the COVID pandemic, the MOH used the digital platforms widely to provide information about COVID as well as information and services to those in need of RMNCAH services.
- Information on protection and seeking care in case of GBV were provided which enabled women and adolescents to protect themselves from violence and also access timely care.
- iCTG technology use for detecting foetal distress was discussed under maternal and perinatal care.
- Currently there are no special digital packages for elderly.

i. RMNCAH INFRASTRUCTURE

KEY ACTIONS:

- ☐ *Based on the EmoNC needs assessment proposed under domain on maternal and perinatal care and national newborn action plan and as per Cluster Hospital development plan, fill the gaps in facilities with regard to infrastructure, supplies and equipment and human resources and develop new infrastructure.*
- ☐ *Develop maternal and newborn intensive care units, NICUs and SNCUs within the cluster hospital plan.*
- ☐ *Develop infrastructure for initiating IVF centres as per the decision of MOH (as identified under domain on infertility).*

Domain	HEALTH SERVICE DELIVERY FOR RMNCAH+A

ii. QUALITY OF RMNCAH+A CARE AND ACCOUNTABILITY

KEY ACTIONS:

The following key actions are In addition to key actions related to improving quality and maternal and perinatal care (under domain on maternal and perinatal care), which are to be carried out in collaboration with Health Service Quality Assurance and Standards Division.

Update BHSQA standard per the requirement of the RMNCAH and shift in the global evidence and practices

- ☐ *Update BHCSQA standards as per the requirement of RMNCAH programmes and as per the shifts in the global evidence and practices.*
  - ◆ Standardize care provided in all priority hospitals and benchmark its performance and compliance of standard of care.
- ☐ *Strengthen and improve the current quality audit systems Including clinical audit systems to include RMNCAH services and SRH services for ageing population as part of the continuous quality improvement system.*
  - ◆ Capacity building of quality focal in hospitals should be part of the process.
- ☐ *Monitor quality indicators on maternal and perinatal care regularly through the routine HMIS (see under the domain HMIS).*
- ☐ *Strengthen infection prevention and control in PHCs and district hospitals.*

iii. HEALTH SERVICE DELIVERY MODELS for RMNCAH+A

KEY ACTIONS:

Develop health service models to improve access.

- ☐ *Develop midwife-led continuity of care during pregnancy and childbirth in consultation with MHPC, KGUMSB and FoNPH, particularly for remote and difficult to access areas (as described under the domain on remote and difficult to access areas).*
- ☐ *Develop maternity waiting homes to serve as a linking between homes and health facilities that can provide care during complications. Feasibility should be assessed and standards for care should be developed (as described under the domain on remote and difficult to access areas).*

Domain	HEALTH SERVICE DELIVERY FOR RMNCAH+A

☐ *Improve the quality of current outreach clinics (based on review of contents, quality, referral mechanisms and expand and strengthen the same).*

iv. USE OF DIGITAL PLATFORMS FOR DELIVERY OF RMNCAH+A SERVICES

KEY ACTIONS:

☐ *Strengthen and expand digital platform use to improve access to information and services.*

The e-health strategy promotes the use of digital platforms to provide information.

- Based on MOH's e-health strategy, expand the digital platforms for ICT enabled solutions for RMNCAH services, particularly for emergency care. Use of digital platforms for EmONC in remote and difficult areas merits consideration.
- Develop RMNCAH information packages for those who are not easily reached such as ageing population, PWD, LGBTIQ, etc.

☐ *Improve the quality of the digital platform use.*

- Develop clear guidelines to improve outcomes and clear-cut parameters to ensure privacy and confidentiality.
- Build capacity of providers for providing health information and services through digital platforms.

Domain	RMNCAH+A HEALTH MANAGEMENT INFORMATION SYSTEMS

Current coverage

- MOH's e-health strategy focuses on digitization of health information systems in the districts through District Health Information Software (DHIS) and patient information system – electronic patient information system(e-PIS).
- The DHIS-2 is implemented nationwide and all levels of facilities use the system in OPDs. The MCH tracking system data is entered in DHIS-2.
- The e-PIS implementation in JDWNRH has gained significant progress while moderate progress has been made in the regional referral hospitals. Training of staff and equipment and software have been initiated in district hospitals. There are concerns about the interphase between e-PIS and MCH tracking system in hospitals, especially the possibility of missing data on deliveries and immediate postpartum events.
- The data in the Annual Health Bulletin of MOH is based on the DHIS 2 system and e-PIS.
- Currently International Classification of Diseases (ICD 11) classification is used to classify diseases.
- In the past, the DHO was responsible for DHIS 2 and other information systems in the district. With the change in role of DHO, it is not clear who will be responsible for the information system.
- MPNDSR guidelines are available and MPNDSR is done regularly as per guidelines and action taken. The DHO was responsible for MPNDSR and with the change in the role of DHO, it is not clear who is currently responsible for MPNDSR at the district level.
- Maternal deaths are notifiable in Bhutan and are reported under the CRVS system. Stillbirths, neonatal, infant and under-five mortality are not reported in the CRVS.
- Currently, not much implementation or operations research are being carried out in the country.

Domain	RMNCAH+A HEALTH MANAGEMENT INFORMATION SYSTEMS

KEY ACTIONS:

- ☐ *Strengthen, expand and improve the quality of the current health information systems.*
  - ◆ Define management of DHIS 2 system (including flow of information) under the revised organizational structure of MOH at national and district level including use of data for decision making.
  - ◆ Improve the interphase between DHIS 2 and e-PIS especially with regard to information gathered from the MCH tracking system to avoid duplication and missing information around the period of delivery and immediate postnatal period.
  - ◆ Expand the scope of routine information systems to include indicators related to mental health, quality of RMNCAH services, perinatal database to enable tracking low birth weight, premature, children with developmental problems, disability, etc., services for ageing populations
- ☐ *Improve the quality of classification of diseases/underlying causes of maternal and perinatal mortality as well as the proposed inclusion of indications for caesarean sections using Robson Classification (For latter see also the priority area EmONC and Caesarean sections)*
- ☐ *Expand the scope of the Civil Registration and Vital Statistics (CRVS) system in collaboration with the National Statistical Bureau.*
  - ◆ Include reporting of stillbirths, newborn, infant and childhood deaths in CRVS system.
  - ◆ Build capacity for full spectrum of research and innovations
  - ◆ Conduct implementation research, especially, in the area of preconception care, ECCD in hospitals for children up to 0-2 years, iCTG, health system bottlenecks in accessing AFHS especially early adolescents, etc.
  - ◆ Conduct research on proximate determinants of fertility in Bhutan (by universities in collaboration with international experts).

Domain	INNOVATIVE HEALTH FINANCING

Current coverage

- 46.7% of Bhutanese households incurred expenditures on health with a higher proportion of urban households reporting health expenditure (53.6%) compared to rural areas (42.8%) (NHS 2023).
- On an average, Bhutanese households spent Ngultrum 1000.8 per month on health care which includes costs for medical care and transportation (NHS 2023).
- Costs for medical care constituted 60.4% of household health expenditure in urban areas while transportation costs accounted for 60.7% of household health expenditure in rural areas (NHS 2023).
- On average, 5.6% of total household expenditure was spent on health care with the proportion slightly higher in the urban areas (6% in urban areas, 5.3% in rural areas (NHA 2023).
- Total health expenditure is 4-4.5% of the GDP as per data from National Health Accounts study for the years 2018/19 and 2019/20.
- Consistently, the government has remained the primary source of financing healthcare.
- External funding for the health sector has declined over the years.
- The largest share of health expenditure was on curative care services followed by preventive care.
- Among programs, the largest share was spent on NCDs followed by RH care and infectious diseases.
- With the escalation of health care costs due to epidemiological shifts in disease patterns, increase in health literacy and the RGOB's efforts to expand the delivery of specialised services and other competing priorities, the sustainability of free health care is becoming a challenge. The out-of-pocket health spending from households is increasing despite improved access to health care services, which undermines the objective of reducing inequity.
- User fee is levied on non-essential services.
- A policy on "Accelerating mother and child health outcome" promoting conditional cash transfers is being implemented to promote equity.

Domain	INNOVATIVE HEALTH FINANCING

- Few private sector services are available in the country such as private pharmacies that sell contraceptives, private diagnostic facilities providing ultrasound services, etc.
- Currently, a policy on private sector engagement is being developed.
- Under the Royal Insurance Company of Bhutan, private health insurance is provided for treatment outside the country, but only few avail the services due to affordability of the premium

KEY ACTIONS:

- ☐ *Expand private sector engagement in RMNCAH+A*
  - ◆ While the policy on private sector involvement is being developed, explore the possibility of including the privatization of selected RMNCAH+A services, building on the current practices. However, stringent regulations will have to be built in to ensure protection of the less privileged.
- ☐ *Create RH and child health sub- accounts at national and sub-national level within the national health accounts.*
- ☐ *Explore increased funding for RMNCAH+A services*
  - ◆ Advocate to local governments to allocate more funds for health care (such as RMNCAH infrastructure) as mentioned in draft National Health Policy 2021.
  - ◆ Explore coordination of funding for health system strengthening under the Global Fund support for HIV, TB and Malaria with health system strengthening for RMNCAH+A.
- ☐ *Conduct implementation research on the conditional cash transfer scheme for accelerating maternal and child health outcomes.*
- ☐ *Implement health insurance schemes for selected RMNCAH services.*
- ☐ *Allocate regular funds for humanitarian crisis – for preparedness and response.*

Domain	ESSENTIAL QUALITY SUPPLIES AND COMMODITIES FOR RMNCAH+A

Current coverage

- A strategy for Reproductive Health Commodity Security exists.
- Stock-outs of medicines, supplies and contraceptives were not reported.
- Storage facilities need improvement in terms of controlling moisture.

KEY ACTIONS:

- ☐ *Review the current strategies on reproductive health commodities and other health commodities and supplies and update them as needed to enable the implementation of the actions listed under various domains.*
  - ◆ Initiate actions to include probiotics, supplementation with calcium phosphate, zinc, multivitamins and iron, implants, etc.
  - ◆ Ensure commodities and supplies as envisaged under emergency preparedness plans are included.
- ☐ *Assess the quality of current medical stores at all levels of the health facility and improve as needed, especially moisture control and ventilation.*
- ☐ *Upgrade the skills in forecasting (also requested by the medical products department).*

Domain	ADVOCACY AND HEALTH PROMOTION FOR RMNCAH+A

Current coverage

- Not much has been done to advocate to parliamentarians and religious and community leaders with regard to RMNCAH and healthy ageing issues.
- National health promotion strategic plan 2015-23 exists. The five strategic areas of the strategic action plan promote inter-sectoral collaboration, capacity building, sustainable and healthy settings/interventions, legislations and regulations to support health promotion across all sectors.

Domain	ADVOCACY AND HEALTH PROMOTION FOR RMNCAH+A

KEY ACTIONS FOR ADVOCACY

High-level advocacy to parliamentarians, religious leaders and community leaders is critical for overcoming some of the barriers to achieving progress of RMNCAH+A indicators.

- ☐ *High level advocacy for investing in adolescent health, changes in legislative and regulatory frameworks related to penal code on adolescent pregnancy, termination of pregnancy and LGBTIQ, developing legislative and regulatory frameworks related to surrogacy, importance of continued investments in family planning, etc. This requires developing evidence-based advocacy materials and engaging the key stakeholders in discussions.*
- ☐ *Advocate to Finance Ministry for increased funding for RMNCAH (based on the analysis of the RH and Chid health sub-accounts discussed under the domain on health financing), regular allocation of funds for humanitarian and epidemic preparedness and response and allocation of additional resources for promoting health in schools including mental health.*
- ☐ *Advocate to Ministry of Home Affairs and Cabinet Secretariat to provide facilities for exclusive breast feeding for infants up to six months, paid leave for attending MCH clinics, etc.*

KEY ACTIONS FOR HEALTH PROMOTION

The RMNCAH+A strategy covers health promotion activities under each of the service delivery domains across the life course. In addition, in collaboration with the Health Promotion Division:

- ☐ *Strengthen the 'health in schools initiative' to protect the health and well-being of children and adolescents.*
- ☐ *Collaborate with urban health initiatives to promote healthy settings.*

Strategic outcome 3: Individuals, families and communities are empowered and engaged in RMNCAH+A through promotion of health literacy, self-care and demand for services.

The domains under this outcome are related to skills to promote empowerment, unlock individual and community potential for engagement with the health system. The outcome seeks to enable individuals and families to make effective decisions about their own health and to enable communities to become actively involved in co-producing healthy environments. The outcome also helps to guarantee universal access to services. Individuals, families and communities as the ultimate beneficiaries of RMNCAH+A services must be oriented and actively engaged in implementation to ensure demand creation, acceptability, utilization and sustainability.

Domain	EMPOWERING AND ENGAGING INDIVIDUALS AND FAMILIES IN RMNCAH+A

Current coverage

- Operational guidelines for Multi-Sectoral Task Force (MSTF) and Community Based Support Systems (CBSS) guidelines are available.
- No information on knowledge and attitudes of individuals towards utilization of services is available from NHS.

Health and well-being of individuals requires their participation through awareness about the problem as well as support of their families to carry out some of the actions. Life course approach is not only about survival but also about thriving which needs individual and family involvement. *Life course approach is also about prevention than it is about treatment and its success depends on people themselves. Hence, empowering people to take actions is critical.*

KEY ACTIONS:

- ☐ *Improve health literacy of women, adolescents and men about RMNCAH issues and action to be taken as discussed under various domains across the life course. Some of the actions are highlighted below:*
  - ◆ Maternal and perinatal care: ANC education, first trimester clinic attendance, avoiding substance use, follow up visits during ANC and PNC

Domain	EMPOWERING AND ENGAGING INDIVIDUALS AND FAMILIES IN RMNCAH+A

- ◆ Nurturing care: Importance of nurturing care during pregnancy, for newborn and child through good health, nutrition, responsive care giving, security and protection and early childhood learning that lays the foundation for human capital for this generation and next generation
- ◆ Childhood and adolescence: Recognition and seeking care early for mental health problems in children and adolescents, importance of preventing obesity during childhood and adolescence for preventing NCD later in life.
- ◆ Awareness about adolescence and critical support need from families in prevention of mental illnesses, prevention of SRH issues including violence, etc.
- ◆ Awareness about early signs of reproductive cancers and where to seek care.
- ◆ Informed choice and consent with regard to SRH services and child and adolescent care.
- ◆ Awareness about SRH needs of ageing population
- ◆ Self-care (discussed later under the domain self-care)

□ *Use of digital media for sharing information, especially for reaching adolescents, building on the existing platforms.*

Domain	EMPOWERING AND ENGAGING COMMUNITIES IN RMNCAH+A

Current coverage
Currently, Village Health Workers (VHWs) and MSTF engage communities in certain areas of RMNCAH+A. However, specific information is not available.

Empowering communities to voice their needs and influence the way care is funded and provided. It helps communities to organize themselves and create changes in their living environments (example: improving water and sanitation, increasing taxes on cigarettes and tobacco, etc.)

Domain	EMPOWERING AND ENGAGING COMMUNITIES IN RMNCAH+A

KEY ACTIONS:

- ☐ *Educate communities about issues such as GBV, rape, adolescent SRH, food habits, water and sanitation, etc. to enable them to voice their needs and also to work with local governments for increased allocation of funds (as mentioned under innovative health financing).*
- ☐ *Mobilize communities (prevention of GBV as was done during the pandemic, food habits, sanitation, emergency preparedness and response, etc.) with support from MSTF and CBSS and VHWs.*
- ☐ *Engaging communities in the design and implementation of the various multi-sectoral responses listed under the domains on child, adolescence and GBV.*

Domain	PROMOTING SELF- CARE IN RMNCAH and SRH OF AGEING POPULATION

Current coverage

- There is no self-care strategy for RMNCAH.
- Self-examination for breast lumps was taught as part of the breast cancer screening programme.

Domain	PROMOTING SELF- CARE IN RMNCAH and SRH OF AGEING POPULATION

Self-care is the ability of individuals, families and communities to protect their own health, prevent disease, and maintain health and cope with illness and disability with or without the support of a health worker. The scope of self-care in this definition includes health promotion, disease prevention and control, self-medication, giving care to dependent people, seeking hospital, specialist or primary care when needed, and rehabilitation, including palliative care. Self-care must work as an extension of the health system, so that while people are using self-care interventions, they can also access the health system and community support for further assistance when needed. It promotes continuum of care from individual to health facilities and helps to increase coverage, reduce costs and improve health. Self-care includes self-management such as self-medication, self-treatment, etc., self-testing such as self-screening for breast cancer, etc., and self-awareness such as self-education, self-determination, etc. Some of the common examples of self-care in RH, applicable in Bhutan, are self-testing for pregnancy, fertility awareness methods, etc.

KEY ACTIONS:

- ☐ *Building consensus among various stakeholders – MOH, MHPC, KGUMSB, MOESD? on inclusion of self-care as part of the first line of action to advance primary health care, across the life course.*
- ☐ *Develop a strategy of self-care, identifying areas under RMNCAH and health services for ageing population that can be introduced.*
- ☐ *Develop guidelines specifying criteria for using self-care and the extent to which self-care can continue should be defined for services identified.*
- ☐ *Create awareness among health workers about the potential of self-care interventions, create adequate knowledge and confidence about the effectiveness of self-care interventions and promote people's self-confidence about using them.*

Domain	INCREASING MALE INVOLVEMENT IN RMNCAH+A

Current coverage
No information is available.

Men play a key part in their own and their family's health, yet they are often neglected in outreach and service delivery. The involvement of fathers before, during and after the birth of a child has been shown to have positive effects on violence reduction, improved maternal health outcomes, breastfeeding, the use of contraceptives and health services, and fathers' long-term support for their children. Engaging men as clients, supportive partners, and champions of gender equality can contribute to improvements in gender equality, couples' decision-making, and the utilization of maternal health services. This in turn leads to better health outcomes for men, women, and their families.

KEY ACTIONS:

- ☐ *Educate men to broaden their understanding of RMNCAH issues particularly STIs, GBV, etc.*
- ☐ *Building the capacity of providers to engage men in counselling and health services.*
- ☐ *Facilitating presence of men as birth companions (men should be encouraged and educated during ANC for this role).*

Domain	CAPACITY BUILDING OF VILLAGE HEALTH WORKERS IN RMNCAH+A

Current coverage

- Manual and handbook for VHWs are available.
- The VHWs are provided initial training for three months after their recruitment.
- In the fiscal year 2014-2015, a total of 400 VHWs underwent training, with 300 receiving refresher courses and 100 undergoing initial training. This initiative covered 11 districts, supported by funding from UNICEF. Subsequently, in the following fiscal year (2015-2016), refresher courses were extended to all 20 dzongkhags to enhance the knowledge and technical competence.
- The VHWs are not paid, but do get travel allowance when they attend trainings. Appreciation certificates and cash awards were given to the best VHWs (2019-2020).

VHWs play a major role in supporting outreach clinics. They also help in educating communities about nutrition, home management of diarrhoea, fever, water and sanitation, etc.

KEY ACTIONS:

- ☐ *Enhance the capacity of the VHWs*
  - ◆ Review the current role of the VHWs, their training and skills and their training manuals.
  - ◆ Build capacity to increase their involvement in mobilizing the communities.
  - ◆ Improve the skills in life-course interventions as appropriate.
  - ◆ Enhance the skills of VHWs in recognition of common illnesses in children and other common illnesses like diarrhoea, malaria, etc. and timely referral.

Strategic outcome 4: South-South and triangular cooperation initiated on RMNCAH and health of ageing population between countries in South Asia and South-East Asia.

With Bhutan graduating to a low middle-income country, it is important to develop South-South and triangular cooperation for further development. At the same time, Bhutan has many best practices and lessons learned to share with countries in the Region.

Domain	SOUTH-SOUTH and TRIANGULAR COOPERATION ON RMNCAH AND HEALTH OF AGEING POPULATION
Current coverage • Currently there are no south-south and triangular cooperation on RMNCAH and Ageing.	
KEY ACTIONS: ☐ *Identify areas that are eligible for south-south and triangular cooperation (e.g. Cervical cancer prevention, SRH education for nuns and monks, family planning in low fertility countries and also to include the evidence generation /research capacity of academia and research institutes under support from other countries.* ☐ *Document best practices.*	

5. Implementation framework

Country leadership

The development of the national RMNCAH+ strategy is a core activity for the implementation of the output under the 13th FYP on RMNCAH. The implementation of the strategy, therefore, will follow the institutional and structural procedures of the MOH that govern health development and services including the changes under the revised health organizational structure and supervisory responsibilities.

The Family Health unit under the NCD division under the Department of Public Health will be mainly responsible for the oversight in the implementation of the strategy. Operational plans will be developed and implemented at all levels of the health system. The implementation calls for multi-sectoral approach and involvement of all stakeholders including units/divisions/Departments of MOH such as NCDs, communicable diseases, nutrition, immunization, mental health, BHCSA Division, HMIS, human resources, Clinical Medicine, MHPC, medical supplies, Policy and Planning Division (PPD), etc. ; the PEMA secretariat; MOESD (school health, ECCD, youth coordination, NCWC); district authorities; local government; NGOs such as RENEW, Save the Children, donors such as the UN agencies, World Bank and Japanese International Cooperation Agency (JICA). The roles and responsibilities of the Ministries should be defined,

The proposed national RMNCAH TAG will have a greater role to play in the implementation of the strategy (providing technical advice as well as in monitoring technical implementation of key areas).

6. Monitoring indicators of the strategy

Suggested list of indicators

Goal	• MMR • Facility based MMR • Direct obstetric case fatality • Pre-discharge perinatal deaths • NMR • Facility based NMR • Stillbirth rate • Infant mortality rate • Under-five mortality rate • Cervical cancer incidence among women 30-49 y • Unmet need for family planning • Unmet need for family planning for spacing among adolescents • Demand satisfied for modern methods of contraception • Adolescent birth rate • Adolescent MMR • Incidence of low birth weight (<2.5kg) • Incidence of premature births (proportion born before 36 weeks

Outcome 1 Domains and indicators	
Preconception care package	• Preconception care strategy developed • Proportion of facilities providing preconception care package • Number of couples who received pre-conception care package
Maternal and perinatal care – Antenatal care – Intrapartum care – Quality EmoNC and C-sections – Postpartum care – Care of small and sick newborns – Quality of maternal and perinatal care	• Proportion of pregnant women attending ANC in first trimester • Proportion of pregnant women attending ANC 4+ • Proportion of pregnant women attending ANC 8+ • Proportion of pregnant women who received full TT immunization • Proportion of pregnant women who received multi-nutrient supplements • Proportion of deliveries by skilled birth attendants • Proportion of institutional deliveries • Proportion of newborns breast fed within an hour of birth • Proportion of women and newborns who had first PNC within 24 and 72 hours of delivery • Women who had 5+ PNC at prescribed timings • Women who accepted family planning in PNC • Proportion of facilities providing quality ANC (as per guidelines for the specific gestational age) • Proportion of deliveries that underwent caesarean sections • Proportion of facilities that are functional Basic EmONC (of the designated BEmONC facilities)

Maternal and perinatal care – Antenatal care – Intrapartum care – Quality EmoNC and C-sections – Postpartum care – Care of small and sick newborns – Quality of maternal and perinatal care	• Proportion of facilities that are functional Comprehensive EmONC (of the designated CEmONC facilities) • Proportion of population with access EmONC within two hours • Proportion of BEmONC facilities within 30 minutes of CEmONC • Proportion of PHCS that can provide emergency obstetric and neonatal care • Proportion of district hospitals that function as SNCUs • Proportion of hospitals that function as NICUs • Proportion of PHCS that have access to NCUs within 30 minutes • Population based caesarean section rate • Robson classification for caesarean sections instituted and action taken • Number of CEMONC facilities using Robson classification • Proportion of newborns screened for congenital anomalies, hearing, vision and hyper-bilirubinaemia • Functional system for regular monitoring the EmONC developed • Proportion of facilities notifying maternal deaths and stillbirths within 24 hours of death • Number of facilities providing MPSDR as per guidelines and actions taken • Proportion of facilities adhering to quality standards

Care for health and development of children (0-2 years)	• Proportion of newborns on exclusive breast feeding for 6 months • Proportion of infants screened for congenital anomaly and proportion identified with specific anomaly • Number of infants started on supplementary feeding at 6 m • Proportion of preterm/low birth weight managed with Kangaroo mother care • Proportion of 6m -2 years receiving Sprinkles • Proportion of 0-2 years assessed for ECCD • Proportion of 0-2 years whose growth is monitored • Proportion of 0-2 years stunted • Proportion treated for severe acute malnutrition • Proportion 0-2 years treated for diarrhoea in a facility • Proportion 0-2 years treated for Acute Respiratory Infection in a facility • Proportion of facilities providing Integrated Management of Neonatal and Childhood Illnesses services • Proportion of children fully immunized as per national schedule • Proportion of facilities conducting infant and child death surveillance and response • Proportion of facilities reporting infant and child deaths within 24 hours
Care for health and development of pre-school children 3-4 years	• Proportion of children whose growth is monitored • Proportion of 3-4 years stunted • Proportion treated for severe acute malnutrition • Proportion 3-4 years treated for diarrhoea in a facility

Care for health and development of pre-school children 3-4 years	• Proportion 3-4 years treated for Acute Respiratory Infection in a facility • Proportion of facilities providing IMNCI services • Proportion of 3-4 years attending ECCD centres • Proportion of children 3-4 years identified with developmental problems
Care for health and development of children 5-9 years (middle childhood)	• Proportion of children who have had a health check up • Proportion of primary schools where school health services are provided regularly • Number of children identified with disabilities
Care and well-being of Adolescents	• Proportion of facilities (designated to provide AFHS services) providing AFHS every day of the week • Number of adolescents who utilized the AFHS services ☐ *10-14 years* ☐ *15-19 years* • Main reasons for attending the AFHS services ☐ *10-14 years* ☐ *15-19 years* • Number of cases referred from schools, youth centres • Number of adolescents referred for mental health care • CPR for modern methods among adolescents • Unmet need for family planning for spacing among adolescents

Care and well-being of Adolescents	• Number of adolescent pregnancies ☐ *10-14 years* ☐ *15-19 years* • Proportion of adolescents immunized as per national schedule • Proportion of adolescents provided iron and folic acid
Family planning	• CPR for modern methods of family planning • CPR for modern methods among adolescents • Proportion of facilities providing full range of family planning methods • Proportion of facilities that screen clients for STIs
Infertility	• IVF established in JDWNRH • Number of women who have utilized services for infertility and percentage successful • Laws changed to enable IVF services
Comprehensive care of abortions /miscarriages	• Number of women using MTP services • Proportion of women provided post-abortion family planning methods • Indications for MTP expanded to include foetal abnormalities
Reproductive organ cancers	Cervical cancer • Proportion of women aged 39-49 years screened with a high-performance test at least once between the ages of 30 and 49 years • Proportion of women aged 39-49 years screened with a high-performance test at least twice between the ages of 30 and 49 years

Reproductive organ cancers	• Proportion of women screened found positive for cervical cancer • Proportion with cervical cancer treated • Proportion of Adolescent girls and boys immunized with Human Papilloma Virus (HPV) vaccine <u>Breast cancer</u> • Strategy for breast cancer screening developed • Proportion of women screened for breast cancer (mammogram) • Proportion of screened found positive for cancer <u>Prostate cancer</u> • Strategy for prostate cancer screening developed • Proportion of District hospitals where diagnostic test for prostate cancer (Prostate Specific Antigen (PSA) introduced
Health services for victims of GBV	• Proportion of ever partnered women and adolescent girls who have been victims of GBV • Proportion of facilities designated for care of victims of GBV providing care • Number of women who received care ☐ *Women* ☐ *Adolescent girls* • Number of cases referred from NCWC and RENEW to health facilities
Integrated services for SRH and HIV/STI	• SRH services integrated in National AIDS Control Programme • Coverage of Prevention of Mother to Child Transmission services • Number of HIV positive receiving SRH services • Number of FP clients screened for STI/HIV

SRH care for ageing population	• SRH incorporated in the strategy for senior citizens • Proportion of facilities providing SRH services for ageing
RMNCAH +A services in humanitarian crisis/ pandemics	• Minimum Initial Services package (MISP) and services for children in disaster/pandemic incorporated into disaster and epidemic preparedness and response strategies • Number of providers who have been trained in MISP and services for children in disaster/pandemic • Dialogues initiated on climate change and its impact on RMNCAH
SRH for vulnerable groups	• Service packages developed for RMNCAH services for people with disability and LGBTIQ • Services initiated in referral hospital for LGBTIQ community
RMNCAH+A services for population living in remote and difficult to access areas	• Number of midwife-led continuity of care units introduced in selected areas • Implementation research on midwife-led continuity of care done • Telemedicine services implemented to support selected EmONC
RMNCAH in urban areas	• Strategy to be developed with the aim of rationalizing the location of the facilities
Nutrition	• Facilities proving multi-nutrient tablets to pregnant mothers • Facilities implementing Sprinkle • No of facilities that have incorporated advice for prevention of obesity in AFHS

Immunization	• Coverage of Tetanus Toxoid in pregnant women • HPV vaccine coverage (eligible girls and boys) • Coverage of infants who have received Pentavalent vaccines
Mental health	• Number of women diagnosed with depression in postnatal period and referred • Number of adolescents referred for mental health issues from AFHS
	Output 2 Domains and indicators
Stewardship	• Proportion of DPHOs trained in RMNCAH+A programme management using WHO RMNCAH programme managers modules • Proportion of CMOs trained in management of RMNCAH+A clinical care • National TAG established • Proportion of districts that conduct monitoring of services and taking action • Policy for private sector involvement in health developed
Human resources for health	• National health workforce accounts developed • Mapping of RMNCAH work force done ☐ *Ratio of doctors to 10, 000 population* ☐ *Ratio of nurses/midwives to 10,000 population* ☐ *Number of obstetricians and Paediatricians* • Regulatory changes made with regard to midwifery practices • Curriculum of MBBS and nursing and public health courses change to include the domains included in the strategy that are currently missing

Health care service delivery – RMNCAH infrastructure – Quality of care – Health care service models – Digital health	Access to NICUs covered under maternal and perinatal health • Proportion of facilities audited for RMNCAH quality • Number of midwife-led continuity of care units established • Guidelines on use of digital media developed
HMIS	• Proportion of districts reporting accurately and completely on DHIS • Number of hospitals that have linked DHIS 2 and e-PIS with regard to intrapartum care • Number of PHCs with updated intrapartum and postnatal information in DHIs 2 • Proportion of districts that conduct MPNDSR regularly as per national guidelines • Number of implementation researches undertaken • Number of researches undertaken
Innovative health financing	• Private health sector involvement strategy approved • RH and CH sub-counts created under national health accounts
Supplies and commodities for RMNCAH	• Number of stock-outs per year of RMNCAH supplies ☐ *Contraceptives (specify which)* ☐ *Oxytocin* ☐ *Antibiotic - Metronidazole* • Number of store keepers whose capacity is strengthened

Advocacy and health promotion	• Number advocacy sessions held with parliamentarians • Number of advocacy sessions held with community leaders
Output 3 Domains and indicators	
Empowering and engaging individuals and families	• Proportion of districts where health literacy campaigns are actively held on RMNCAH +A issues (nurturing care, ECCD, etc.) and the topics covered
Empowering and engaging communities	• Proportion of districts where community groups are mobilised on specific issues under RMNCAH+A (GBV, adolescent issues)
Promoting self-care in RMNCAH+A	• Strategy for self-care developed
Increasing male involvement in RMNCAH	• Number of sessions held with men on RMNCAH issues
Capacity building of VHWs	• Number of VHWs whose capacity has been enhanced in life course approach
Outcome 4 Domain and indicators	
Strategies developed	• Number of best practices documented