Progress of Health and Population Sector

2022/23 (2079/80 BS)

NATIONAL JOINT ANNUAL REVIEW REPORT

Government of Nepal
Ministry of Health and Population
Ramshahpath, Kathmandu
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ABBREVIATIONS

AIN	Association of INGOs
AMR	Antimicrobial Resistance
ANC	Ante Natal Care
AWPB	Annual Work Plan and Budget
BEK	British Embassy Kathmandu
BEMS	Biomedical Equipment Management System
BHS	Basic Health Service
BPKIHS	BP Koirala Institute of Health Sciences
BRMS	Birth Registration Management System
CAPP	Consolidated Annual Procurement Plan
CCU	Critical Care Unit
CDC	Centre for Disease Control
CDC	Curriculum Development Centre
CEONC	Comprehensive Emergency Obstetric and Neonatal Centre
CGAS	Computerised Government Accounting System
CHU	Community Health Unit
CIAA	Commission for Investigation of Abuse of Authority
CLPIU	Central Level Project Implementation Unit
CPR	Contraceptive Prevalence Rate
CS	Caesarean Section
CSD	Curative Service Division
DCTP	Destitute Citizen Treatment Plan
DDA	Department of Drug Administration
DLI	Disbursement Linked Indicator
DoAAM	Department of Ayurveda and Alternative Medicine
DoHS	Department of Health Services
DoNIDCR	Department of National ID and Civil Registration
DPR	Detailed Project Report
DRMS	Death Registration Management System
DUDBC	Department of Urban Development and Building Construction
ECD	Early Childhood Development
EDCD	Epidemiology and Disease Control Division
eGP	eGovernment Portal
EHR	Electronic Health Record

eLMIS	e-Logistics Management Information System
EMT	Emergency Medical Team
EOC	Emergency Obstetric Care
FA	Framework Agreement
FCDO	The Foreign, Commonwealth & Development Office
FCGO	Finance Comptroller General Office
FDA	Food and Drug Administration
FEFO	First Expire First Out
FMIP	Financial Management Improvement Plan
FMIS	Financial Management Information System
FWD	Family Welfare Division
FY	Fiscal Year
GBV	Gender Based Violence
GDP	Gross Domestic Product
GLASS	Global Antimicrobial Resistance Surveillance System
GoN	Government of Nepal
HA	Health Assistant
HCWM	Healthcare Waste Management
HDI	Human Development Index
HDP	Health Development Partners
HFOMC	Health Facility Operation and Management Committee
HPV	human papillomavirus
HRH	Human Resources for Health
HAS	Humanitarian Staging Area
ICD	International Classification of Diseases
ICT	Information & Communications Technology
ICU	Intensive Care Unit
IDP	Institutional Development Plan
INGO	International Non-Government Organisation
IP	Infection Prevention
JEE	Joint External Evaluation
JFA	Joint Financing Arrangement
KAHS	Karnali Academy of Health Sciences
LARC	Long-Acting Reversible Contraceptive
LISA	Local Government Institutional Capacity Self-Assessment
LMBIS	Line Ministry Budget Information System

LMIS	Logistic Management Information System
LNOB	Leave No One Behind
MCCoD	Medical Certification of Cause of Death
M&E	Monitoring and Evaluation
MD	Management Division
MEC	Medical Education Commission
MMR	Maternal Mortality Ratio
MNCH	Maternal, Neonatal and Child Health
MoEST	Ministry of Education Science and Technology
MoF	Ministry of Finance
MoHP	Ministry of Health and Population
MoSD	Ministry of Social Development
MoWCSC	Ministry of Women, Children and Senior Citizens
MPDSR	Maternal and Perinatal Death Surveillance and Response
MSNP	Multi Sectoral Nutrition Programme
MSS	Minimum Service Standards
NAMS	National Academy of Medical Sciences
NAR	National Annual Review
NCD	Non-Communicable Disease
NDHS	Nepal Demographic and Health Survey
NHAA	National Health Accreditation Authority
NHEICC	National Health, Education, Information and Communication Centre
NHFS	Nepal Health Facility Survey
NHIDS	Nepal Health Infrastructure Development Standards
NHRC	Nepal Health Research Council
NHSS	Nepal Health Sector Strategy
NHSS-IP	Nepal Health Sector Strategy – Implementation Plan
NHSSP	Nepal Health Sector Strategic Plan
NHTC	National Health Training Centre
NICU	Newborn Intensive Care Unit
NJAR	National Joint Annual Review
NMR	Neonatal Mortality Rate
NPC	National Planning Commission
NPHL	National Public Health Laboratory
NRA	National Reconstruction Authority
NSO	National Statistics Office

OAG	Office of the Auditor General
OCMC	One-Stop Crisis Management Centre
OPD	Outpatient Department
OTTM	Operation Theatre Technology Management
PAHS	Patan Academy of Health Sciences
PAHS	Pokhara Academy of Health Sciences
PDNA	Post Disaster Need Assessment
PDRF	Post Disaster Recovery Framework
PEN	Package of Essential Non-communicable Diseases
PHCC	Primary Healthcare Centre
PHD	Provincial Health Directorate
PHEOC	Provincial Health Emergency Operation Centres
PHLMC	Provincial Health Logistic Management Centre
PHTC	Provincial Health Training Centre
PIP	Procurement Improvement Plan
PLMBIS	Provincial Line Ministry Budget Information System
PNC	Postnatal Care
POCQI	Point of Care Quality Improvement
PPMD	Policy Planning and Monitoring Division
PPMO	Public Procurement Monitoring Office
PPSC	Provincial Public Service Commissions
PPSF	Public Procurement Strategic Framework
QI	Quality Improvement
QoC	Quality of Care
QSRD	Quality Standard and Regulation Division
RAHS	Rapti Academy of Health Sciences
RDQA	Routine Data Quality Assessment
RHD	Rheumatic Heart Disease
RMIS	Revenue Management Information System
RMNCH	Reproductive Maternal Neonatal and Child Health
RRT	Rapid Response Team
RTA	Road Traffic Accident
SATS	Safe Abortion Training Site
SBA	Skilled Birth Attendant
SBD	Standard Bidding Document
SDG	Sustainable Development Goal

SDP	Service Delivery Point
SHSP	Social Health Security Programme
SSU	Social Service Unit
SuTRA	Sub-national Treasury Regulatory Application
SWAp	Sector Wide Approach
THE	Tilganga Eye Hospital
TRVST	Traceability and Verification System
TSB	Technical Specifications Bank
TUTH	Tribhuvan University Teaching Hospital
U5MR	Under-Five Mortality Rate
UHC	Universal Health Coverage
USD	United States Dollar
VERS-MIS	Vital Event Registration System Management Information System
WHO	World Health Organization
WISN	Workload Indicators of Staffing Needs
WRH	Western Regional Hospital

EXECUTIVE SUMMARY

The Nepal Health Sector Strategy (NHSS) 2015-2020, a joint commitment of the Government of Nepal and Health Development Partners (HDP), provided a framework for a sector wide approach and a roadmap towards achieving Universal Health Coverage in alignment with the SDG. The NHSS has been the major vehicle to translate the Constitutional spirit of providing free basic health services to all citizens and translate the National Health Policy and the 15th Periodic Plan into action. Building back from the Gorkha Earthquake 2015, the NHSS passed through transition from unitary system of governance to a federal system and succeeded the battle against the COVID-19 pandemic. These events led to extension of the NHSS implementation journey from 2020 to 2023.

Under the leadership of the Ministry of Health and Population (MoHP), the HDPs were jointly held accountable for implementing, monitoring the performance, and achieving NHSS results through operationalisation of the NHSS Implementation Plan (2016-2021) and the subsequent Annual Work Plan and Budget (AWPB). Health related ministries and the municipal health offices, in collaboration with the federal government and the HDPs, have been leading the implementation of the NHSS at the provincial and local levels respectively. The main source of funding for the NHSS has been the government budget and the funds received from HDPs.

The sector performance has been monitored based on its results framework, through a mid-term review of NHSS and annual performance reviews at federal, provincial and local levels. The National Annual Review (NAR) – MoHP's regular annual event since 1994/95 (2051/52) and the Joint Annual Review (JAR) – an event held annually since 2004 following the Nepal Health Sector Strategy: An Agenda for Reform (2004), have been organised as a single combined event since 2018 as the National Joint Annual Review (NJAR). The holistic review covering support from HDPs and the contribution of the private and other non-governmental sectors has been a common platform for MoHP and HDPs to review annual progress, draw lessons, agree priorities for subsequent years and harmonise efforts for achieving NHSS results.

This report highlights major progress of health and population sector against the NHSS priority interventions under each of the nine outcomes over the NHSS implementation period (2015/16-2022/23) including the last fiscal year 2022/23. The report also presents progress against the action points of the last NJAR, and health related action points of policy and programme and Budget Speech. It summarises lessons learnt and suggests the way forward in alignment with the strategic objectives of the new sectoral strategic plan 2023-2030, endorsed in June 2023. The primary objective of this report is to inform the discussions during the NJAR 2023.

The section below highlights key progress made during the NHSS implementation and the way forward, by the NHSS outcomes.

Outcome 1: Rebuilt and strengthened health systems: Infrastructure, human resources for health, procurement, & supply chain management	
Key progress	Way forward
▪ Nepal Health Infrastructure Development Standards (NHIDS), endorsed in 2017 and is in operation. ▪ National Strategy on HRH 2077/78 - 2086/87 was developed and endorsed in 2021. The health workforce needed for the country till 2087/88 (2030/31) is projected. Professional councils have developed digital registry platforms to inform health workforce production.	▪ Need to shift focus from earthquake-resistant infrastructure to the development of multi-hazard-resistant, climate-resilient, and environment friendly health infrastructure by incorporating green technology. Ensure construction quality aligns with the approved design and complies with the established monitoring framework.

▪ Provincial Public Service Commissions have started to recruit staff as per the approved new organograms. ▪ Standardisation of technical specifications and establishment of technical specifications bank has made easy to procure quality medical goods at all levels. ▪ There is good progress at federal, provincial and local levels in terms of standardising list of basic medicines and medical supplies, with clearer standards, specifications, forecasting, procurement, storage, distribution, and transportation of health commodities to health facilities.	▪ However, active health workforce database is not available for use in HRH planning and decision making. ▪ Addressing the increased HRH demand across federal, province and local level requires a robust mechanism for comprehensive projection, production, distribution, and retention. ▪ Reform the procurement and supply chain management system with increased focus on domestic production of medicines, diagnostics, and health products and enhancing regulatory mechanisms to ensure uninterrupted availability at the service delivery points.
Outcome 2: Improved quality of care at point of delivery	
Key progress	Way forward
▪ A wide range of legal documents, frameworks, standards, guidelines, and programme-specific protocols related to improving quality of care at the point of delivery are developed and these documents provide the overall framework to govern the quality of care. Public Health Service Act 2018, Public Health Service Regulations 2020, Safe Motherhood and Reproductive Health Rights Act 2018, National Health Care Quality Assurance Framework 2022, National Action Plan for Antimicrobial Resistance 2021-2026 (Draft) developed. ▪ Reforming the MoHP structure in alignment with the federal context, a Quality Standard and Regulation Division has been formed within the MoHP. ▪ Minimum Service Standard (MSS), a system to self-assess health facility readiness to deliver quality health services, developed for different levels of health facilities ranging from health post to specialized hospitals and rolled out across the country. ▪ There are number of cases which demonstrate availability of globally recognised standard quality health services in the country. ▪ Standard treatment protocols as per global and regional standards developed and oriented to health care professionals during the period.	▪ Develop comprehensive regulatory framework and independent body for quality assurance and accreditation. ▪ Establish and implement a mechanism for comprehensive assessment of quality of care covering all eight dimensions of quality at the point of service delivery. ▪ Establish fast-track service delivery for referred cases. ▪ Finalize, endorse, and effectively implement the National Action Plan for Antimicrobial Resistance, 2021-2026. Expand Antimicrobial Resistance (AMR) surveillance laboratory sites with improved infrastructure and skilled/trained human resources to tackle AMR. ▪ Complete the study on Maximum Retail Price Mechanisms and effectively implement price adjustment of essential drugs ensuring transparency. ▪ Promote sustainable practices and state non-state partnership models for waste management in collaboration with local governments. ▪ Ensuring the compliance of Standard treatment protocols at the point of service delivery for quality care.
Outcome 3: Equitable distribution and utilisation of health services	
Key progress	Way forward
▪ In general, an impressive progress has been achieved in increasing access to and utilisation of health services over the years, but more specific interventions are needed to reduce the equity gap among different population sub-groups and to achieve universal health coverage and the SDG targets. ▪ The Constitution defines free basic health services as fundamental rights of the citizens, and there are legal, policy and programmatic instruments for its delivery.	▪ Monitor and accelerate interventions tailored to the local needs to achieve universal coverage of basic health services reducing equity gaps among different population strata, in terms of geography, provinces, wealth quintile, demography and education. ▪ Capacitate institutions to translate the legal and policy provisions into action. Develop a mechanism for ensuring that all public health facilities designated for BHS delivery provide

▪ Laboratory services have been expanded to two thirds of Health Posts in the country.	free BHS to the citizens leaving no one behind. ▪ Harmonise the social security schemes to avoid duplication and improve efficiency. ▪ Expand health services leveraging modern information communication technology.
Outcome 4: Strengthened decentralized planning and budgeting	
Key progress	Way forward
▪ The provincial and local levels planning process guidelines developed by the National Planning Commission (NPC) in alignment with the federal context has been adopted in the health sector. ▪ Conditional grant from federal to provincial and local governments has helped to ensure alignment between federal plans and priorities; and that of provincial and local governments. Equalisation grant provides space for local and provincial levels to plan and implement the context specific initiatives tailored to the local needs. ▪ MoHP provides program implementation guidelines for activities funded through the conditional grant, which has been instrumental in increasing compliance and quality of health program implementation at provincial and local level. ▪ Dedicated planning and budgeting sections have been created in MoHP and provincial governments to coordinate evidence-based planning and budgeting process. ▪ MoHP and provincial health ministries use LMBIS and P-LMBIS respectively, for entering activities and preparation of annual health plan and budget, whereas local levels use SuTRA for planning and entering health activities to be implemented. ▪ The Federation, Province and Local Level Coordination and Inter-relation Act, 2020 (2077), which has provision for sectoral coordination committees, has been instrumental to improve coordination of planning and implementation at three levels of government. It created provision for sectoral coordination committees.	▪ Health sector coordination committees need to be strengthened to improve coordinated planning and implementation among three levels of government. ▪ Updating SuTRA, an effective tool for local governments for planning, budgeting, and accounting to have better linkages with provincial and federal government systems allowing joined-up planning and budgeting process would help harmonizing the planning process at three levels of government. ▪ Capacity of local government Social Development Committee needs to be enhanced for it to be able to more effectively contribute in evidence-based health sector planning and implementation. ▪ Through capacity building, there is a potential for Health Facility Operation and Management Committees to play more effectively role in health governance and in improving service delivery. ▪ As online planning, budgeting and accounting trend is increasing, all three levels of government need robust technical infrastructure capacities and training on operating software for a more effective health sector governance.
Outcome 5: Sector management and governance	
Key progress	Way forward
▪ Several Acts, policies, strategies, frameworks, guidelines and structures are prepared to improve health sector governance and accountability. ▪ The organizational structure of MoHP and health service delivery system have been revised and staff adjustments at federal, provincial and local levels have been completed in alignment with federal structure. ▪ Organization and Management (O&M) survey of provincial and federal hospitals have been completed and submitted to MoF and are awaiting approval. ▪ Policy provisions are in place to partner with non-state actors. Public Health Service Act (Section 5) provides for federal, provincial and local Levels to carry out necessary partnership with private or non-	▪ Develop a strong regulatory mechanism to ensure that the legal provisions are implemented effectively. ▪ Continue improving NJAR/JAR to be more interactive and effective to review the sector progress together with partners to strengthen donor harmonization and GoN-HDPs partnership. ▪ Federal Public Service Act should be promulgated to ensure availability of appropriate human resource skills mix across all tiers of government. ▪ Establishment and operationalization of Centre for Disease Control (CDC), Food and

governmental health institutions to provide basic health services. ▪ The Internal Control System Guideline for MoHP got endorsed in 2021 and is being implemented. ▪ Integrated financial report is regularly submitted to FCGO on time. ▪ Development Cooperation Policy 2019 has prioritized sector-wide approach (SWAp), which has guided and synchronized external funding/programs to national priorities. ▪ NAR and JAR have been combined to make NJAR since 2018 to foster development cooperation. ▪ GoN endorsed the Nepal Health Sector Strategic Plan, 2023-2030, and is in operation.	Drug Administration (FDA) and National Health Accreditation Authority shall be a priority for the next cycle of health sector plan. ▪ Strengthen coordination mechanisms with National Natural Resources and Fiscal Commission (NNRFC), Ministry of Finance (MoF), Ministry of Federal Affairs and General Administration (MoFAGA), Office of the Auditor General (OAG) to ensure financial accountability and regular health expenditure reporting. ▪ Effectively implement the NHS-SP drawing learning from implementation of previous strategies with specific focus on the last NHSS. ▪ Continue and strengthen SWAp. A comprehensive TA framework agreed by the government and the development partners could be instrumental in harmonizing the TA efforts across the governments. ▪ Strengthen the capacity of provincial and local governments to revitalise the social accountability mechanism in health sector and implement Gender Equality and Social Inclusion Strategy.
Outcome 6: Improved sustainability of healthcare financing	
Key progress	Way forward
▪ National Health Financing Strategy (2023-33) was developed and endorsed in 2023. ▪ Several guidelines have been prepared / drafted for enrolment of specific target groups in health insurance and other social security schemes. ▪ Some local and provincial governments have topped up on federal government provided social security allowances. ▪ The health insurance scheme is operational in all 77 districts of Nepal, covering 749 local levels out of 753. ▪ The annual budget analysis exercises done at federal, provincial and some local levels have been very instrumental in providing a better sense of how resources are being distributed and spent, giving insight into how health financing should be done and contributed to evidence-based planning.	▪ Continuation of regular tracking of the expenditure in the health sector through robust budget analysis and national health accounts effectively linking to health sector planning and budgeting process would be instrumental in mobilization of public investment in health. ▪ Effective adherence to International Development Cooperation Policy, 2019 ensuring INGO programs are more closely aligned to NHSSP (2023-30). ▪ Investment should be done to establish a permanent organisational structure (organogram) for the health insurance board to deliver effective management of the health insurance programme. Concerted efforts and bold reforms are required to improve effectiveness and efficiency of the health insurance scheme.
Outcome 7: Improved healthy lifestyle and environment	
Key progress	Way forward
▪ Collaboration with Ministry of Education initiated to review/revise current school health curriculum and school health program is in progress. ▪ Psychosocial, psychiatric and curative care for gender based and sexual violence have been expanded through One Stop Crisis Management Centres (OCMC) (94) and Social Service Units (SSUs).	▪ Continue promoting healthy lifestyles through health facilities, community health workers and school education as an integral part of health system. ▪ Strengthen collaboration with Nepal Police, Road Department, and other stakeholders to reduce road traffic accidents and deaths.

▪ Mental health service is included in the Basic Health Service Package. ▪ Ayurveda health institutions and citizen wellbeing centres regularly conduct Nagarik Aarogya Karyakram (Citizen Wellbeing Program) at the community level. ▪ Urban Health Promotion Centres established at municipality level.	▪ Strengthen collaboration with other sectors to enforce standards for air, water and food quality. ▪ Promote use of evidence to address the adverse impact of climate change on human health. ▪ Support municipalities for expansion of Urban Health Promotion Centres.
Outcome 8: Strengthened management of public health emergencies	
Key progress	Way forward
▪ Many national and sub-national level protocols and operational guidelines have been developed for preparedness and response of health emergency situations with clear roles and responsibilities of stakeholders including three spheres of government, health clusters, Rapid Response Team, Emergency Medical Team with focus on intra and inter sectoral coordination. ▪ MoHP has prioritized establishing/upgrading health facilities near highways and major urban areas to manage trauma cases. Provinces have also initiated capacitating health facilities near highways to manage trauma cases. ▪ Public Health Service Act and Regulations have provisioned establishment of health emergency fund. ▪ Successful completion of three batches of Frontline Field Epidemiology Training Program I ▪ Provincial Health Emergency Operation Centres (PHEOC) have been established and are operational in all seven provinces. ▪ A Joint External Evaluation (JEE) was held in November-December 2022 to fully assess compliance to the International Health Regulations (IHR).	▪ Ensure timely review and revision of the protocols and their effective implementation to yield the expected results. ▪ Further strengthen institutional capacity of federal, provincial, and local governments for more effective and timely preparedness and response of public health emergencies. ▪ Strengthen coordination and collaboration among the emergency response units/point personnel designated across different government ministries, institutions and offices for coordinated planning and action. ▪ Put accelerated efforts in establishment and operationalization of integrated disease surveillance system. ▪ Implement the recommendations of the JEE for better compliance to the IHR.
Outcome 9: Improved availability and use of evidence in decision making processes at all levels	
Key progress	Way forward
▪ There has been increased focus on generating quality data, using the data for evidence-based planning and implementation across the three spheres of government. ▪ Various management information systems (MIS), periodic surveys and research are in place to generate data and feed into the decision-making process. ▪ Maternal Mortality Study following Census 2021 has been accomplished setting a milestone in estimating MMR at provincial level and identifying cause of death covering all maternal deaths that occurred during the one-year study period. This study has also enhanced capacity of local health workers to further strengthen the ongoing MPDSR system. ▪ Practice of improved knowledge management is being institutionalized in terms of producing knowledge products like policy briefs, technical briefs and digital dashboards. ▪ eHealth Strategy and its implementation plan is in place.	▪ Further strengthen the overall process of evidence generation and data management leveraging modern technologies with a particular focus on their use for ensuring evidence-equity based planning at three levels of government. ▪ Prioritize accelerated efforts in building compatible linkage and interoperability between the systems avoiding duplication of work and enhancing efficiency in reporting. ▪ Prioritize standardization and expansion of electronic health record system in public and private hospitals, and promotion of quality health research in priority areas. ▪ Assess cost effectiveness and efficiency of major public health interventions to guide the future priorities. ▪ Accelerate the efforts towards standardization and rollout of electronic health record system at all levels of health facilities.

▪ Unified coding system has been developed and used in the National Health Facility Registry, hosted on the MoHP website as a milestone towards building interoperability among different information systems. ▪ Government Integrated Data Centre (GIDC) under the Ministry of Communication and Information Technology, has been providing a common platform for management and sharing of data. ▪ National Annual Review and Joint Annual Review have been combined in the form of National Joint Annual Review since 2018.	▪ More concentrated efforts are needed for creating a common platform among MoHP, councils, other line ministries and non-state sectors on generation, availability and use of information. ▪ There is a strong need for enhancing the institutional capacity to create central data repository to house data generated from routine information systems and national surveys in collaboration with development partners.

The achievements and learning from implementation of the NHSS (2015/16-2022/23) serve as a foundation and knowledge asset in shaping and implementation of Nepal Health Sector Strategic Plan, 2023-2030. The plan has five major strategic objectives with the overall goal of improving health condition of every citizen. The plan has set 14 outcomes and 29 outputs to achieve the goal. The five strategic objectives and the outcomes are:

1. Enhance efficiency and responsiveness of health system
    - Skill-mixed human resources for health produced and mobilized
    - Evidence - and equity-based planning
    - Safe and people-friendly health infrastructure
    - Uninterrupted availability of quality medicines and supplies
    - Improved governance, leadership and accountability
    - Effective management of public health emergencies
2. Address wider determinants of health
    - Reduce adverse effects of wider determinants on health
    - Citizens responsible for their own, family and community health
3. Promote sustainable financing and social protection in health
    - Improved public investment in the health sector
    - Improved social protection in health
4. Promote equitable access to quality health services
    - Improved quality of health services
    - Reduced inequality in health services
5. Manage population and migration
    - Demographic dividend maximized and demographic transition managed in development process
    - Systematic migration and planned settlement practiced

1 INTRODUCTION

The Nepal Health Sector Strategy (NHSS) 2015-2022/23, a joint commitment of the Government of Nepal (GoN) and Health Development Partners (HDP), was developed to guide the health sector and provide a framework for a Sector Wide Approach (SWAp). The strategy was initially developed covering the period from 2015 to 2020 but the implementation phase was extended to mid-2022, due to the COVID-19 pandemic and further one year to mid-2023. The strategy was developed when the unitary system of governance was in place and implemented during a period of transition to a federal system. NHSS carried the values of the Constitutional provision to guarantee access to basic health services as a fundamental right to every citizen. The strategy also carried the aspirations of the National Health Policy 2014, Fifteenth Periodic Plan (2018/19-2023/24), the relevant Acts and Regulations, Sustainable Development Goal (SDG) and other international commitments of the country. GoN developed a new National Health Policy in 2019 that responded to the health sector needs of federalism, also drawing learning from implementation of previous sector-wide strategies. NHSS has thus far provided a roadmap towards universal coverage of basic health services as enshrined in the Constitution and has been the major vehicle to translate the Constitutional spirit into action, implement the National Health Policy, and work towards achieving the SDGs by 2030.

The Ministry of Health and Population (MoHP) had the overall leadership and responsibility of implementing NHSS, and both the GoN and HDPs were jointly accountable for implementing, monitoring the performance and achieving NHSS results. NHSS Implementation Plan (NHSS-IP) 2016-21 as an output-based plan - was developed to facilitate smooth operationalisation of NHSS. The NHSS-IP and the Annual Work Plan and Budget (AWPB) subsequently have been the vehicles to translate the strategy into action. Following federalisation, provincial health related ministries and the municipal health offices have been leading the implementation of NHSS in collaboration with HDPs. NHSS served as a guide to prioritise health services and design health interventions to improve access to basic health services at the local levels.

The main source of funding for NHSS has been the government budget and the funds received from HDPs. A Joint Financing Arrangement (JFA) was agreed to enhance predictability and accountability of resources for effective implementation of NHS and has been the main coordination mechanism between GoN and HDPs who provided the budget support through a pool fund, that finances through agreed set of provisions and procedures for financial and technical support. Over the years, since the introduction of NHSS, the sector performance has been monitored based on its results framework, through a mid-term review of NHSS and annual performance reviews at federal, provincial and local levels. Respective programme-specific monitoring and evaluations were also carried out as per the NHSS-IP.

The National Annual Review (NAR) – MoHP's regular annual event since 1994/95 (2051/52) and the Joint Annual Review (JAR) – an event held annually since 2004 following the Nepal Health Sector Strategy: An Agenda for Reform (2004), used to be separate events, but have been organised as a single combined event since 2018 - the National Joint Annual Review (NJAR). The holistic review covering support from HDP and the contribution of the private and other non-governmental sectors has been a common platform for MoHP and HDPs to review annual progress, draw lessons, agree priorities for subsequent years and harmonise efforts for achieving NHSS results.

During the NHSS implementation years, Nepal survived three major events: the earthquakes of 2015, federal restructuring of the country, and the COVID-19 pandemic. The Nepal health sector

demonstrated its resilience by building-back, continuing to make health gains and persisting with the progress towards achieving set targets.

This report highlights major progress of health and population sector against NHSS (2015-202/23) outcomes[1]. The report summarises the progress against the key priority interventions under each of the nine outcomes with focus on the progress made over NHSS implementation period (2015/16-2022/23) including the last fiscal year (FY) 2022/23[2]. It also summarises lessons learnt over the NHSS implementation period and suggests the way forward. The report also presents progress against the action points of the last NJAR, and health related action points of policy and programme (Rt. Hon. President's address to the Parliament highlighting the national priorities for the fiscal year) and Budget Speech (Rt. Hon. Finance Minster's address to the Parliament). The Nepal Health Sector Strategic Plan 2022-2030 (2079/80-2087/88) that was endorsed in June 2023, was drawn up taking into account progress over the longer-term and recognises many of the aspects that have emerged from previous NJARs.

The primary objective of this report is to inform the discussions during the NJAR 2023 event. The tentative agenda of NJAR 2023 meeting is included in Annex 3.

[1] The NHSS results framework – showing the goal, outcomes and outputs of the NHSS is presented in Annex 1.
[2] FY 2022/23 of Gregorian calendar refers to FY 2079/80 in Nepali Calendar. Mapping of the FY in Gregorian and Nepali calendar is in Annex 2.

2 OVERVIEW OF PROGRESS

In the last two decades, Nepal has witnessed remarkable achievements in improving health status of its citizens, particularly on life expectancy, maternal and child survival, and the control of infectious diseases. Maternal mortality reduced from 539 deaths per 100,000 live births in 1996 to 151 in 2021[3]. Between 1996 to 2022, under-five mortality rate (U5MR) reduced from 118 per 1000 live births to 33; neonatal mortality rate (NMR) from 50 per 1000 live births to 21, and the proportion of childhood stunting from 57 to 25 percent (Table 2.1). Total fertility rate reduced from 4.6 in 1996 to replacement level (2.1) by 2022. In terms of service coverage, the proportion of children fully vaccinated improved from 43 percent to 80 percent and institutional childbirth from 8 percent to 79 percent. National TB prevalence Survey 2018-19 suggested a significant impact of efforts on TB epidemiology in Nepal that led to an estimated 3% annual reduction of TB incidence in the last decade.[4]

Table 2.1: Progress in major health indicators

Indicators	Year					
Maternal Mortality Ratio (per 100,000 live births)	539		281		239	151
Under-five mortality rate (per 1,000 live births)	118	91	61	54	39	33
Neonatal Mortality Rate (per 1,000 live births)	50	39	33	33	21	21
Total fertility rate (births per women aged 15-49 years)	4.6	4.1	3.1	2.6	2.3	2.1
Fully vaccinated children (%)	43	66	83	87	78	80
Children under 5 years stunted (%)	57	57	49	41	36	25
Institutional delivery (%)	8	9	18	35	57	79

***Data sources**: For MMR in 2021: Nepal Maternal Mortality Study following Census 2021.*
For all other data: Nepal Family Health Survey 1996, Nepal Demographic and Health Surveys 2001, 2006, 2011, 2016 and 2022.

Though there is progress in health outcomes in general, the progress is not uniform across all segments of the population sub-groups. Health system continues to experience gaps and challenges particularly in reducing the equity gaps among different population strata, in terms of geography, provinces, wealth quintile and education. There is a need to accelerate interventions tailored to the local needs to achieve universal coverage of basic health services and meet the SDG targets. Maternal mortality is reported highest in Lumbini province with 207 maternal deaths per 100,000 live births whereas the national average is 151 per 100,000 live births and Bagmati province reported the lowest MMR at 98 per 100,000 live births (Table 2.2). Likewise, more than one fifth of currently married women aged 15-49 years in Bagmati Province had their demand for FP satisfied, whereas the proportion was only 65% in Gandaki.

Five out of seven provinces had higher than national average coverage of four ante-natal care visits as per protocol. The highest rate of institutional deliveries was recorded in Bagmati Province (88%) followed by Gandaki (87.7%) and Sudurpaschim (86.8%). The proportion of institutional deliveries in Madhesh (66.6%) and Karnali (72.5%) lag behind the national average of 79.3%, indicating the

[3] Nepal Maternal Mortality Study following Census 2021
[4] National Tuberculosis Prevalence Survey Report, 2020, National Tuberculosis Control Center.

need for concerted effort in these provinces to meet the national target of 90% institutional deliveries by 2030. Eighty percent of children aged 12-23 months are fully vaccinated at the national level: six out of seven provinces having higher than average coverage, but it is only 68% in Madhesh Province. Karnali Province had the highest proportion of stunted children under five years (35.8%) followed by Madhesh (29.3%), Sudurpaschim (28.4%) and Lumbini (25.1%). The rate of wasting among children under five was highest in Lumbini (16.2%) and Madhesh (10.1%) followed by Sudurpaschim (5.1%). Nutrition specific and sensitive interventions need to be scaled up and strengthened.

Table 2.2: Provincial disaggregation of selected health indicators (2022)

Indicators	National	Province						
		Koshi	Madhesh	Bagmati	Gandaki	Lumbini	Karnali	Sudurpaschim
Maternal mortality ratio (per 100000 live births)	151	157	140	98	161	207	172	130
Under five mortality rate (per 1000 live births)	33	34	43	24	23	41	46	49
Neonatal mortality rate (per 1000 live births)	21	20	27	18	8	24	26	27
Women attending four or more ANC visits (%)	80.5	78.8	68.4	88.8	84.6	86.9	79.1	90
Institutional delivery (%)	79	82	67	88	88	84	72	87
Delivery assisted by skilled provider (%)	80.1	81.8	67.9	86.6	89.2	86.9	72.3	87.8
Fully vaccinated children aged 12-23 months (%)	80	80.8	67.7	83.4	93.4	85.3	84.3	88.8
Children under age 5 years who are stunted (~2SD) (%)	25	20	29.3	17.6	19.7	25.1	35.8	28.4
Children under five years wasted (<-2SD) (%)	7.7	3.8	10.1	4.5	4	16.2	3.8	5.1
Total fertility rate (births per women aged 15-49 years)	2.1	2.2	2.7	1.6	1.4	1.9	2.6	2.3
Demand satisfied for FP (all methods) (%)	73.3	77.8	69.9	80.5	64.7	70.8	70.3	72.6
Contraceptive prevalence rate (any method) among currently married women of age 15-49 years (%)	57	61.5	49	66.2	51.5	56.5	55.3	58.6

Source: NDHS 2022.
Colour code: Green=Highest/Best; Light green=Equal or better than national average; Orange = Lower/worse than national average; and Red=Lowest

2.1 SERVICE UTILISATION BY WEALTH QUINTILE

The data shows large disparities for selected health indicators in terms of wealth quintiles. Ninety-three percent of the women from the highest wealth quintile attended four or more ANC visits compared to 75% of the women in the lowest wealth quintile (Table 2.3). A similar pattern was seen for institutional delivery and full vaccination of children aged 12-23 months. Ninety-eight percent of women from the highest wealth quintile had childbirth in health facilities compared to only 65.8% of women from the lowest wealth quintile. The proportion of stunting among children from the lowest wealth quintile (36.9%) was found to be much higher than the proportion among children from the

highest quintile (13.1%). Highest CPR was found in women from the highest wealth quintile (62.5%), and highest proportion of women from the highest wealth quintile (79%) had their demand for FP satisfied.

Table 2.3: Disaggregation of selected health indicators by place of residence and wealth quintile (2022)

Indicators	National	Residence		Wealth quintile				
		Urban	Rural	Lowest	Second	Middle	Fourth	Highest
Women attending four or more ANC visits (%)	80.5	79.5	82.4	74.5	76.7	77.7	84.5	92.6
Institutional delivery (%)	79.4	80.9	76.5	65.8	73.2	79.6	87.1	97.6
Delivery assisted by skilled provider (%)	80.1	81.4	77.6	67.0	73.1	81.2	88.2	97.4
Fully vaccinated children aged 12-23 months (%)	80.0	79.8	80.3	75.8	74.1	85.0	85.2	82.8
Children under age 5 years who are stunted (~2SD) (%)	24.8	21.5	31.0	36.9	28.4	22.3	17.7	13.1
Children under five years wasted (<-2SD) (%)	7.7	7.9	7.5	5.6	7.8	8.5	8.4	9.2
Total fertility rate (births per women aged 15-49 years)	2.1	2.0	2.4	2.8	2.4	2.1	1.7	1.6
Contraceptive prevalence rate (any method) among currently married women of age 15-49 years (%)	57.2	56.9	58.0	54.3	56.4	56.2	56.6	62.5
Demand satisfied for FP (all methods) (%)	73.3	73.4	73.3	68.7	72.5	73.3	73.0	78.7

Source: NDHS 2022.
Colour code: Green = Equal or better than the national average; Orange = Lower/worse than the national average,

2.2 SERVICE UTILISATION BY PLACE OF RESIDENCE

Urban – rural disparities in service utilisation persist in some areas. While the urban-rural differences are not stark for Contraceptive Prevalence Rate (CPR) among currently married women of age 15-49 years, demand satisfied for family planning, and full vaccination of children aged 12-23 months, there continues to be the challenge of bringing rural areas up to par with urban areas. Rural-urban differences are wider for ANC four visits 82.4% vs 74.5%), institutional childbirth (76.5% vs 80.9%), and stunting among children under five years (31% vs 21.5%) which points overall to the fact that access to services continue to be a challenge in rural areas (Table 2.3).

2.3 PROGRESS ON NHSS RESULTS FRAMEWORK GOAL LEVEL INDICATORS

The NHSS Results Framework includes health sector indicators and targets that contribute to achieving the NHSS goal, its nine outcomes and 26 outputs. It comprises of 10 goal-level indicators, 29 outcome-level indicators and 56 output-level indicators. This section of the report highlights progress on the 10 goal-level indicators and selected outcome-level and output-level indicators (Table 2.4). Progress on NHSS outcomes is presented in Chapter 3. Progress against each indicator of the NHSS Results Framework is available on the MoHP website (www.nhssrf.mohp.gov.np).

- Maternal Mortality Ratio has **decreased** from 239 per 100,000 live births in 2016 (190 in 2013 according to UN estimate) to 151 per 100,000 live births in 2021 (Nepal Maternal Mortality Study

2021). The 2020 target was to reduce to 125; aiming to reducing it to 99 by 2025 and to 70 per 100,00 live births by 2030.

- Under-five Mortality Rate has **decreased** from 38 per 1000 live births in 2014 to 33 in 2022. The 2020 target was to reduce to 28; aiming to reducing it to 24 by 2025 and to 20 per 1000 live births by 2030.
- Neonatal Mortality Rate has **stagnated** at 21 per 1000 live births since 2016 indicating a need for renewed and accelerated efforts in newborn health.
- Total fertility rate has **decreased** from 2.3 in 2014 to 2.1 in 2022.
- Proportion of stunting among children under five years **decreased** from 37 percent in 2014 to 24.8 percent in 2022.
- Lives lost due to road traffic accidents per 100,000 population has **decreased** from 34 in 2013 to 9.4 in 2022.
- Suicide deaths per 100,000 population **increased** from 16.5 in 2014 to 22.2 in 2022

Table 2.4: Progress on NHSS goal level indicators

Code	Indicator	Baseline		Current Status (2023)		NHSS 2020 Target	SDG 2025 Target	SDG 2030 Target
		Data	Source	Data	Source			
G1	Maternal mortality ratio (per 100,000 live births)	190	UN estimate 2013	151	NMMS 2021	125	99	70
G2	Under five mortality rate (per 1,000 live births)	38	NMICS 2014	33	NDHS 2022	28	24	20
G3	Neonatal mortality rate (per 1,000 live births)	23	NMICS 2014	21	NDHS 2022	17.5	14	12
G4	Total fertility rate (births per women aged 15-49 years)	2.3	NMICS 2014	2.1	NDHS 2022	2.1	2.1	2.1
G5	% of children under age 5 years who are stunted (~2SD)	37.4	NMICS 2014	24.8	NDHS 2022	31	20	15
G6	% of women aged 15-49 years with body mass index (BMI) less than 18.5	18.2	NDHS 2011	13.4	NDHS 2022	12		
G7	Life lost due to road traffic accidents (RTA) per 100,000 population*	34	MoPPTM 2013	9.4	Police Mirror 2022	17	7.45	4.96
G8	Suicide rate per 100,000 population	16.5	Nepal Police 2014	22.2	Police Mirror 2022	14.5	7.8	4.7
G9	Disability adjusted life years (DALY) lost: Communicable maternal, neonatal & nutritional disorders; non-communicable diseases; and injuries	8319,695	IHME, BoD 2013	9,288,691	NBoD 2019	6,738,953		
G10	Incidence of impoverishment due to OOP expenditure in health	1.7	NHA 2015/16			Reduce by 20%		

Note: * NDHS 2022 shows 14 per 100,000 population RTA mortality ratio (Male 11 and female 3 per 100,000 pop)

2.4 PROGRESS ON NJAR 2022 (2079) ACTION POINTS

The National Joint Annual Review (NJAR) for the FY 2078/79 (2021/22) was held on 28 & 29 November 2022. The two-day review meeting was jointly participated by over 200 officials from the MoHP and its Departments, Divisions and Centres, federal hospitals, academia, health sector related councils, Provinces, Local Levels, other ministries, National Planning Commission (NPC), HDPs and other health sector stakeholders. The review focused on assessing the sector's performance including the issues/challenges and possible way forward. This section summarises the progress towards the key action points of the last NJAR (Table 2.5).

Table 2.5: Progress on key action points of the last NJAR

SN	Key action point	Progress
1	NJAR experiences and lessons to feed to the process of developing the 16th periodic plan	MoHP has been working closely with the NPC in drafting the 16th periodic plan. The lessons from NJAR and contents of the NHS-SP have well informed the initial contents of draft of the 16th plan.
2	Get the Nepal Health Sector Strategic Plan, 2079/80-2087/88, endorsed by the Cabinet.	The Nepal Health Sector Strategic Plan, 2023-2030 (2079/80-2087/88), got endorsed by the Cabinet in May 2023 (Baisakh 2080).
3	Get the National Health Financing Strategy, 2080/81-2087/88, endorsed by the Cabinet.	The National Health Financing Strategy, 2023-2033 (2080/81-2087/90), got endorsed by the Cabinet in May 2023 (Baisakh 2080).
4	Enhancing coordination and collaboration among three spheres of governments	Consultation meetings with provincial and local level authorities and stakeholders were held in Madhesh, Bagmati, Karnali provinces in 2023 under the leadership of Hon. Minister, MoHP. A policy dialogue to address maternal mortality through multisectoral collaboration at all three tiers of government was held in July 2023
5	Finalise and disseminate the Nepal Maternal Mortality Study following the Census 2021.	The Nepal Maternal Mortality Study following the Census 2021 has been finalised and disseminated at federal and provincial levels. National, provincial and local level policy briefs have also been prepared and disseminated. The report and briefs are available on the MoHP website. The study provides MMR and determines the cause of death at provincial level, and counts the maternal deaths occurred over a one-year period at the local level.
6	To address the stagnant neonatal mortality at 21 per thousand livebirths from 2016 (NDHS 2022), prepare and roll out action plan to achieve SDG targets of under-5 mortality of 20 and neonatal mortality of 12 per thousand livebirths by 2030.	Nepal's Every Newborn Action Plan – Implementation Plan (NENAP-IP), 2023-2030, has been prepared. The draft plan is expected to be endorsed and rolled out in 2024. FWD is taking a holistic approach of addressing NMR, UMR and MMR as care of the mother and the child are interrelated.
7	Develop and roll out Family Planning Sustainability Roadmap 2030. [21% women's need for	FWD is preparing the roadmap, which is expected to be finalised and rolled out by 2024.

Table 2.5: Progress on key action points of the last NJAR		
SN	**Key action point**	**Progress**
	family planning are still unmet in 2022 (NDHS 2022)].	
8	Work with the Curriculum Development Centre to review the school level health related curriculum.	NHEICC, in collaboration with Curriculum Development Centre, is reviewing the school-level health related curriculum. MoHP is coordinating with the Ministry of Education, Science and Technology for further actions.
9	Finalise and get the bills for Centre for Disease Control and National Health Accreditation Authority endorsed.	Bills have been drafted for establishment of Centre for Disease Control and National Health Accreditation Authority and shared to relevant line ministries for review and concurrence.
10	Develop strategies to improve access to vaccination to the unreached population [Childhood vaccination decreased from 87% in 2011 to 80% in 2022 (although it stood further below at 78% in 2016) resulting to rise in the incidence of no vaccination at 4% in 2022, compared to 1% in 2001].	FWD organised orientation/sensitisation programmes for the local elected leaders and other stakeholders from the districts and local levels reporting low immunisation coverage. FWD is supporting the low performing districts/local levels for microplanning to improve immunisation coverage.
11	Discussions on contradicting policies, plans and legislations	Basic and Emergency Health Service Management Section, Curative Service Division, conducted a review of legal and policy provisions/issues related to basic health service. The Constitution defines free basic health service as fundamental rights of every citizen and mandates the local governments for its delivery; the Public Health Service Act defines the BHS components (9); and the Public Health Service Regulation defines the BHS package and categorises certain health facilities including general and specialised hospitals, hospitals under Academies and Medical Colleges managed by federal and provincial governments as BHS delivery units, whereas the National Health Policy 2019 and the Nepal Health Sector Strategic Plan 2080-2030 aim to deliver BHS from all health facilities across the country. The review has pointed out the need to develop a common understanding on BHS at all levels and a workable mechanism for delivery of BHS in compliance with the constitutional and policy provisions and spirit. FWD has conducted a consultative review of the CEONC services which included examining the key legal and regulatory documents that have been developed to implement various rights, roles and responsibilities, relating to CEONC services. The review highlighted key discrepancies in the categorisation of the health facilities and the type of services to be offered from different levels of health facilities. Inconsistencies in the classification of health facilities as per the National Health Infrastructure Development Standards and the Public Health Act

Table 2.5: Progress on key action points of the last NJAR		
SN	**Key action point**	**Progress**
		and regulations, differences in services to be offered from different levels of health facilities as per The Right to Safe Motherhood and reproductive Health Act and Regulation compared with the Public Health Service Act and regulations can lead to confusion and affect coordination amongst the three tiers of government.
12	Roll out HPV vaccine	HPV vaccine has been rolled out in seven hospitals – one in each province. Koshi hospital in Koshi province, Narayani hospital in Madhesh, Maternity hospital in Bagmati, WRH Gandaki, Bheri hospital in Lumbini, Dadeldhura hospital in Sudurpaschim province; and Surkhet provincial hospital in Karnali province in 2022/23. The government procured vaccine is being provided to 10,000 adolescent girls. MoHP has submitted proposal to GAVI for nation-wide coverage of the vaccine.

2.5 Progress on Key Action Points from Policy and Programme -Health, 2022/23 (2079/80)

Table 2.6 presents the progress on the key action points related to health from Policy and Programme of GoN for FY 2022/23 (2079/80).

Table 2.6: Progress on key action points from Policy and Programme – Health, 2022/23 (2079/80)		
SN	**Key action point**	**Progress**
1	▪ Implement digital health programmes. ▪ Implement an integrated electronic health information system in all hospitals to manage the health records of every citizen.	▪ MoHP has initiated the process of developing interoperability framework. A consultative workshop was held in 2023 to take inputs from relevant stakeholders. ▪ Telemedicine service is in operation in Seti hospital. Likewise, Kanti Children's Hospital, Child and Adolescent Psychiatry Unit is operating tele mental health service. ▪ Standardisation of electronic health record (EHR) system has been initiated. Orientation on EMR system completed in Dadeldhura Hospital.
2	Strengthen legal system for safety of health institutions, doctors and health workers.	▪ First amendment of the Safety of Health Workers and Health Institutions Act, 2022 (2079) is submitted to Parliament for its endorsement.
3	▪ Integrate social health security programmes into health insurance programmes. ▪ Establish social service unit (SSU) in all hospitals.	▪ Social health protection schemes are listed, and a study is in progress with the objective of harmonisation. ▪ SSUs are established and are in operation in 86 hospitals across the country.
4	Vaccinate all children in the age group five to eleven years against Covid-19.	▪ 94% of children aged 5-11 years have been vaccinated with first dose of COVID-19 vaccine and 86% of children with second dose of vaccine.
5	Ensure specialised health services for senior citizens.	▪ Geriatric Health Service Strategy 2021 (2078), and Senior Citizens (Geriatric) Health Services Operation Standards, 2022 (2079), have been developed.

Table 2.6: Progress on key action points from Policy and Programme – Health, 2022/23 (2079/80)		
SN	**Key action point**	**Progress**
		▪ Geriatric wards are established in 94 hospitals. Specialised health services were provided to 39,402 senior citizens. ▪ A total of 322,674 senior citizens received the services through Senior Citizen Programme run by Department of Ayurveda and Alternative Medicines (DoAAM).
6	Make the following two services available free at least once a year in all local level health facilities: ▪ Basic laboratory tests service for all citizens above 40 years ▪ Cervical cancer screening services for women.	▪ District and municipal health workers and stakeholders have been oriented for screening for cervical cancer. ▪ A total of 205,291 women have been screened for cervical cancer free of charge. Of these, 6531 (3.2%) were screened positive.
7	▪ Introduce a special programme to make breast cancer diagnosis and treatment easy and accessible.	▪ Public awareness campaigns about breast cancer self-identification methods are being aired through radio and television programmes. More targeted interventions are needed for ensuring easy and accessible diagnosis and treatment services.
8	▪ Make central public health laboratory modern and equipped with all kinds of specialised tests in a simple and convenient manner. ▪ Establish government-owned blood transfusion centres in all provinces. ▪ Encourage and attract private sector to set up specialised health laboratories. ▪ Send laboratory samples abroad for testing only when testing facilities are not available in country.	▪ National Public Health Laboratory has been equipped with specialised tests like immunohistochemistry for specific cancer tests and molecular tests for HPV, measles, adenovirus, enterovirus, Mpox. NPHL has started the tests. Gene sequencing available for covid19 and influenza. ▪ 25% of construction of additional building completed for National Public Health Laboratory, Teku. ▪ MoHP has approved concept paper and guideline for establishment of government-owned blood transfusion centre in each province. ▪ A list of laboratory tests available within the country is now ready. Guideline to regulate outsourcing of sample outside country is drafted This will facilitate the process of sending the samples abroad only when testing facilities are not available in country.
9	Develop a mandatory mechanism for audit of all deaths that took place in hospitals during treatment.	Institutional death registration system has been developed and the doctors/health workers and medical recorders working in hospitals in Koshi Province have been oriented to use the system. The system records cause of all deaths occurring in the facility. Hospitals implementing MPDSR system have been reviewing maternal and perinatal deaths occurring in the facility.
10	Effectively implement a multisectoral action plan for prevention and control of non-communicable diseases.	The Package of Essential Non-communicable Diseases (PEN) has been introduced to screen, diagnose, treat and refer cardiovascular diseases, COPD, cancer, diabetes, and mental health at health posts, primary healthcare centres and hospitals for early detection and management of chronic diseases within the community. PEN-Plus package is endorsed this year. The PEN-Plus is an integrated care delivery strategy focused on alleviating the

Table 2.6: Progress on key action points from Policy and Programme – Health, 2022/23 (2079/80)		
SN	**Key action point**	**Progress**
		NCDs burden by increasing the accessibility and quality of chronic care services for severe NCDs – such as type 1 diabetes (T1D), rheumatic heart disease (RHD), congenital heart disease, sickle cell disease, and Thalassemia. The PEN-Plus program is now expanded to four more selected hospitals in Madhesh, Karnali, Lumbini and Sudurpaschim provinces. The trained health workers in the selected hospitals screen the ailments and provide treatment.
11	Conduct citizen health campaign (*Nagarik Arogya Abhiyan*) to reduce non-communicable disease with participation of citizens.	DoAAM has been running citizen health campaigns at the community level. Please see Section 3.7 for details.

2.6 PROGRESS ON KEY ACTION POINTS FROM BUDGET SPEECH - HEALTH, 2022/23 (2079/80)

Table 2.7 presents the progress on the key action points related to health from Budget Speech of GoN for FY 2022/23 (2079/80).

Table 2.7: Progress on key action points from Policy and Programme – Health, 2022/23 (2079/80)

SN	Key action point	Progress
1	Raise the Human Development Index (HDI) to 0.650 by improving level of health and education.	In 2021/22, the HDI value marginally declined from 0.604 to 0.602[5]. This indicates need for more efforts to achieve the target of 0.650.
2	Implement Nepal Health Sector Strategic Plan, 2023-30 (2079-2087) to achieve sustainable development goals.	The NHS-SP 2023-30 was endorsed by the Cabinet in May 2023, and the plan is in operation now.
3	Complete construction of basic hospitals in 655 local levels.	In this financial year, detailed project reports of 592 hospitals have been approved, funds have been released to 449 hospitals and work has been completed in 25 hospitals.
4	Establish and operationalise senior citizen wards in 25 federal and provincial hospitals to ensure specialised services to them.	Geriatric wards have been established in 94 hospitals (including 25 in FY 2022/23). A total of 39,402 senior citizens received the services.
5	Provide 98 types of medicines free of charge from government health facilities.	A mechanism has been developed for free distribution of 98 types of medicines for basic health services, but not all public facilities have been able to provide all the listed medicines free-of-charge to the clients. The NHFS 2021 shows that only 1.3% of public health facilities reported having all 18 types of tracer medicines available at the time of survey.
6	Increase funds in Aama Surakshya Programme to reduce maternal mortality by providing maternity services from health institutions.	Unit cost of Aama Surakshya Programme has been increased as follows: ▪ Normal delivery - from NPR 1,000 to 2,500 ▪ Complicated delivery – from NPR 3,000 to 4,000 ▪ Caesarean section – from NPR 7,000 to 10,000 In 2022/23, 380,183 mothers got the incentive[6], covering more than 95% of the eligible women, which is an increase of 37,096 women since 2021/22.
7	Provide a lump sum of Rs. 5,000 nutritional expenses to the mothers of poor families in the 25 districts that are lagging behind in the human development index.	▪ FWD prepared guidelines for distribution of nutritional expenses to the mothers of poor families in the 25 districts that are lagging behind in the human development index. However, the fund could not be distributed to the mothers during the fiscal year.

[5] UNDP 2022, Human Development Report 2022.
[6] HMIS data as of 30th Sept 2023

Table 2.7: Progress on key action points from Policy and Programme – Health, 2022/23 (2079/80)		
SN	**Key action point**	**Progress**
8	In order to provide quality health services and promote health tourism, establish hospital to provide super specialty services in Lumbini Province through Patan Academy of Health Sciences; and in Saptari (Madhesh Province) through National Academy of Medical Sciences.	MoHP has been facilitating PAHS and NAMS to run the specialty services in collaboration with Madhesh and Lumbini Provinces.
9	Proceed with construction of Teachers' Hospital.	Policy level discussions are in progress
10	Establish sickle cell anaemia research and treatment centre.	Bheri Hospital, Nepalgunj, has started dedicated Day Care Centre for treatment of Sickle cell anaemia and Thalassemia patients. GoN provides free treatment up to NPR 100,000 to the patients of Sickle cell anaemia through the 10 listed hospitals. Lumbini Province has made a provision of free enrolment of Sickle cell anaemia patients into the Health Insurance Scheme. Health workers are provided with training for the diagnosis and treatment of Sickle cell anaemia. Bheri hospital, Gulariya hospital and Kohalpur Municipality Hospital are providing free diagnosis for sickle cell anaemia. Special studies/research focusing on the target groups are in plan.
11	Establish trauma centres at Sainamaina in Rupandehi, Devchuli in Nawalparasi East, Lamki in Kailali, Rakam in Karnali Corridor and Belkhu in Dhading.	▪ Urban Development and Building Department's LMBIS was received in 2022 (on 2079 Falgun 22) for establishment of trauma centre in Rupandehi's Saina Maina and Karnali highway in Rakam Karnali. Correspondence has been done with the project offices for land consolidation, but the land has not been managed yet. ▪ Land acquisition process is in progress for construction of trauma centre at Bardghat Nawalparasi (East). ▪ Land has not been managed to build a 50-bed trauma centre in Belkhuma in Dhading and Lamki in Kailali.
12	Implement 'One Doctor One Hospital' programme to motivate doctors and health workers working in remote district hospitals.	'One Doctor one Hospital' programme is in operation in Gorkha Hospital and Dadeldhura Hospital.
13	Purchase a Pet Scan Machine and a Cyclotron Production Machine necessary to diagnose cancer and provide treatment services in the country	Kathmandu Valley and B.P. Koirala Cancer Hospital have been chosen for installation of Pet Scan Machine and Cyclotron Production Machine (Secretary level decision dated 24 Kartik 2079). However, the machine purchase procedure has not taken place due to lack of space for installation.
14	Launch vaccination programme against cervical cancer.	▪ HPV Vaccine SoP, Protocol and guidelines have been prepared. District and municipal health workers and stakeholders have been oriented for screening for cervical cancer.

Table 2.7: Progress on key action points from Policy and Programme – Health, 2022/23 (2079/80)		
SN	**Key action point**	**Progress**
		▪ HPV vaccine has been rolled out in seven hospitals – one in each province. ▪ A total of 205,291 women have been screened for cervical cancer free of charge. Of these, 6531 (3.2%) were screened positive.
15	▪ Develop Shaheed Dharmabhakta National Transplantation Centre as an institution capable of producing specialists in organ transplantation. ▪ Purchase dialysis machines to provide dialysis services in all provincial hospitals. ▪ Provide free kidney transplant service for poor kidney patients.	▪ The Centre is in the process of identifying suitable land for establishment of a dedicated and capable institute of producing specialists in organ transplantation. The Centre supported Western Regional Hospital, Pokhara and Surkhet Provincial Hospital to carryout kidney transplant surgery and the is in the process of expanding this service to all 7 provinces. See Section 3.2 below for details about the Centre. 321 kidney patients across the country got free kidney transplant service.
16	In coordination and cooperation with the local level, all health science academies and medical colleges to conduct free health camps at least twice a year in local basic hospitals and in rural and remote areas so that health technology and experience can be exchanged.	▪ National Academy of Medical Sciences and BP Koirala IHS have run one-one free health camps in coordination and collaboration with the local governments. . ▪ PAHS is providing free check-up service every month in 5 hospitals in 4 districts. ▪ Karnali AHS provides free check-up service in Kalikot district.
17	Establish National Centre for Disease Control for disease prevention and control.	A concept paper has been developed for establishment of National Centre for Disease Control and shared with relevant line ministries for review and concurrence.
18	Prepare necessary legal arrangements to establish a National Health Accreditation Board to measure and certify the quality of health institutions and health services.	A concept paper has been developed for establishment of National Health Accreditation Board and shared with relevant line ministries for review and concurrence.
19	Develop and install electronic health information systems in major hospitals and gradually expand to all health institutions.	EMR system orientation completed in Dadeldhura hospital. Standardisation of the EHR system is in progress through establishment of interoperability lab at the MoHP.
20	▪ In order to make health insurance programme more systematic and effective, provide the service to the beneficiaries only from community and government hospitals. ▪ Establish social health units in all community and government hospitals. ▪ For sustainability of the programme, prepare to run health insurance programme through insurance company.	A list of various social health protection schemes has been prepared after studying the effectiveness of the payment system of social health protection schemes. SSUs are established and are in operation in 86 hospitals across the country.

Table 2.7: Progress on key action points from Policy and Programme – Health, 2022/23 (2079/80)		
SN	**Key action point**	**Progress**
21	▪ Implement community health education programme in collaboration with the local level. ▪ Conduct public health campaign with participation of community people.	▪ Local Citizen Health Committees (*Sthaniya Nagarik Arogya Samiti)* have been formed in 150 places and 25 local Citizen Health Groups have been formed to conduct Citizen Health Campaigns. ▪ Guidelines have been developed for training of community health nurses on healthy lifestyle and behaviour change.
22	▪ Conduct free screening service for non-communicable diseases once a year in local level health institutions for citizens above 40 years of age. ▪ Provide free health check-ups for all public-school students before the commencement of the academic session.	▪ 40,000 students from 234 schools received free health check-ups.
23	Establish government-owned blood banks in all provinces.	MoHP has approved the concept paper for establishment of government-owned blood transfusion centre at provincial level on January 9, 2023.
24	Make necessary arrangements to start emergency cardiology services with Cath lab in federal hospitals of all provinces.	Funds have been transferred to Surkhet, Seti and Narayani hospitals for cardiology services including Cath lab.
25	Operate ambulance service through an integrated system.	National Ambulance Guideline 2021 (2078) has been developed and is being implemented across the country.

3 PROGRESS BY NHSS OUTCOMES

This chapter highlights major progress in the health and population against NHSS (2015-2023) outcomes[7]. This summarises the progress against the key priority interventions under each of the nine outcomes with focus on the progress made over the last FY 2022/23.

3.1 REBUILD AND STRENGTHEN HEALTH SYSTEMS: INFRASTRUCTURE, HUMAN RESOURCES FOR HEALTH, PROCUREMENT, AND SUPPLY CHAIN MANAGEMENT

3.1.1 Infrastructure

NHSS was developed soon after the Gorkha Earthquake 2015, thus the focus during the initial years of NHSS implementation was on re-building physical infrastructure and reinstating medical equipment in earthquake-affected districts. The priority thereafter gradually shifted to establishing earthquake resilient facilities and upgrading existing facilities as envisaged in the federal structure. In the recent years, the focus has been towards developing multi-hazard-resistant, climate-resilient and environmentally friendly health infrastructure by incorporating green technology. MoHP has been working in coordination with provincial and local governments to promote best practices and ensure a harmonised approach to health-related infrastructure. As per the national policy of establishing a basic hospital at each local level, health facilities are being upgraded to 5-bed, 10-bed or 15-bed primary hospitals by the local levels. Capital budgets are being allocated to local levels to expand access to basic health services. Furthermore, MoHP is assisting local governments to develop multi-hazard resilient designs and proceed with the construction.

3.1.1.1 Progress status on NHSS priority interventions

Table 3.1 presents the progress status on NHSS priority interventions.

Table 3.1: Progress status on NHSS priority interventions

SN	NHSS priority interventions	Progress status
1	Revise and implement Health Facility Masterplan based on population and geographic criteria, with special focus on post-earthquake scenario.	The Nepal Health Infrastructure Development Standards (NHIDS), endorsed by the Cabinet in 2017 established a rational federal planning framework for developing and upgrading health facilities, considering accessibility, catchment population, topography, availability of suitable land, condition of existing or nearby facilities, and the principles of universal access and Leave No One Behind (LNOB). The concerned authorities are implementing NHIDS. As per the NHIDS health facilities categories, MoHP selected, budgeted and authorised different local levels to upgrade 396 health facilities to be upgraded into 5 beds, 10 bed or 15-bed basic hospital in FY 2019/20 (2077/78); and in FY 2020/21(2078/79) included 259 local level health facilities to be assessed for construction site and prepare detailed project report (DPR).
2	Improve infrastructure planning and ensure adherence to building standards including timely	Infrastructure planning has been improved after the implementation of the standards and guidelines. To ensure adherence to them, MoHP has been reviewing design drawings and structure design of the 5,10 and15 beds basic hospitals, being implemented by local levels. Similarly, design proposals submitted by HDPs for post-earthquake reconstruction work have also been reviewed and

[7] The NHSS results framework – showing the goal, outcomes and outputs of the NHSS is presented in Annex 1.

Table 3.1: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
	development and commissioning	confirmed that they adhere to the standards. The Department of Urban Development and Building Construction (DUDBC) is also implementing health infrastructure construction projects as per these standards. In the federal context, the responsibility of managing local health facilities and provincial health facilities is with the local and provincial governments. Understanding of health infrastructure development codes, standards, and guidelines among subnational governments is currently inadequate, which has contributed to delays in initiating and completing health facility construction projects.
3	Revise standards and guidelines for earthquake resilient construction, including site selection and routine maintenance with clear roles and responsibilities	GoN revised the Nepal National Building Code NBC 105:2020 Seismic Design of Buildings in Nepal in 2020. The, 'Nepal Earthquake Retrofitting and Rehabilitation Standards (Draft)' and 'Repair and maintenance guidelines and action plan (Draft)' have also been developed.
4	Revise and implement existing guidelines and standards for facility construction, functioning and licensing, including earthquake resilient and disabled friendly infrastructures	NHIDS, Standard guideline for Design and construction of Health Buildings 2017 (2074) and the Health Institution Operation Standards 2020 (2077) were developed and implemented. MoHP has prepared: ▪ Basic Hospital Building Construction Guideline 2020 (2077) ▪ Monitoring Framework on Health Infrastructure DPR Preparation and Construction 2020 (2077) ▪ Standard design drawings for construction of Basic hospitals (5, 10 and 15 Bed). These guidelines and standards are being implemented for facility construction, functioning and licensing, including earthquake resilient and disabled friendly infrastructures by both public and private sector.
5	Establish coordination mechanism between different line Ministries and include private sector stakeholder	Mechanism for coordination between different line ministries including private sector stakeholder is in place.
6	Establish reference laboratories at regional level	Provincial laboratories are being constructed through DUDBC in six provinces except Bagmati Province.
7	Demolish and re-build damaged and unusable facilities by the earthquake according to a build-back-better approach	Reconstruction, retrofitting, and repair work is being implemented as per the Post Disaster Need Assessment (PDNA) report and Post Disaster Recovery Framework (PDRF) through MoHP, National Reconstruction Authority (NRA) and HDPs. Data of reconstruction projects and their current status is presented in Table 3.1, 3.2, 3.3, 3.4

Table 3.1: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
8	Retrofit health institutions to be earthquake-resilient	Major retrofitting work is being implemented in two hospitals (Western Regional Hospital, Pokhara and Bhaktapur Hospital, Bhaktapur). Status of the projects is presented in Table 3.8
9	Develop and implement guideline for renovation and routine maintenance with defined roles for local bodies	Health Facilities Repair and Maintenance Guideline (Draft) has been prepared.
10	Develop capacity of regional and district level staff to routinely monitor, supervise and support health infrastructure development and maintenance	Capacity enhancement activities on multi-hazard resilient health infrastructure, retrofitting, design and planning, repair and maintenance, construction monitoring and supervision, and construction safety have been conducted in federal, provincial, and local level staff.
11	Pre-qualify and standardise medical equipment by level of health facility	Medical equipment requirements for all levels of health facilities are specified and standardised in Minimum Service Standards (MSS). For the procurement of the appropriate quality of the medical equipment, MoHP has published standard technical specification bank on its website.
12	Adopt new engineering and biomedical technologies	MoHP has been updating technical specification bank to ensure the procurement of the medical equipment with latest engineering and biomedical technologies.
13	Maintain inventory of medical equipment / products at all levels	Logistic Management Information System (LMIS) is in place to maintain inventory of the medical equipment at all the levels. LMIS is being updated regularly by the concerned section in DoHS.
14	Develop replacement plan for medical equipment	A biomedical equipment inventory system has been developed for the resource planning, repair, and maintenance of biomedical equipment in the country. The system provides notification about the annual/preventive maintenance, warranty period, parts replacement time, calibration requirements, and others. Please see Section 3.1c. for details.
15	Improve capacity for maintenance of biomedical equipment at local levels	Biomedical equipment maintenance and capacity enhancement training is being provided at provincial hospitals with technical support from Nick Simons Institute. Biomedical equipment maintenance lab has been established in Lumbini Province Hospital to provide maintenance service to public hospitals at the local level. Besides, the Biomedical Technician Training Centre under National Health Training Centre (NHTC) has been conducting diploma courses to produce human resources. It also provides maintenance and training support to public hospitals.

3.1.1.2 Major Initiatives

Significant progress has been made in health infrastructure in FY 2021/22 and FY 2022/23. Major achievements are summarised below:

- **Ongoing Post-Gorkha-Earthquake 2015 Reconstruction -** Most of the reconstruction work which is being implemented by different governments and other agencies are completed. As the tenure of NRA came to an end in December 2021 as per the Council of Ministers, responsibility for completing all the remaining works were transferred to DUDBC. The Central Level Project Implementation Unit (CLPIU) in DUDBC is running a total of 448 health building reconstruction projects. Among them, 303 projects are funded by the GoN, 10 projects are funded through the Saudi Fund for Development (SFD) from the Kingdom of Saudi Arabia and 135 projects are funded through Indian Grant Assistance from the Government of India (GoI). The progress status of these projects is given in Tables 3.2, 3.3 and 3.4.
- The GoN has also conducted health facilities reconstruction through a set of bilateral arrangements with HDPs. These projects are being implemented by the partners. Among them retrofitting and construction works supported by BEK; KOICA; JICA; GIZ, KfW (FC recovery phase-1), USAID (Nepal Reconstruction Engineering Services – NRES) has been completed and handed over in previous years. Progress of remaining projects is presented in Table 3.5.

Table 3.2 Progress status of Health Infrastructure reconstruction by NRA-CLPIU through GoN fund

HI types	Ongoing	Completed	Total
Health Post	109	173	282
Academic Hospital	1	0	1
Primary Hospital	3	3	6
Public Health Office	0	1	1
Ayurveda Ausadhalaya/Health centre	5	8	13
Total	**118**	**185**	**303**

Table 3.3 Progress status of Health Infrastructure reconstruction by NRA-CLPIU through SFD

HI types	Ongoing	Completed	Total
Health Post	9	0	9
Ayurveda Ausadhalaya/health centre	1	0	1
Grand Total	**10**	**0**	**10**

Table 3.4 Progress status of Health Infrastructure reconstruction by NRA-CLPIU through GoI grant

HI types	Ongoing	Completed	Total
Health Posts	83	33	116
Primary Hospital	2	1	3
Ayurveda Ausadhalaya	11	5	16
Grand Total	**96**	**39**	**135**

Table 3.5: Progress of ongoing projects under agreements with bilateral agencies

Agency	Works description	Progress
KfW	**FC Recovery Phase - 2:**	
	Reconstruction of Melbisauni Primary Hospital	Tender evaluation ongoing
	Reconstruction of Jhaukhel Health Post, Sankhu Primary Hospital, Kathmandu (B2) and Bhimeshwor Health Post	
CHINA	Chautara hospital	Reconstruction work is ongoing

- **Regular health facilities construction programme by DUDBC -** MoHP collaborates with DUDBC as its delivery entity for the construction, extension and refurbishment of health

facilities. Since FY 2015/16, there has been a general improvement in the number of projects completed, while the number of 'sick' projects[8] has decreased. Progress on these projects is given in Table 3.6. MoHP authorised DUDBC to implement 152 projects (including continuing projects from previous years) in FY 2022/23. Of these projects, 47 have been completed, while others are in progress.

Table 3.6: Health Infrastructure construction works budgeted and authorised to DUDBC (July 2023)

Building type	No of projects	Design/ tender process	Construction Ongoing	Completed
Hospital (Secondary and Primary)	54	16	29	9
Health Post	54	1	25	28
Public Health Office	1		1	
Provincial Public Health Laboratory	6	1	5	
Ayurved Hospital	7	4	2	1
Ayurved Health Centre	1	1		
Ayurved Health Post	8		4	4
Quarter	6	1	4	1
Others (Pharmacy, retaining wall, post-mortem etc.)	15	3	8	4
	152	**27**	**78**	**47**

- **Construction of Basic Hospital by Local Governments -** As of October 2023, 413 local levels had issued construction contracts and started construction process and among these, 26 local levels have received all the allocated budget and two local levels have reported completion of construction. As mentioned in the Table 3.1 the MoHP Health Infrastructure technical team has been supporting local levels by reviewing the designs of basic hospitals based on existing national building codes, standards and guidelines developed with technical support from BEK. Since the FY 2020/21, 467 local levels have submitted their designs for review and as of end of October 2023, 251 designs were approved, and the rest have been asked to update and resubmit. Details of these are presented in Table 3.7.

Table 3.7: Province-wise health facilities design approval status

Province	No. of Basic Hospital
Koshi Province	50
Madhesh Province	44
Bagmati Province	36
Gandaki Province	21
Lumbini Province	42
Karnali Province	23
Sudurpaschim Province	35
Total	**251**

- **Priority hospital retrofitting –** Following the 2015 Gorkha earthquake, BEK committed to upgrade two major hospitals to demonstrate seismic retrofitting as a viable and affordable approach to strengthening Nepal's health facilities. Following a selection process based on comprehensive hospital selection criteria, MoHP and DUDBC with technical support from BEK have been implementing retrofitting projects at two public hospitals: Bhaktapur Hospital in the Kathmandu Valley and Western Regional Hospital (WRH) in Pokhara. This initiative has been a

[8] Projects that have been stalled or halted, for example, owing to technical or contractual problems

flagship activity in the MoHP Health Infrastructure programme since 2017 and introduces a three-fold integrated retrofitting approach in Nepal (Figure 1):

1. **Seismic retrofitting** covers the strengthening of existing building components, including both structural and non-structural elements, to meet current seismic strength requirements as per present-day codes and standards. It also includes the other hazards safety measures.
2. **Functional retrofitting** involves upgrading building functions within existing structures to make them more usable and effective for hospital services and planning for rational placement of services to meet current standards of health service provision and.
3. **Green retrofitting** focuses on upgrading existing buildings to improve environmental and energy performance, water quality, thermal comfort, and indoor air quality.

Figure 1: Integrated Retrofitting approach

To ensure consistent and high-quality healthcare services during construction works in the running hospitals, these projects adopted a patient-centred construction process with a decanting strategy. Multi-purpose decant Facilities were initially constructed at each hospital, enabling the temporary relocation of services and equipment from each block until the retrofitting work of the block is completed, and services are reinstated. During COVID-19 pandemic, MoHP re-purposed the decant facilities at both hospitals as COVID-19 Treatment Centres. This was a major humanitarian intervention at the time, with more than 4500 patients treated, and doubtlessly, many lives saved. Table 3.8 presents the status of the project.

Table 3.8: Status of Retrofitting works at Bhaktapur Hospital and WRH Pokhara

Activity	Progress
Qualitative and Quantitative Assessment of the health facilities at both hospitals including on-site investigations	Completed
Retrofitting and Rehabilitation Design	Completed
Retrofitting Design Review and verification by National and International Experts and its approval from DUDBC and Hospital Management	Completed
Preparation of design drawings, cost estimation, specification, and tender documents	Completed
Tendering	Completed
Construction work:	
Decanting blocks construction at both hospitals (1st package)	Completed and handed over
Retrofitting construction works (2nd package) a) Western Regional Hospital Pokhara b) Bhaktapur Hospital	Construction works ongoing. a) 63% physical progress b) 61 % Physical Progress
Decanting of Services (3rd package)	Ongoing
Additional retrofitting package (4th package) *(Construction of Waste Management area, Wastewater treatment system, landscaping, store blocks and others)* a) Western Regional Hospital Pokhara b) Bhaktapur Hospital	a) Construction works ongoing (30% Physical Progress) b) Tender evaluation process

The COVID-19 pandemic and the use of the Retrofitting Decant Facilities as COVID-19 Treatment Centres caused major slippage in project progress. However, hospital management have made some alternative space available for decanting as both decanting structures are still occupied. DUDBC has extended the length of the main retrofitting construction contracts - Bhaktapur Hospital is due to be completed by 28 October 2023, and WRH by 13 November 2023.

Figure 2: Retrofitted Medical Block in WRH, Pokhara

Figure 3: OT block in Bhaktapur Hospital

- **Ayurveda Health Facilities**
  - Hospital construction process has been progressed after land acquisition for federal Ayurveda Hospitals in Gandaki and Madhesh Provinces.
  - Land acquisition process has progressed in Bagmati Province and Sudurpaschim Province.
  - Construction of Ayurveda Panchakarma and Yoga Sewa Kendra in Budhanilkanth, Kathmandu is about to be completed and O&M survey has been started.

3.1.2 Human Resources for Health

NHSS emphasises production and deployment of a mix of skilled human resources for health (HRH) tailored to local contexts. Primarily NHSS prioritised improving availability of human resources with a focus on rural retention and enrolment; and improving medical and public health education and competencies.

3.1.2.1 Progress status on NHSS priority interventions

Table 3.9 presents progress status on NHSS priority interventions related to HRH.

Table 3.9: Progress status on NHSS priority interventions

SN	NHSS priority interventions	Progress status
1	Develop an HR master plan based on improved knowledgebase of existing health sector staff and including HR projections, for appropriate production of health sector personnel	National Strategy on HRH 2020 - 2030 (2077/78 - 2086/87) was developed and endorsed in 2021. This strategy adopts a comprehensive approach on HRH governance, management, deployment, and information system. An action plan has been developed for implementation of this strategy. The Medical Education Commission recently in 2023 (2080 Jestha 08) projected the health workforce needed for the country till 2030/31 (2087/88)[9]. The projection reveals that in the FY 2020/21 (2077/78), the base year, the total health workforce need for the country was 275,203 whereas only 211,977 were reported to have

[9] Nepal Health Workforce Projection, 2079/2087, 2023, Medical Education Commission

Table 3.9: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
		been working indicating a 23% gap (63,226). This includes the gap of 2,904 MBBS and 5,779 specialised doctors. The projected health workforce for the year 2030/31(2087/88), is 301,895. Professional councils have developed digital registry platforms to inform health workforce production. However, active health workforce database is not available for use in HRH planning and decision making. There is a need for regular review and implementation of the National Strategy on HRH - Action plan to address the HR needs.
2	Strengthen partnerships with academia to better align HR needs with production, particularly for health workers in remote and rural areas	Each Academy of Health Science is governed by a separate Act which includes a mandatory provision for the institutions to align with national HRH needs particularly for health workers in remote and rural areas, support capacity building of health institutions in remote areas, and support them with skill-mixed HRH. Health Science Academies have started production of health workers based on the provincial and local needs. MoHP has adopted and piloted Workload Indicator Staffing Norms (WISN) Tool' in the country context in 2021. A pool of WISN trainers have been developed. Some local governments have initiated the practice of signing an MoU with individuals to provide scholarships for doctors and the recipients to serve the local health facilities for the specified period of time.
3	Review existing HR recruitment and deployment system to timely fill the vacant position	Staff Adjustment Act 2017 (2074) was enacted in October 2017 and makes placement of health workforce in provinces and local government easier and facilitates the retention of health workforce. HRH has also been adjusted according to the Act. This has led to better distribution of HRH at sub national level. There are 25,351 (80.2%) of HRH at local level, 3,593 (11.3%) at provincial level and 2,662 (8.4%) at federal level. MoHP prepared Human Resources for Health Strategic Roadmap in 2021 (2078).
4	Initiate sanctioning and recruitment of new HR to address the problem of inequitable distribution and skill-mix of health workers	Provincial Public Service Commissions (PPSC) have been established in each of the seven provinces. They have started recruitment of health workforce as per the need identified by the line ministry (health) under the respective provincial government. PPSC, Gandaki has recruited 677 health workers (38 for province and 639 for local levels) in the FY 2021/22 (2078/79).
5	Develop effective mechanisms for efficient recruitment and distribution of health workers for remote areas, including incentives mechanism	Provincial and local governments have been recruiting staff on contract basis to fill the HRH gaps and to serve in the remote areas. Some local governments have introduced incentives for health workers serving at remote areas and/or providing specialised services.

Table 3.9: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
6	Develop a system to deploy recent medical graduates particularly in rural areas and hard to access areas	MoHP has been deploying recent medical graduates who receive government scholarship to serve particularly in rural areas and hard to access areas. A qualitative study on rural retention of HRH done in 2021 by MoHP has revealed the issues related to professional growth and motivation as major factors contributing to retention of HRH.
7	Establish a joint mechanism among MoHP, MoE and academic institutions to upgrade quality of pre-service education for health worker	Establishment of the Medical Education Commission in 2019, has been a milestone in the process of developing a mechanism among MoHP, MoE and academic institutions to upgrade quality of pre-service education for health workers. MoHP provides scholarships and deploys recent graduates of different categories like medical doctors, nursing, public health, pharmacy and others to serve the dual objective of producing need-based HRH and filling the gaps.
8	Review and revise regulations governing health profession education institutions	GoN formulated and enacted Medical Education Act in 2018 (2075). As provisioned in the Act, Medical Education Commission (MEC) has been in operation since 2019 (2076. Nepal Medical Education Regulation was formulated in 2020 (2077) and amended in 2021 (2078). Accreditation of academic faculties and formation of national curriculum framework has also been completed. Health Workers and Health Institutions Security Act, 2009 (2066) was amended in 2022 (2079) Each professional council has developed their own Council Act. ▪ Nepal Medical Council Act, 2020 ▪ Nepal Nursing Council Act, 2052 ▪ Nepal Health Professional Council Act, 2053 ▪ Ayurveda Medical Act, 2045 ▪ Nepal Pharmacy Council Act, 2057 Professional councils have been conducting licensing examinations to ensure knowledge and skills as per the council mandates before going to practice. Continuum professional development curriculum has been developed and is in practice.
9	Revise and standardise the academic curricula with focus on national public health programme, information system and health emergencies	As guided by the Nepal Medical Education Regulation, the National Curriculum Framework for Undergraduate Health Profession Education in Nepal, 2023 (2080) has been developed and is in operation. Medical Education Policy, 2023 (2080) has been developed
10	Undertake institutional development programme to strengthen delivery and	NHTC has been updating the induction training package for newly recruited health officials integrating the programmatic needs. Different programme divisions and centres are conducting service training as per the standards, protocols and guidelines.

Table 3.9: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
	management of integrated in-service training	
11	Develop and implement new methods for capacity building including clinical and management focused mentoring	Implementation guidelines for on-site clinical coaching/ mentoring of MNH services have been developed in 2021 (2078). As of 2021/22, a total of 354 clinical mentors had been developed, more than 7400 mentees have received at least one session, and more than 1400 health facilities have been covered through mentoring.
12	Implement the principle of task shifting for optimal utilisation of health workers	A number of task-shifting initiatives are being implemented. Some of the initiatives include rural ultrasound training to nursing staff to identify high risk pregnancy and timely referral to CEONC sites; Anaesthesia Assistant course to Health Assistants and Staff Nurses; and Advance SBA training to Medical Officers for CEONC services.
13	Develop the e-learning environment for pre and in service medical education	NHTC has developed modules for online training of health workers including: geriatric health online learning system, training on infection prevention and control. NHTC has also developed biomedical equipment maintenance training videos. A large number of online training/orientation packages had been developed and used during the COVID-19 pandemic.
14	Establish at least one medical academic institution in each region	GoN has the policy of establishing at least one public medical academic institution in each province, and currently six provinces have them: 1. Koshi: BP Koirala Institute of Health Sciences (BPKIHS), Dharan, Sunsari 2. Madhesh: Ramraja Prasad Singh Academy of Health Sciences (RPSAHS), Rajbiraj, Saptari 3. Bagmati: National Academy of Medical Sciences (NAMS), Kathmandu and Patan Academy of Health Sciences (PAHS), Lalitpur 4. Gandaki: Pokhara Academy of Health Sciences PAHS, Pokhara, Kaski 5. Lumbini: Rapti Academy of Health Sciences RAHS, Dang 6. Karnali: Karnali Academy of Health Sciences KAHS, Jumla Sudurpaschim: Geta Hospital in Geta, Kailali is in the process of upgrading into medical academic institution. Each public medical academic institution is currently governed by a separate Act, and GoN is in the process of developing an integrated umbrella Act to govern all medical academic institutions. Provinces have also initiated establishment of provincial institutes of health sciences: 1. Madhesh: Madhesh Institute of Health Sciences, Janakpurdham 2. Bagmati: Madan Bhandari Academy of Health Sciences, Hetauda

Table 3.9: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
15	Initiate Midwifery Education to create professional midwives cadres in country	National Nursing and Midwifery Strategic Action Plan 2020-30 (2077/78- 2086/87) has been developed. The plan projects the need of nursing and midwifery workforce, sets out plans to produce and deploy this workforce, and presents a capacity enhancement plan for nursing staff. Provision of school health nurses for comprehensive school health services has been initiated.

Current availability of HRH

The federal context offers opportunities as well as challenges for management of human resources for health. There are still some critical shortages of staff in some cadres and in some locations, indicating a challenge in filling vacancies in rural and remote locations. Overall, some improvement has been observed in fulfilment of HRH over the last five years (Table 3.10). The percentage of sanctioned posts filled improved from 71.3% in 2015 to 73.4% in 2021. However, a sharp decline has been observed in fulfilment of sanctioned positions of physicians/general practitioners in the last five years, from 56.5 in 2015 to 37.9% in 2021.

Table 3.10: Among public health facilities, comparison of percentages of MoHP sanctioned posts filled for the indicated provider category between 2015 and 2021

Year	Consultants (%)	Physicians/ general practitioners	Medical officers	Nurses	Paramedics *	All providers**
2015	48.4	56.5	55.9	72.1	74.3	71.3
2021	53.9	37.9	53.2	74.3	75.7	73.4

Note: *Includes health assistant, auxiliary health worker, senior auxiliary health worker, public health inspector, public health officer, auxiliary nurse midwife, laboratory technologist, laboratory officer, laboratory technician, laboratory assistant, radiographer, and dark room assistant
***** Includes consultants, physicians/general practitioners, medical officers, nurses, and paramedics***
Source: NHFS 2015 and NHFS 2021

The NHFS 2021 reveals that more than one-fourth of the public health facilities in Nepal have shortage of staff with 73% sanctioned positions fulfilled (Table 3.11). Staffing shortages are particularly severe in Urban Health Centres and Community Health Units (CHUs) with only 19% and 8%, sanctioned posts fulfilled, respectively. By province, Gandaki reported higher shortages of staff with only 57% sanctioned positions fulfilled while Madhesh and Bagmati each reported better situation with 83% sanctioned positions fulfilled.

Table 3.11: Among public health facilities, percentages of MoHP sanctioned posts filled for the indicated provider category

Background characteristics	Consultants (%)	Physicians/ general practitioners	Medical officers	Nurses	Paramedics *	All providers**
Facility type						
Federal/provincial-level hospitals	53.9	42.3	58.5	78.2	73.4	68.8

Local-level hospitals	-	22.7	30.7	59.8	81.8	69.7
PHCCs	-	-	44.4	52.6	81.9	74.7
BHS centres	-	-	0.0	0.0	75.2	75.1
HPs	-	-	0.0	0.0	76.8	76.7
Urban Health Centres	-	-	-	-	18.7	18.7
CHUs	-	-	-	-	7.8	7.8
Province						
Koshi	23.4	50.0	33.3	73.3	67.5	65.2
Madhesh	34.0	44.4	65.9	62.3	85.2	82.7
Bagmati	77.2	50.0	71.8	88.6	83.5	82.6
Gandaki	52.1	37.5	36.6	57.0	59.2	57.2
Lumbini	48.8	33.3	32.4	53.2	73.6	68.8
Karnali	0.0	0.0	23.8	58.6	71.8	69.7
Sudurpaschim	16.7	12.5	32.8	69.9	68.8	65.5
Total	**53.9**	**37.9**	**53.2**	**74.3**	**75.7**	**73.4**

Note: *Includes health assistant, auxiliary health worker, senior auxiliary health worker, public health inspector, public health officer, auxiliary nurse midwife, laboratory technologist, laboratory officer, laboratory technician, laboratory assistant, radiographer, and dark room assistant
***** Includes consultants, physicians/general practitioners, medical officers, nurses, and paramedics***
Source: NHFS 2021

3.1.2.2 Major Initiatives

- **HRH training** - 16,924 health workers received NHTC certified training in FY 2022/23 (2079/80) which includes 1,647 by NHTC and 15,346 by PHTCs.
- **Accreditation of training sites** - NHTC has accredited 20 Safe Abortion Training Sites (SATS), 11 Mid-level Practicum, 12 VIA, 5 Rural Ultrasound, 5 Haemodialysis, 4 Operation Theatre Technology Management (OTTM), 21 IUCD, 23 Implant, 6 Intensive Care Units, Critical Care Units, NICU; 6 ECCT sites as of July 2023 (Asar 2080).
- **Orientation package for municipal elected leaders -** In 2018, after the first local government elections, NHTC developed an orientation package for newly elected municipal leaders, which included the contents related to health, determinants of health, Constitutional provisions for health and local government roles as per the Unbundling document, highlights of relevant laws and policies, national and international commitments, highlights of basic health services, and expectations from elected leaders. This was rolled out across the country. Following the second local government elections in 2022 (2078), NHTC updated the orientation package and is in the process of rollout.

3.1.3 Procurement and Supply Chain Management

NHSS envisions reforming procurement and logistics systems responsible for forecasting, tendering, contracting, and supply chain processes. Efforts have been put for enhancing the capacity of spending units responsible for the procurement and distribution of quality medicines and equipment in order to ensure timely and efficient procurement and distribution. During NHSS implementation phase, there has been impressive progress in improving the performance of procurement and supply chain management in health sector.

3.1.3.1 Progress status on NHSS priority interventions

Table 3.12 presents the progress status on NHSS priority interventions related to procurement and supply chain management.

Table 3.12: Progress status on NHSS priority interventions related to procurement and supply chain management		
SN	**NHSS priority interventions**	**Progress status**
1	Build capacities in procurement and quality assurance at central and decentralised levels	▪ National level and international level Procurement Trainings are provided to the health sector procurement professionals, and Procurement Clinics established at DoHS and MoHP. The clinic has been adapted as Knowledge Bank at the Management Division of DoHS. ▪ e-GP (updated version) training provided, and electronic bidding started at DoHS in 2017, and it has been adapted as regular practice. The practice has been transferred to the provinces and local levels. Now, more than 90% of procurement in contract value in health sector is being done by e-GP. ▪ Standardisation of procurement procedure by using Standard Bidding Document (SBD) and e-GP as well as orientation to the procurement staff for including quality assurance criteria in the bid document enhanced the quality of procurement as well as quality of medical goods procured. ▪ The standardisation of technical specifications and establishment of Technical Specifications Bank (TSB) made easy to procure quality medical goods in all levels. ▪ Development and circulation of Standard Operating Procedure and Facilitation Handbooks on procurement procedure, e-GP operation, Pre-shipment Inspection, Post-delivery Inspection and laboratory analysis eased the procuring entities and medical stores in maintaining quality in procurement and supply chain management. ▪ The PIP and later-on transformation of Procurement Improvement Plan (PIP) into Public Procurement Strategic Framework (PPSF) facilitated all level of procurement entities in formulating and implementing procurement capacity enhance activities and quality assurance measures in planning, procurement, warehousing, distribution as well as HR development in procurement and warehouses.
2	Implement Consolidated Annual Procurement Plan	The practice of preparation and implementation of Consolidated Annual Procurement Plan (CAPP) in DoHS evolved with initiation of NHSS has become a regular practice and it is taken as fiduciary requirement. The progress of CAPP is quarterly monitored by CAPP Monitoring Committee for resolving the procurement issues and expediting the procurement in time.
3	Widen the scope of multi-year contracts in health products and services.	▪ Multi-year contracts are adapted in procurement of vaccines and pesticides. ▪ Initiation is being taken for procurement of regular items like contraceptives, syringes and kits. ▪ Conceptual development initiated to procure essential medicines in multi-year basis, but the devolution of procurement to provinces and local levels made the large number of procurement entities and reduced the volume of procurement per entity. Similarly lack of proper document for Framework Agreement is as bottleneck for multi-year procurement who has less capacity in procurement.
4	Pilot central bidding and local ordering	Central bidding - local ordering is only an approach and to be addressed by the Framework Agreement (FA) arrangement in the procurement act and regulations. There is provision of FA in the Public Procurement Act (PPA)

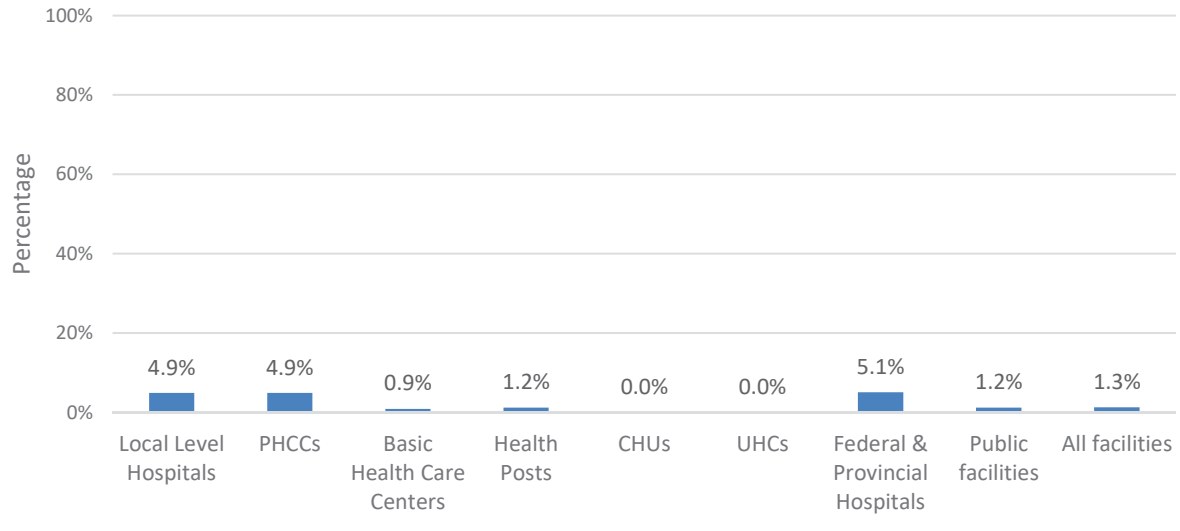
Table 3.12: Progress status on NHSS priority interventions related to procurement and supply chain management		
SN	**NHSS priority interventions**	**Progress status**
	approach and scale-up as appropriate	and Public Procurement Regulations (PPR) but which is not sufficient for implementing in health sector, as well as there is no SBD for FA endorsed by PPMO. Therefore, several discussions were held between DoHS, MoHP and PPMO for developing SBD for FA and include some provision suitable for procuring medical goods under FA. A draft SBD for FA developed by DoHS and submitted to PPMO, which is not yet endorsed and there is not yet any SBD for FA.
5	Lay foundations for the establishment of procurement centre	Series of discussions were held for establishment of procurement centre, but tangible progress is yet to be achieved.
6	Develop capacity in operational planning and logistics management systems in order to develop a cost effective and timely distribution system.	▪ Basic logistics and inventory management training is given to then district stores and regional stores. The stores are later transformed to provincial and Health Office levels stores and also added local (palika) stores. The later stores are also trained in storage and supply/distribution and logistics management. ▪ e-LMIS rolled out to all provincial and local level stores for better inventory management and logistics planning.
7	Expand warehouse capacities, including upgrading of storage facilities at regional and district levels.	▪ Upgraded the central store and provincial stores with cold chain facility and also could step towards the availability of ultra-cold chain facility during the COVID-19 pandemic. ▪ A modern vaccine store is under construction at Teku, construction of a new cold chain system management building for vaccine storage with 32,500 cubic feet space at Teku having ultra cold chain facility and walk-in cooler. ▪ Vaccine stores are constructed in seven provinces and in the process of being equipped with Cold Chain Equipment. ▪ Warehouses are enhanced with materials handling equipment such as medicine shelf, pallet, ladder, trolley, thermometer, hygrometer, fire extinguisher, expiry drug storge trunk, locker rack etc. to all Provincial Health Logistic Management Centres (PHLMCs), Health Offices, local levels and service delivery points ▪ Warehouse Management Guideline has been developed and distributed to all levels. ▪ Use of Available Resource and Support in Emergency by using the Humanitarian Staging Area (HSA) at the Tribhuvan International Airport with recording on e-LMIS all the materials donated for emergencies.
8	Explore innovative approaches (e.g., PPP) and technologies to improve supply chain management between the district store and health facilities for supply	▪ LMIS/e-LMIS reporting switched to monthly reporting from quarterly reporting so that timely reports are obtained to address the stock status, stock-outs, and overstocks of essential health commodities and supplies. ▪ Traditional LMIS has been upgraded to online e-LMIS with rolled-out to all stores and local levels.

Table 3.12: Progress status on NHSS priority interventions related to procurement and supply chain management		
SN	**NHSS priority interventions**	**Progress status**
	management at the district level.	
9	Improve management to prevent expiry of drugs and handling of expired drugs and non-functional equipment	Training provided to manage inventory by using pull and push mechanism as well as use of First Expire First Out (FEFO). Also, capacity enhancement of stores for keeping and handling the medicines and vaccines. ▪ A directive for disposal of expired medicines and medical waste developed and made available to all stores. Similarly, medical waste management guidelines were also developed. ▪ Orientation given to the stores for managing and disposing the expired drugs and medical wastes.
10	Improve supply chain of Ayurvedic drugs/medicines	▪ Provinces enter the Ayurvedic drugs/medicines procured and distributed in e-LMIS which has improved the supply chain of Ayurvedic drugs/medicines at subnational governments. ▪ However, it is not yet operationalised at the federal level.

Availability of tracer medicines

An assessment of availability of tracer medicines at the health facility - the point of service delivery – reveals that only very few facilities have maintained the stock (NHFS 2021). The NHFS 2021 which examines availability of 18 tracer medicines at the health facilities on the day of the survey shows that only 1.3% of facilities reported having all 18 types of medicines[10]. Local level hospitals (basic

Figure 2: Availability of Tracer Medicines (18) by Type of Health Facilities (Source: NHFS 2021)



[10] MoHP, 2022, Nepal Health Facility Survey, 2021. Eighteen tracer medicines include: Albendazole, Amoxicillin tablet/capsule, Amoxicillin syrup (paediatric), Benzoic acid compound ointment, Chloramphenicol caps/application, Ciprofloxacin infusion/ear/eye drop, Iron + folic

hospitals) and PHCCs, 4.9% each, reported to have all 18 types of medicines while none of the Urban Health Centres and Community Health Units had all 18 types of tracer medicines on the day of the survey. Notably, none of the BHS delivery outlets had all the medicines listed in the BHS package (Figure 2). In other words, all the health facilities had sometimes suffered from stock out of the BHS listed medicines at some point of time. The local level authorities responsible for maintaining the stock reported that stock out was mainly due to the issues related to inadequate funding to procure, delay in procurement process, and the practice of procuring in small quantity at a time.

3.1.3.2 Major initiatives

- **Implementation of PPSF**: The Procurement Improvement Plan (PIP), 2017-2022 was prepared as part of the NHSS reform initiative but following devolution of responsibilities including procurement of medicines under basic health services the "Public Procurement Strategic Framework for Management of Medicines and Medical Goods, (2022/23–2026/27)" was developed and implemented. It has guided to prepare PIPs at province levels aimed at improving transparency, competitiveness, and result-oriented procurement and supply chain management at the sub-national levels. Consequently, three provinces – Madhesh, Lumbini and Sudurpaschim provinces prepared their PIPs.
- **Supply Chain Management Working Group (SCMWG) Meetings:** In FY 2022-23 (2079-2080), fifteen SCMWG meetings were organised with the participation of Ministry of Social Development (MoSD), Provincial Health Directorate (PHD) and HDPs involved in supply chain management where key performance metrics were discussed based on information from the eLMIS data dashboard. Evidence-based remedial actions were discussed, as were issues related to policy, SOPs, strategies to strengthen supply chain performance, and capacity development of health workers. These meetings have helped to address specific supply chain performance issues, such as LMIS reporting and improve eLMIS data use for effective decision-making to inform stock levels for required action.
- **Forecasting and quantification at subnational governments:** In FY 2022-23 (2079-2080), eight forecasting and quantification workshops were organised by the Management Division and PHLMCs at the central and provincial levels. At the national level, a forecasting and quantification exercise workshop was conducted for programme commodities, essential drugs, and vaccines. Data used for quantification were generated from e-LMIS (consumption data and stock-on-hand data) and the HMIS. Quantifying essential drugs and surgical items, including Maternal, Neonatal and Child Health (MNCH) products was done at the provincial level. The workshops aimed to improve technical skills PHLMC, Health Offices, local levels and hospital staff. This exercise was important to determine the required procurement quantities and subsequent procurement plan during the FY 2023-24 (2080/81) to avoid shortages and waste of health commodities.
- **Standardising Procurement Process:** MoHP is promoting standard methods of procurement as per the Public Procurement Act (PPA) and Public Procurement Regulations (PPR) of Nepal. Use of Standard Bidding Document (SBD) and use of Electronic Government Procurement (e-GP) are adapted in the health sector procurement improving the efficiency transparency, fairness and competition. The use of e-GP has been established in procurement by the

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acid combination tablet, Gentamycin injection, Metronidazole tablet/syrup, Oral rehydration solution, Oxytocin injection (or other uterotonic-only in facilities that offer normal delivery services), Paracetamol tablet/injection, Povidone iodine solution, Salbutamol tablet or inhaler, Zinc sulphate tablet, RHZ (only in facilities that provide tuberculosis diagnosis or treatment services), Ringer's lactate, and Vitamin A.

provinces and local levels too reaching 97% of procurement by PHLMCs through PPMO's e-GP portal. A Single Stage Two Envelop (1S2E) bidding method is initiated in procurement of goods following the 12th amendment of PPR. Similarly, new e-GP Operation Guideline, 2023 has also been implemented. A separate SBD for health sector and framework agreement could not be initiated in this year too due to unavailability of guidance from PPMO.

- **Capacity Assessment of Biomedical Equipment:** A "Capacity Assessment of Biomedical Equipment in Government Hospitals of Bagmati Province" is conducted. An online portal Biomedical Equipment Management System (BEMS), https://bems.mohp.gov.np has been developed for tracking biomedical equipment at hospitals and other stakeholders in Nepal. It is a biomedical equipment inventory system of all the government hospitals in the country for the resource planning, repair, and maintenance of biomedical equipment in the country. It provides notification about the annual/preventive maintenance, warranty period, parts replacement time, calibration requirements, and others. As the first step an assessment was started from Bagmati province and the inventory of medical equipment in the hospitals of Bagmati province has been recorded.
- **Capacity enhancement:** Capacity development of procurement and supply chain management officials continued throughout the year through supportive supervision visits to selected sites by PHLMC officials that helped to improve supply chain operations and performance at those sites. Covering supply chain competency areas such as store and stock management and reporting, these mentoring visits have been helping in providing technical support and onsite coaching; capacity building of local staff to transfer skills and ownership for sustainability of warehouse and inventory management. In terms of capacity enhancement, a total of six batches of eLMIS training were conducted in FY 202-23 (2079-2080), in which participants were trained in basic health logistics management, inventory, and store management.
- **Warehouse Expansion and Management:** Construction of the modern vaccine store at Teku is in progress. The central store and provincial stores are upgraded with cold chain facilities and vaccine storage capacity is enhanced in all provinces. Construction of a new cold chain system management building for vaccine storage with 32,500 cubic feet space at Teku has been completed as expansion of existing vaccine storage capacity. It consists of one Walk-in Freezer and four Ultra Cold Chain Freezer each of 25-liter capacity. Similarly, dry storage building at Madhesh province is in final stage of construction to be used as medical store in Madhesh. A Warehouse Management handbook was published and distributed to all the stores.

3.2 IMPROVED QUALITY OF CARE AT POINT-OF-DELIVERY

NHSS had envisioned improving overall quality of care at the point of delivery by aiming for focused attention on three aspects:

- ensuring compliance to standards and protocols
- strengthening quality assurance system, and
- improving infection prevention and healthcare waste management.

Alongside this tailored attention to improving quality at point of service delivery, NHSS also aimed to influence quality services positively though a number of strategies and initiatives within the health system. Efforts to strengthen human resource management, medical procurement, supply chain management, infrastructure, healthcare waste management, financing mechanisms, information management, use of Information & Communications Technology (ICT), and others were all geared towards improving quality of care. NHSS considers quality care is delivered when it is effective, safe, client-centred, timely, equitable, culturally appropriate, efficient and reliable, which comprise the eight dimensions of quality.

3.2.1 Progress on NHSS priority interventions

This section highlights the status of progress on NHSS priority interventions for improved quality of care at the point of delivery over the implementation period (Table 3.13) followed by details on some of the key initiatives.

Table 3.13: Progress on NHSS priority interventions for improved quality of care at the point of delivery

SN	NHSS priority interventions	Progress status
1	Assess eight dimensions of quality at the point of service delivery	NHFS 2015 and NHFS 2021 assessed aspects of quality of care at the point of delivery (e.g., safe and client-centred care) but a comprehensive assessment that covers all eight dimensions of quality is yet to be done and still a high need for the sector. Patient safety action plan with broad strategic dimensions of quality of care has been drafted and reviewed with wider consultations of stakeholders.
2	Revise existing and develop new treatment guidelines/protocols and standards for each level of the health system in line with the defined service packages	A large number of guidelines/protocols have been developed/revised with a focus on improving quality of care in line with the defined service packages. Standard treatment protocols of basic health services and emergency services as per public health service regulations developed and health care professionals oriented on the protocols. The detailed list is presented below in Section 3.2.1.2
3	Strengthen supervision and mentoring to build capacity of health workers in quality-of-care procedures	FWD has developed SBA clinical coaching mentoring guidelines and tools; and these are in operation. Further details are provided in the narrative below.
4	Develop comprehensive regulatory framework and independent body for quality assurance and accreditation	National Public Health Laboratory (NPHL) has been assessed and accredited in accordance with ISO 15189:2012 in the discipline of clinical chemistry, immunology, serology, haematology and molecular testing since 2020. Preliminary tasks have been done for establishment of an independent body for quality assurance and accreditation. The document is in the process of review and endorsement from the concerned line agencies/ministries.
5	Update quality assurance policy for health sector and strengthen existing quality assurance mechanisms within MoHP	MoHP has developed the National Healthcare Quality Assurance Framework in 2022. MoHP restructuring after federalisation has led to formation of Quality Standard and Regulation Division within the MoHP.
6	Develop quality control mechanism for equipment	The Technical Specification Bank (TSB) specifies the standards of equipment and medicine. All levels of governments are using the standards for the procurement as per their needs. Recently in 2023, CSD has initiated updates to the specifications of drugs for Basic Health Services and this is in the process of approval. There is also a facilitation handbook for pre-shipment and post-delivery inspection for medical goods. Tools and measurement criteria have been developed to build capacity for quality improvement functions at all levels. Minimum Service Standard (MSS) tools have been developed to monitor and improve service readiness of different levels of health facilities. The MSS tool has been developed for Basic Healthcare Centre (Health Post), primary, secondary-A and secondary-B, and

Table 3.13: Progress on NHSS priority interventions for improved quality of care at the point of delivery		
SN	**NHSS priority interventions**	**Progress status**
		tertiary hospitals. The hospital MSS process is being implemented. For HP MSS, facilitator's orientation was provided to provinces, district and local levels through a cascading model and the assessment process is being implemented by each local level using AWPB and accompanying guidelines. Please see narrative below for further details. In 2022/23 (2079/80) MSS tools were developed for four specialist hospitals (Kanti Children Hospital, Prasuti Hospital, Mental Hospital, and Sukhraraj Tropical and Infectious Disease Hospital). CSD has a plan to develop MSS tools for other specialized hospitals like cardiac and trauma.
7	Strengthen capacity of National Laboratory in regulation and quality assurance, as an international reference laboratory.	NPHL has been accredited in accordance with ISO 15189:2012 in the discipline of clinical chemistry, immunology, serology, haematology and molecular testing since 2020. National Medicines Laboratory (NML) is preparing for ISO 17025:2017 accreditation for its international recognition to ensure quality, competency, and reliability of its analytical work. NML has completed different capacity building activities related to ISO 17025:2017 accreditation. To strengthen quality management system of NMS, laboratory quality manual and different laboratory SOPs and guidelines are developed and implemented. There is a plan to develop MSS tools for other specialised hospitals like Cardiac and Trauma Centres.
8	Strengthen National Drug Regulatory Authority capacity in regulation and quality assurance covering all pharmaceutical supplies	Department of Drug Administration (DDA) has conducted self-assessment using WHO Global Benchmarking tool for National Regulatory Authority and developed Institutional Development Plans (IDP) to improve its regulatory maturity level. WHO including other partners (MTaPs, PQM+) are supporting DDA for implementation of the developed IDPs. Nepal has been practicing Traceability and Verification System (TRVST), a multistakeholder initiative, to address the impact of falsified and diverted products, within National supply chains with a vision towards national traceability of all vaccines, medicines, and health products.
9	Develop anti-microbial drug resistance action plan, including expanding laboratory capacity	National Action Plan for Anti-Microbial Resistance, 2021-2026, has been drafted and is in the process of Cabinet endorsement. The endorsement needs further facilitation, and the sub national levels need support for its implementation. Currently, 22 sites (hospitals/laboratories) are included in AMR surveillance for 10 priority organisms, and the results are reported to the Global Antimicrobial Resistance Surveillance System (GLASS). However, expansion of lab sites, improvement of infrastructure, and training of human resources are required to tackle AMR.
10	Review and implement regulatory system for combatting antimicrobial resistance	DDA has collected national antimicrobial consumption data (2016-2021) and initiated sharing collected AMC data to the WHO GLASS-AMC platform from 2022. DDA has restricted registration, renewal, import and production of 103 WHO not-recommended antibiotics and preparing to implement redline marking on labelling of locally manufactured antibiotics.

Table 3.13: Progress on NHSS priority interventions for improved quality of care at the point of delivery		
SN	**NHSS priority interventions**	**Progress status**
11	Review and implement price adjustment of essential drugs and ensure transparency	A rapid appraisal of current drug pricing mechanism has been accomplished for developing proper drug pricing mechanism. DDA is working towards implementation of the recommendations from the assessment. Study on Maximum Retail Price (MRP) mechanisms is in progress in few countries including Nepal. Different capacity building activities are planned on various medicines pricing regulation and pricing policy for drug regulators.
12	Review and enhance regulatory capacity for rational use of drugs, including over-the-counter sales. Collaborate with Ministry of Agriculture to regulate the use of antibiotics in animal	National List of Essential Medicines has been revised and published in 2021 by DDA. The list is aligned with the objectives of the National Drug Policy 1995 i.e., to ensure the availability and affordability of efficacious, safe and quality medicines relevant to the quality healthcare needs and service of the people in a sustainable and equitable manner and to promote the rational use of medicines by healthcare professionals and consumers. Life-saving emergency and orphan medicines list was developed approved in 2022. The listed medicines are prioritised for fast-track registration by DDA to improve their availability. DDA has been conducting periodic monitoring of pharmacies for regulating rational use of drugs, including over-the-counter sales of prescriptive drugs.
13	Establish quality assurance mechanism for Ayurvedic medicine production and supply.	DDA has developed Good Manufacturing Practice (GMP) guidelines for Ayurveda medicines to improve quality of locally manufactured Ayurveda medicines and is in process for approval. Ayurveda medicine manufacturers are trained on GMP and documentation preparation as per GMP requirements. Standard treatment protocols of Ayurveda and Alternative medicine for basic health services has been developed.
14	Review and enforce standards for infection prevention and healthcare waste management	National Healthcare Waste Management Standards and Operating Procedures (2020) and IPC guideline (2022) have been revised to improve capacity of healthcare providers. The orientation has been provided to healthcare providers in all seven provinces. In line with orientation on RMNCH interim guideline during COVID-19, more than 4000 healthcare providers at hospital, PHCC and HPs were oriented/re-oriented on infection prevention. some of the major components of IPC guideline have been included in the SBA onsite clinical coaching and mentoring guideline and it is being implemented each year. From 2020 to 2022, a total of 4,202 MNH service providers received IP orientation during clinical coaching and mentoring sessions.
15	Promote state -non-state partnership models for waste management	State - non-state partnership for integrated healthcare waste management (HCWM) with Centre Treatment Facility (CTF) is being practiced in Pokhara Metropolitan City and Nepalgunj Sub-Metropolitan City in coordination with respective local government, public and private hospitals. There are positive learnings from this initiative, which are yet to be replicated in Dhangadi Sub-Metropolitan City (in progress) and other areas. Whereas most of the provincial and federal hospitals have developed their own HCWM system within the hospital following non-burning technology and circular economy principles in line with National HCWM Standards and Operating Procedure 2020.

3.2.2 Major initiatives

A number of policy, regulatory and strategic documents, guidelines, protocols and procedures related to quality of care were developed over the NHSS implementation period. These documents have provided a sound foundation and framework for improving quality of care at the point of delivery.

- **QoC related documents produced during NHSS implementation period**

1. Strategy for Skilled Health Personnel
2. Strategy for Skilled Birth Attendants (2020-2025) (approved 2021)
3. Standard Treatment Protocol of Basic Health Service 2021 (2078)
4. Standard Treatment Protocol of Emergency Health Service 2021 (2078)
5. Standard Operating Procedure of Basic Health Service 2022 (2079)
6. Federal Directives on Social Accountability in Health Sector 2020 (2077)
7. SMNH Roadmap 2030 (June 2021)
8. NMS volume-I for contraceptive services 2020 (2077)
9. RMNH interim guideline during covid-19 (2020)
10. Implementation Guideline for C-Section monitoring at public and private facilities using Robson classification, 2078 (2022)
11. Post natal care home visit microplanning guideline (2021)
12. Health Post MSS Tool 2078
13. Health Post MSS Implementation Guideline (2020)
14. National Ambulance guideline, (2078)
15. National guideline on appropriate use of blood and blood product in Nepal, 2076 (2019)
16. MPDSR guideline 2078
17. Revised Aama Guideline 2078
18. NMS Volume III for maternal and newborn 2022
19. IPC guideline, 2079
20. SNCU level II training package for nurses -revised 2023
21. EOC job aids revised 2023
22. Clinical coaching/mentoring programme facilitation guide and guide for mentors for MNH service providers at BC/BEONC and CEONC sites 2079 (2022)
23. National Healthcare Quality Assurance Framework 2022
24. ANC to PNC continuum of care facilitation material 2079
25. SAS onsite coaching guideline 2079
26. Kangaroo Mother Care (KMC) Guideline 2079
27. Nepal Newborn Action Plan 2023-30 (in the process of approval)
28. SBA-SHP modular training package (being developed)
29. Adolescent Friendly Health Services Operation Guidelines, 2079
30. National HIV Testing and Treatment Guidelines (2022)
31. National Guidelines on Management of Sexually Transmitted Infections (2022)
32. National Guidelines on Prevention, Management and Control of Dengue in Nepal (2019)
33. National Guideline on Kala-azar Elimination Program (Updated) 2019
34. National Guideline on Diagnosis, Management and Prevention of Scrub Typhus in Nepal 2079 (2022)
35. SoP on Morbidity Management and Disability Prevention (MMDP) Care and Support Centre
36. National Tuberculosis Management Guidelines (2019)
37. National Guidelines on Drug-Resistant Tuberculosis Management (2019)
38. National Malaria Treatment Protocol (2019)

- **Point of Care Quality Improvement (POCQI)** – A training was conducted for the healthcare workers (doctors and nurses) working in the labour room and the Newborn Intensive Care Unit (NICU) in three hospitals in 2019 (Janakpur Provincial Hospital, Narayani Hospital and Gajendra Narayan Singh Sagarmatha Hospital). Following that the Child Health Section conducted a two-day review of the tool in Madhesh Province in FY 2022/23 (2079/80) to understand its efficacy and effectiveness. The tool is now being implemented in seven hospitals of the country (Narayani

Hospital, Janakpur Provincial Hospital, Gajendra Narayan Singh Sagarmatha Hospital, BPKHIS, Paropakar and Maternity Women Hospital (PMWH), Bheri hospital, and Bharatpur hospital).

- **Maternal And Perinatal Deaths Surveillance and Response (MPDSR)** - FWD has been implementing both hospital and community based MPDSR programme across the country. Three batches of MPDSR ToT was conducted in FY 2022/23 (2079/80) covering 70 participants. As of today, community based MPDSR has been implemented in 34 districts and hospital based MPDSR has been implemented in 108 hospitals.
- **Child Immunisation** - The first month of every year of the Nepalese calendar is considered as the "immunisation month" when health workers do a household level survey in their target areas to line list eligible children and identify and trace dropouts, if any. In April/May 2023 (Baishakh 2080), FWD led the "Extensive Search and Vaccination" campaign to vaccinate all the missed children and 40,463 children were vaccinated. Five provinces and 72 districts have been declared as full immunisation provinces and districts. Vaccinators in all provinces were trained on the revised manual and FWD conducted four batches of training in Kathmandu particularly for the vaccinators in private hospitals.
- **Early Childhood Development -** FWD initiated discussions for strengthening the role of MoHP on Early Childhood Development (ECD). Components of this are included in the Community-based Integrated Management of Newborn and Childhood Illness (CB-IMNCI) clinical protocol updated in 2021, and in 2023 FWD developed ECD guidelines which are yet to be finalised. Several batches of CB-IMNCI training were conducted for the health workers across the country for nearly 100 heath workers, and 60 others were trained in Comprehensive Newborn Level II and Kangaroo Mother Care (KMC) training.
- **Comprehensive Emergency Obstetric and Newborn Care (CEONC) services -** There has been an expansion of CEONC services and currently 76 districts (except Manang) have at least one public CEONC site in 2022/23 (2079/80). There 114 public CEONC sites/hospitals that are operational across these 76 districts. However, functionality of the sites remains problematic specially in remote areas. FWD is providing conditional grant (CEONC Fund) which can be utilised for the recruitment and salary of human resources needed for CEONC functionality. Similarly, FWD is also providing Aama fund that provides free maternal and newborn interventions from all public hospitals.
- **Caesarean Section Monitoring and Optimisation -** FWD has introduced and rolled out the Robsons Ten Group Classification System (TGCS) monitoring tool in several hospitals over the NHSS implementation period to optimise Caesarean Sections (C-Section) at hospitals. Two batches of Robson TGCS orientation were conducted at federal level in July 2023, and health workers from 17 hospitals participated. As of date, this has been introduced and is being implemented in 38 hospitals (public and private) in five provinces (except Karnali and Sudurpaschim). An online reporting tool is used for Robson TGCS, and a dashboard to facilitate visualisation and data use has been hosted on the FWD website.
- **SBA Clinical Coaching and Mentoring** - This clinical mentoring process was initiated in FY 2016/17 and scaled-up across all 77 districts in subsequent years. Clinical mentors are mobilised for coaching/ mentoring MNH service providers at BC/BEONC sites and to facilitate the Quality Improvement (QI) self-assessment process including IPC practices. As of July 2023, 405 SBA clinical mentors were trained from across the 77 districts, and of these 74 were trained in FY 2022/23. Total 636 clinical coaching and mentoring sessions conducted in In FY 2022/23 at BC/BEONC and CEONC sites (Figures 3 and 4).

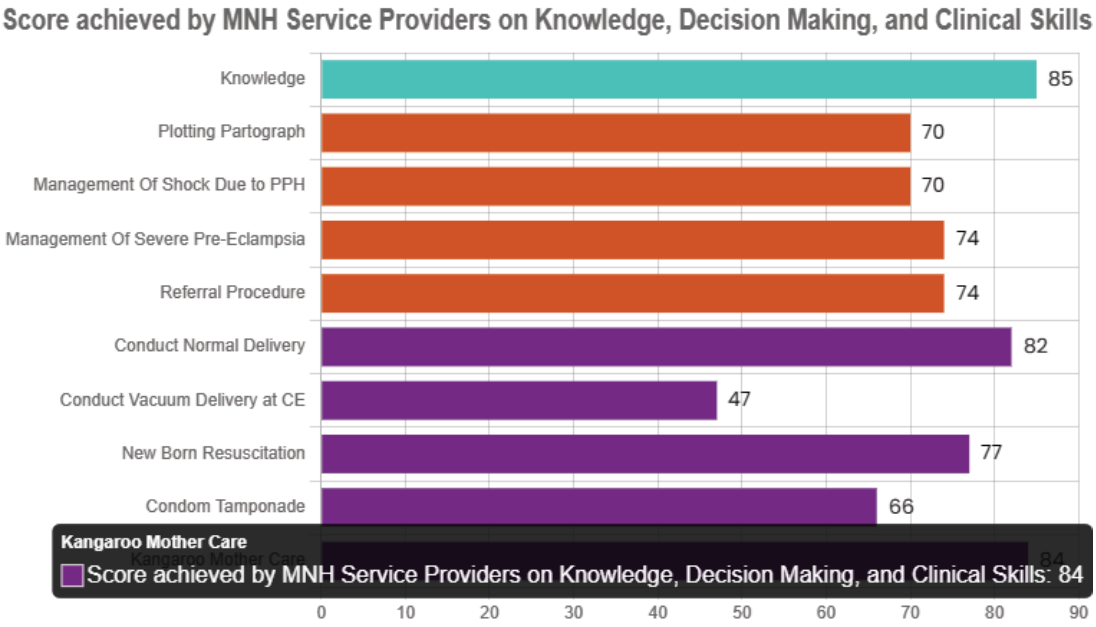


Figure 3: Signal Functions Readiness and Quality Domains score at CEONC sites in FY 2079/80

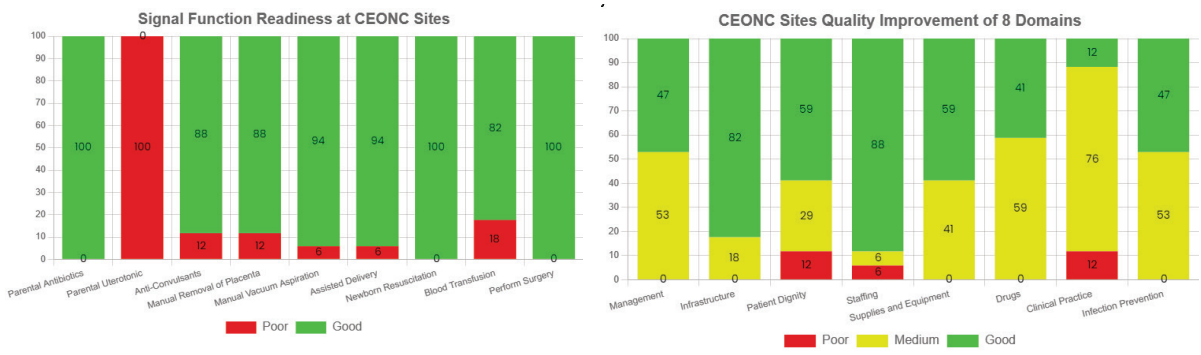
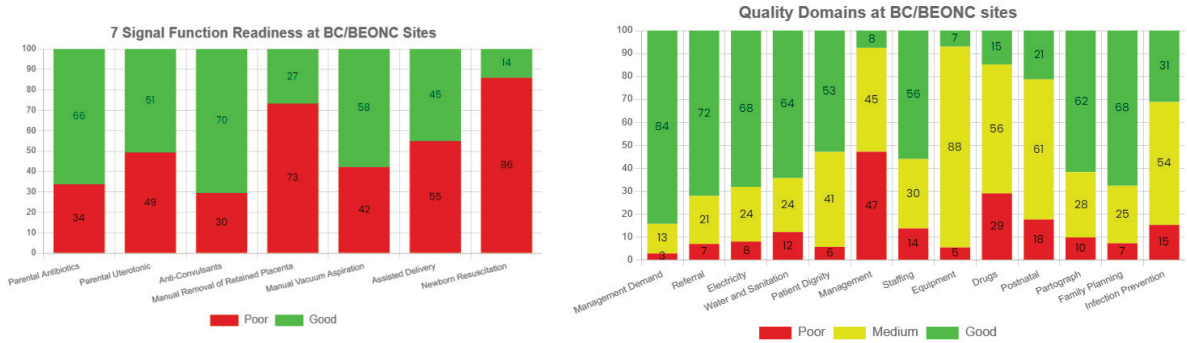


Figure 4: Signal Functions Readiness and Quality Domains score at BC/BEONC sites in FY 2079/80



- **Quality Improvement (QI) Data dashboard -** FWD has developed the Quality Improvement (QI) Data dashboard that supports visualisation of data generated from the SBA Coaching/Mentoring programme and C-Section Monitoring via Robson TGCS. This can be accessed from the FWD website and is open to access for all to encourage health workers and decision-makers to make evidence-based plans and take decisions.
- **Minimum Service Standards (MSS)** - MSS assessments were conducted health facilities of Madhesh and Lumbini province in July 2023. The Curative Services Division undertook a comprehensive review was done in Madhesh and Lumbini, aimed to understand the present

status of HP-MSS implementation at selected health facilities with a special focus on implementation of action plans developed post HP-MSS assessment and identify the barriers and facilitators, lessons learnt and its linkages to broader quality improvement initiatives. These findings suggested that the implementation of MSS did not contribute to overall improvement in service quality standards in health facilities. However, the qualitative findings highlighted several benefits of MSS implementation.

- **National level SMNH review** was conducted in two batches in July 2023. SMNH focal person from all the districts, Provincial Health Directorates and from selected hospitals were invited to the review. More than 100 participants participated the review.
- **Post natal care (PNC) home visit review** was conducted in all seven provinces, where MNH focal person and health officer from all districts, PHD and MoSD participated the review. Likewise, FWD conducted orientation on RMNCH data base in all provinces, which was then rolled out via provinces to districts and local levels.
- **Addressing reproductive health morbidities** - During FY 2022/23 (2079/80), a conditional grant was provided to all the local levels to conduct integrated reproductive health morbidity screening, which includes Ca cervix, Ca breast, pelvic organ prolapses (POP), obstetric fistula and infertility. The Cervical Cancer Prevention Guideline 2022 (2079) and Standard Operating Procedures for HPV DNA implementation were developed. Based on the SOP, orientations for provincial focal persons were completed. Roll-out with orientation to focal persons in Sunsari, Mahottari, Sarlahi, Palpa and Lalitur, procurement, distribution plan and distribution of VTM for selected local levels in these districts were completed. The integrated screening was done for 3.8% women aged 30-49 years for cervical cancer across the country, with highest percentage in Karnali province (7.4%) and lowest in Madhesh province (1.5%). Conservative management of POP was done within the screening site, and any identified cases for vaginal hysterectomy, or fistula were referred designated service sites.

Some examples reflecting improving quality of services

Despite the challenges in improving quality of care, some health institutions in Nepal have demonstrated their capability to deliver globally recognized high quality health services. The section below presents few examples of such good practices reflecting high quality of care at the point of delivery.

Kidney and Liver transplantation

Shahid Dharmabhakta National transplant Centre- SDNTC (Human Organ Transplant Centre- HOTC) is the only dedicated organ transplant centre in the country carrying out more than 150 kidney transplants a year. It has conducted more than 500 kidney transplants in half a decade of its establishment and is also the pioneer of liver transplant and deceased donor organ transplantation in the nation, having conducted three successful live donor liver transplantations and four kidney transplantation from two brain-dead deceased donors. The average cost of renal transplant is up to USD 25,000 in neighbouring countries, while this service is free for its citizens in Nepal. Likewise, the cost of liver transplant in neighbouring countries is as high as USD 150,000 while it costs about USD 20,000 for its citizens in Nepal.

Under the leadership of SDNTC-HOTC, kidney transplant services have been expanded in government hospitals outside Kathmandu valley. The service is now expanded at Pokhara Academy of Health Sciences, Western Regional Hospital, Pokhara, Gandaki province, Madan Bhandari Institute of Health Sciences, Hetauda, Bagmati province, and at Seti Provincial hospital, Dhangadi in Sudurpaschim province in 2022.

Likewise, Tribhuvan University Teaching Hospital (TUTH), Marajgunj, has successfully been conducting liver and kidney transplant surgeries. In 2020, the former Prime Minister Mr K P Oli underwent second kidney transplant at TUTH, after twelve years of first kidney transplant in 2007 in Apollo Hospital, New

Delhi. In 2021, TUTH successfully conducted a liver transplant operation on an 11-month-old child, the first paediatric liver transplant case in the country.
Dual organ transplant *KIST Medical College and Teaching Hospital, on 9 October 2023, successfully accomplished dual organ transplant – a liver and a kidney transplant - in a single patient (33-year-old female). This success presents a testament to the high clinical capabilities of Nepal's health care system.*
Eye care *Tilganga Eye Hospital (TEH) is a WHO Collaborating Centre for Ophthalmology since June 2019. Joining over 800 collaborating centres in over 80 WHO Member States, TEH is the second institute in Nepal to receive this designation after SAARC Tuberculosis and HIV/AIDS Centre. TEH collaborates with WHO in providing quality formulation and implementation of eye care service delivery, ophthalmic research, and educating qualified human resources in the field of ophthalmology.*
Laboratory Services *National Public Health Laboratory has been assessed and accredited in accordance with ISO 15189:2012 in the discipline of clinical chemistry, immunology, serology, haematology and molecular testing since 2020*
Nick Simons Institute, Nepal received the Sasakawa Health Award 2023 *On the recommendation of the MoHP, in 2023, Nick Simons Institute, Nepal, received the Sasakawa Award from the WHO, for its outstanding and innovative work in public health. The Nick Simons Institute has been working closely with the MoHP to improve quality of rural health services and fill health workforce gaps, particularly in rural Nepal through innovative measures since 2006.*
State-of-the-art endovascular treatment facility *Upendra Devkota Memorial National Institute of Neurological and Allied Sciences, having introduced the first state of the art Bi-Plane Cath Lab in 2020, has revolutionised the treatment of stroke, aneurysms, and arteriovenous malformations. A stroke ready hospital, it offers mechanical thrombectomy, considered the gold standard in the treatment for ischemic stroke worldwide. To date, over 200 stroke patients have benefitted. Similarly, endovascular treatment of over 250 cases of cerebral aneurysms has also been performed in the Bi-Plane Cath Lab setting new standards for care in the country.*

3.3 EQUITABLE DISTRIBUTION AND UTILISATION OF HEALTH SERVICES

NHSS outlines equity in utilisation of healthcare services as one of the four strategic approaches to achieving Universal Health Coverage (UHC). It focuses on taking the client-centred care closer to communities by improving access to health services, especially for unreached populations; and by strengthening health service networks, including a referral system.

3.3.1 Progress status of NHSS priority interventions

This section highlights the key initiatives taken to improve equitable distribution and utilisation of health services during the NHSS implementation period (Table 3.14).

Table 3.14: Progress status of NHSS priority interventions

SN	NHSS priority interventions	Progress status
1	Update basic healthcare package by including emerging healthcare need like psychosocial counselling, mental health, geriatric health, oral health, standard NCD package, Ayurveda and rehabilitative services	The BHS package defined by the Public Health Service Regulation 2020 (2077) includes psychosocial counselling, mental health, geriatric health and oral health, NCD, Ayurveda and rehabilitative services.

Table 3.14: Progress status of NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
2	Develop a legal framework for the Basic (free) Health Service package.	Public Health Service Act 2017 (2075) defines BHS and its delivery mechanism – federal government to manage financing of BHS through fiscal transfer to local governments and local governments to deliver free BHS to citizens. The Act enables provinces and local governments to add other services to the BHS package using their own resources. Public Health Service Regulation 2020 (2077) defines the BHS package and categorises the health facilities for delivery of free BHS to citizens.
3	Expand basic health service packages in different level of health facilities based on population and geography	Public Health Service Regulation 2020 (2077) categorises the health facilities that need to deliver free BHS to citizens. The National Health Policy 2019 and the Nepal Health Sector Strategic Plan 2022-2030 aim to deliver BHS from all health facilities. It mandates at least one BHS delivery unit (Health Post or Community Health Unit or Urban Health Centre) in every ward of a local level and a basic hospital in each local level. At least one health facility within 30 minutes distance is mandated. Despite the legal and policy provisions, none of the local governments have managed to deliver BHS free at federal and provincial hospitals.
4	Assess and improve implementation of free care programme	Besides the BHS, GoN is providing following health services free of charge to the citizens: Voluntary Surgical Contraception, Long-acting reversible contraceptive (LARC) services; Dialysis services to poor people; identification, diagnosis, prevention and treatment of tuberculosis cases, HIV; malaria, leprosy, kala-azar and other priority communicable diseases. Assessment of Aama programme is being undertaken on a regular basis. A review of the programme conducted in 2020 showed that access to CEONC services was unequal amongst women, although when women are able to access and travel to a health institution, they tend to prefer to give birth in a higher-level health facility (i.e., hospital). The review had a number of recommendations related to CEONC services Curative Service Division, in collaboration with NHRC, is undertaking an evaluation of free care programmes with the objective of improving harmonisation and effectiveness in implementation.
5	Expand community health services through mobilisation of extended health workers	Primary healthcare outreach clinics are providing basic services. Satellite clinics extended visiting service providers and mobile camps provide LARC services. Static sites or scheduled seasonal and mobile outreach services provide sterilisation services. PNC home visits programme has been expanded, and home-based visits for geriatric population was initiated through Community Health Nurse in Bhaktapur and Bardibas.

Table 3.14: Progress status of NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
6	Implement Extended Health Services in public hospitals	GoN has developed a Guideline for implementation of Extended Health Services in public hospitals in 2020 (2077) and is implementing it. For instance, Beni Hospital – provincial hospital in Gandaki province, has been providing free OPD services as one of the AWPB 2022-23 (2079/80) initiatives.
7	Improve capacity of district hospitals to deliver specialised services in partnership with public and private academic institutions	Guidelines for providing services including specialist surgery in district hospitals in collaboration with medical colleges/institutions have been developed in 2020 (2077). As per the guideline NAMS is providing satellite service in Dhading, TUTH in Sindhupalchowk, PAHS in Tanahu, KAHS in Humla, Birat medical college in Terathum etc.
8	Expand health services leveraging modern information communication technology	Digital Nepal framework (2019-2030) which identifies health as one of the eight priority sectors is being implemented The framework prioritises a number of initiatives including the National Digital Health Platform connecting all public sector health facilities; EHR system across all public and private healthcare facilities; mobile health units/vans equipped with digital connectivity and GPS services; e-maternal care medical records; drones for supply of medical supplies and equipment to remote areas.
9	Scale up laboratory services at all levels	Two-thirds of health posts in Nepal laboratory services, including any rapid diagnostic tests (Please see below for details). From FY 2022-23 (2079/80), the Provincial Public Health Laboratory in Madhesh province has been supporting all local governments (136) in the province to establish and operationalise selected laboratory services from one of the health facilities in the local level.
10	Expand Blood Transfusion Services	MoHP has approved concept paper for establishment of government-owned blood transfusion centre in each province.
11	Establish functional network for basic health services in urban areas	Local levels, Sub-Metropolitan and Metropolitan Cities operate Urban Health Centre and/or Urban Health Promotion Centres that provide basic health services and beyond.
12	Designate satellite clinics for referral level hospitals	Central Hospital and Health Institutions Satellite Clinics Operation Guideline was prepared in 2020 (2077). Some federal hospitals like Bharatpur hospital, Dadeldhura hospital and Bheri Hospital have started satellite clinics in designated district level hospitals but could not be continued due to budgetary constraints.
13	Revise/update referral guidelines ensuring that: • Referral mechanisms are incentivised • Referring institutions are made responsible for cases in transit	National Health Policy 2015 (2075), Public Health Service Act and Regulations emphasise strengthening of referral system. DoHS has developed MNH referral guidelines for Emergency Obstetric Care (EOC). Each local level and selected provincial hospitals get annual conditional grant for EOC referral service. Some local level governments in Arghakhanchi and Rukum East districts have developed and implemented EOC free referral

Table 3.14: Progress status of NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
	• Fast-track service delivery for referred cases is established	guidelines, allocating extra budget in addition to federal conditional grant. National Medical Standard for Maternal and Newborn Care, Volume III, 2022, includes Standard for Newborn Referral. Curative Service Division has recently initiated development of National Referral Guidelines.
14	Establish an effective referral system among primary, secondary and tertiary level care providers in urban and rural areas with special plan for remote areas.	National Referral Guidelines is under development by Curative Service Division Presidential Woman Uplifting Programme under the Ministry of Woman Children and Senior Citizens is implementing Emergency Air Lifting Programme for management of EOC services focusing on remote areas since 2018-19 (2075/76). The effectiveness of the programme needs to be assessed
15	Develop and launch National Ambulance Service, including networking and standardisation of emergency response services	National Ambulance Guideline 2021 (2078) was developed and is being implemented to facilitate effective and timely referral of complicated cases.

3.3.2 Major initiatives

- **Free Basic Health Services** - Availability of the tracer basic health services (not free delivery of the services), as per Nepal Health Facility Survey 2021 shows that only 79% of the public health facilities across the country had all the tracer services available[11]. The survey also shows large variations by facility type (Figure 5). Public health facilities managed by local governments were reported to be more likely to provide all tracer basic health services compared to those managed by federal and provincial governments. Public facilities were four times more likely to provide all tracer basic services than private facilities (79% versus 20%). Likewise, by services, child curative care was available at almost all of the health facilities (98%), family planning and antenatal care each were available at 98% of the facilities, child growth monitoring at 91%, child vaccination at 89%, and STI services were available at 86% of the health facilities. The survey also reported wide variations in basic health service availability by province. The proportion of facilities offering all tracer basic services ranged from 66% in Bagmati and Koshi Province to 73% in Madhesh and 84% facilities in Lumbini province. BHS utilisation increased over the last five years (Figure 6). For example, BHS components like proportion of fully immunised children, children aged 12-23 months registered for growth monitoring, pregnant women who attended four antenatal care (ANC) visits, institutional deliveries and post-natal care visits show an increasing trend over the last five years.
- Data show that a large majority of the clients utilised child vaccination and institutional delivery services from public health facilities whereas large proportion of the people visited private health facilities for treatment of childhood illness like ARI, fever and diarrhoea (Figure 7). High

[11] MoHP, 2022, Nepal Health Facility Survey, 2021. The survey considers the following as tracer services: outpatient curative care for sick children, child growth monitoring, facility-based child vaccination services, provision of any modern method of family planning, antenatal care, and STI services as tracer basic health services.

use of private sector facilities for common childhood illness, a BHS component, contributes to high out-of-pocket expenditure leading to high financial burden on families.

Figure 5: Availability of Basic Health Servcies (Tracer) by type of Health Facilities (Source: NHFS 2021)

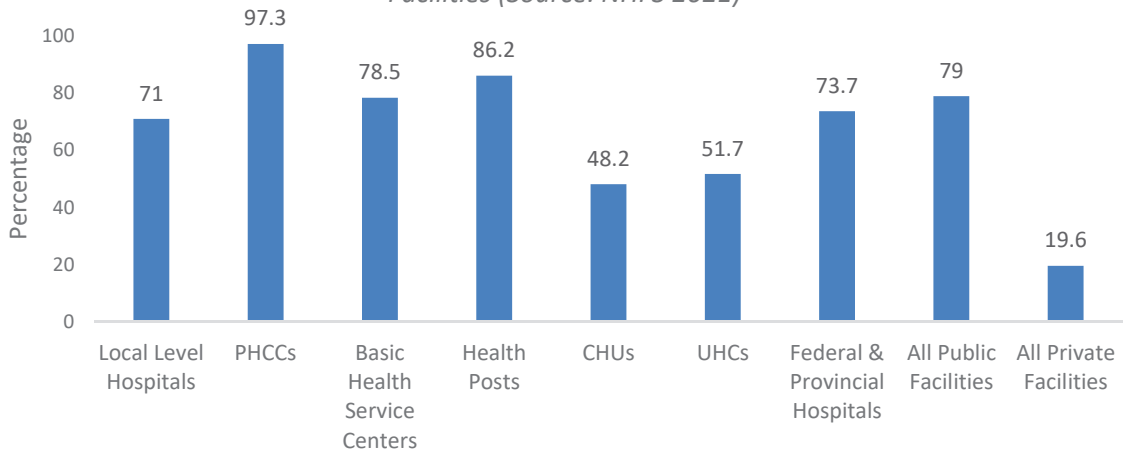


Figure 6: Utilisation of selected basic health services by fiscal year over a 5-year period (Source: HMIS)

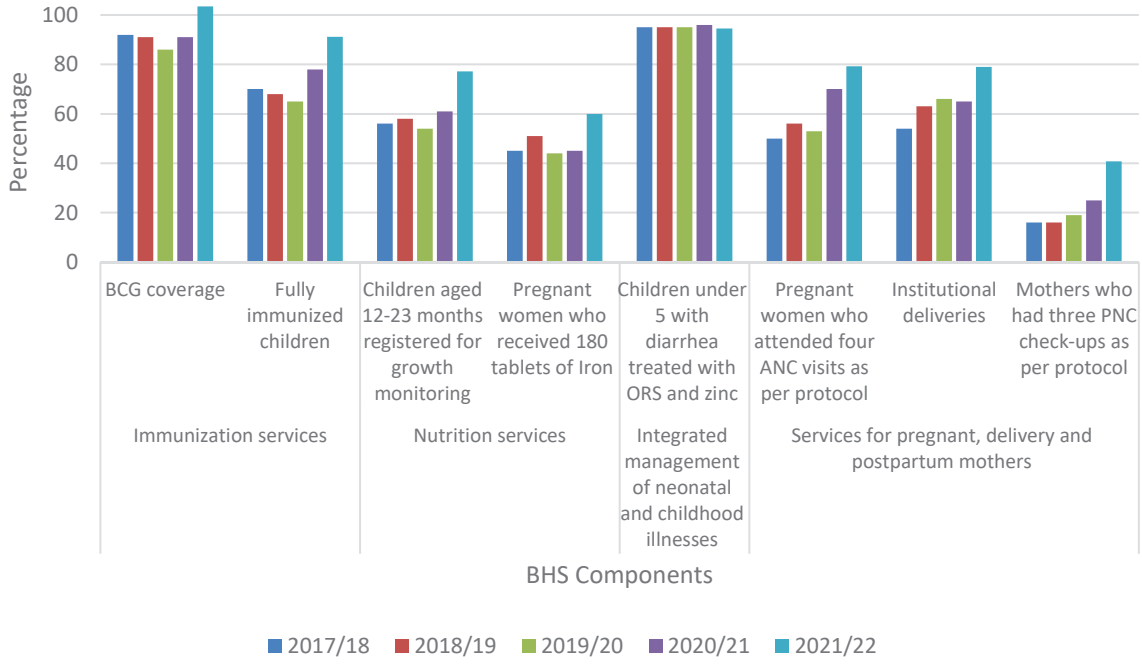


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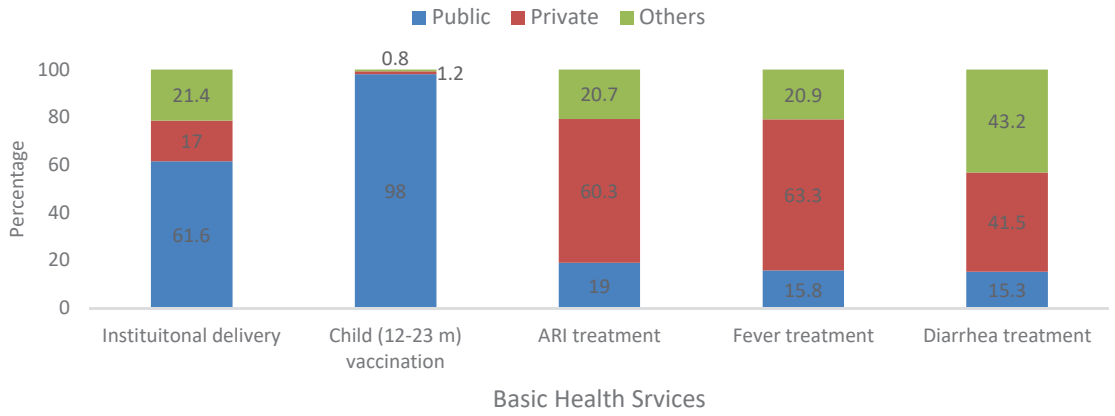
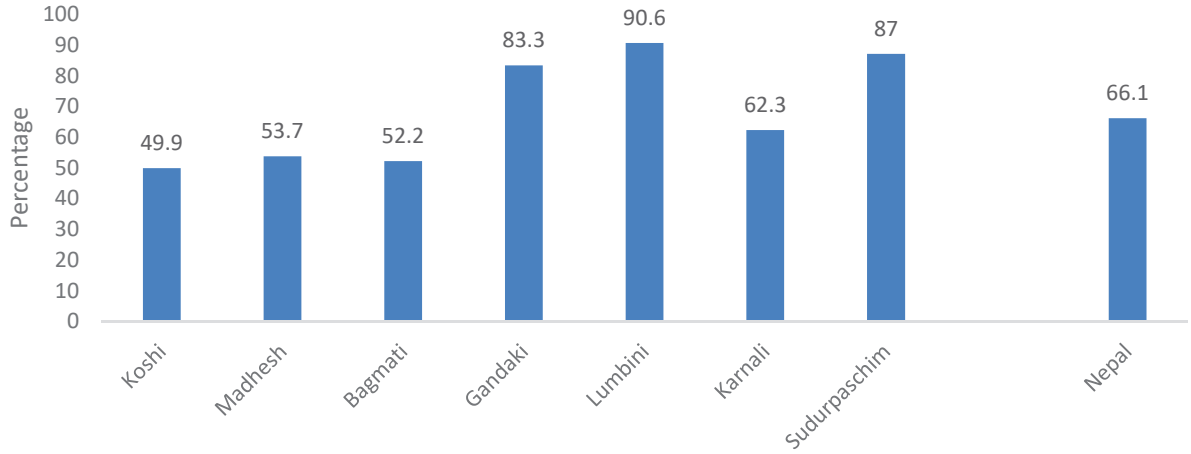
Figure 7: Health facilities where basic health services were sought (Source: NDHS 2022)



- Ayurveda health institutions are systematically provided basic health services - ayurveda and other traditional medicine – nationwide, and 601,564 people these services. The Senior Citizen Programme reached 322,674 senior citizens. The Lactating Mother programme covered 58,755 lactating mothers.
- **Expansion and strengthening of laboratory facilities -** Proportion of health posts with laboratory facilities, defined as the capacity to conduct any tests at the facility, including any rapid diagnostic tests, has substantially increased from 13% in 2015 to 66% in 2021. Higher proportion of HPs in Lumbini province (91%) have laboratory services, than those in Madhesh province (54%) and in Koshi province (50%) (Figure 8).

Figure 8: Proportion of health posts with laboratory services, by province (Source: NHFS 2021)



In 2023, two provincial laboratories have been established in Biratnagar (Koshi province) and Butwal (Lumbini Province), with construction and equipment support from Global Fund.

- **Maternal health services** - Equity gap in maternal health services like ANC, institutional delivery and PNC has decreased over the period of last 5 years in all dimensions like wealth, ecoregion, caste/ethnicity, and provinces, however in some services like C-Section delivery the equity gap has increased considerably in the past few years. To reduce the gap and make C-

Section services available CEONC sites are being expanded throughout the country. As of FY 2022-23 (2079/80), 76 districts have at least one CEONC site.

- **Social Service Units (SSUs) -** These are being gradually expanded in hospitals throughout the country and as of FY 2022-23 (2079/80), 86 hospitals across 77 districts have established SSU. Similarly geriatric friendly services are being provided by 60 hospitals and One Stop Crisis Management Centres (OCMC) are established in 94 hospitals.

3.4 STRENGTHENED DECENTRALISED PLANNING AND BUDGETING

NHSS committed to focus on decentralised approach to health sector planning and budgeting that is more accountable to the public and responsive to their needs. This meant strengthening of decentralised planning and budgeting through strategic planning and strengthening institutional capacity at all levels.

The federal government is responsible for defining national priorities; creating regulatory framework for the priorities; monitoring progress; and arranging required technical and financial resources. Local governments are mandated to provide 'basic health and sanitation', including health awareness raising, education, treatment, and referral services. All three levels of government are required to prepare their AWPB setting their operational priorities within the framework of national and sub-national priorities, including Sustainable Development Goals (SDGs), periodic development plans (currently 15th plan), National Health Policy 2019, Public Health Service Act 2018 and NHSS (2016-22).

MoHP endorsed the NHSS implementation plan, which provided a budgetary framework to help Nepal's progress towards UHC and the SDGs by 2030. This initiative towards localising was aimed at sub-national governments prioritising social indicators in their planning and budgeting.

3.4.1 Progress on NHSS priority interventions

Table 3.15 summarises the progress on the single output included for this outcome.

Table 3.15: Progress status on NHSS priority interventions

Strengthen harmonised annual planning, budgeting and review process, including use of evidence in planning

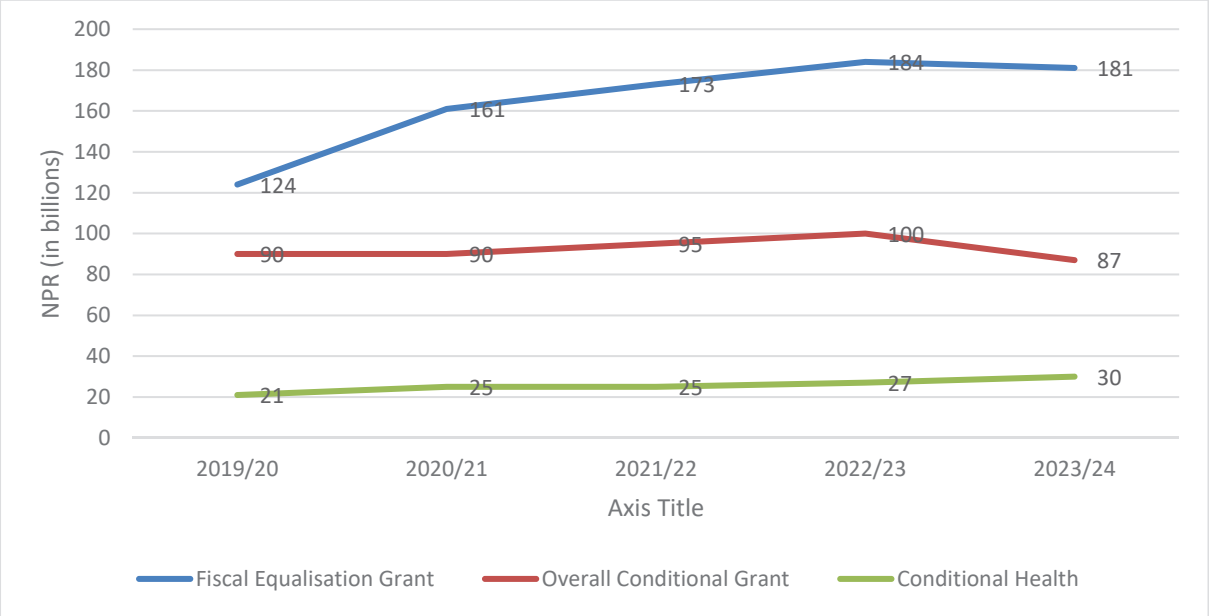
Progress status
• Various national-level documents have been developed and implemented, over the NHSS implementation period ahat provide the legal and operational frameworks for annual planning and budgeting. Important documents include:
  • Local Government Operation Act, 2074 [2017]
  • Intergovernmental Fiscal Transfer Act, 2074 [2017]
  • Reference guidelines for Local Level Planning and Budgeting, 2017 (MoFAGA)
  • Handbook for Local Level Planning and Budgeting, 2020 (MoFAGA)
  • Planning and Budgeting Guidelines for the Local Level (National Planning
  ▪ Commission)
  • Planning and Budgeting Guidelines for the Health Sector, 2018 (MoHP)
  • Programme Implementation Guidelines, various years (MoHP)
  • Federal, Province and Local Level (Coordination and Inter-relation Act), 2020 (2077)
▪ MoF, in collaboration with NPC, the relevant ministries and National Natural and Fiscal Resources Commission (NNFRC), each year has provided budget ceilings on fiscal transfers to provincial and local levels. MoHP has provided budget ceiling and guidance to its federal health entities to prepare activity-based plans.

Table 3.15: Progress status on NHSS priority interventions
▪ Dedicated planning and budgeting sections - MoHP Planning and Budgeting Section and Provincial Health Planning and Budgeting Section have been coordinating evidence-based planning and medium-term expenditure projection and guiding different MoHP departments and provincial departments on AWPB. ▪ Federal level is providing a mix of conditional and equalisation grant to subnational governments. Conditional grant ensures an alignment of provincial and local levels plans to nationally set plans and priorities. MoHP has also over the implementation period, has been reducing in number of line items in conditional grants (health) to allow for more flexibility at the local level. As of 2022, the number of activities planned in health sector on federal and conditional grant reduced by 3.9% from the previous year. Equalisation grant provides space for local and provincial levels to plan and budget for and address context specific issues. Provincial government also provided conditional grants to local level. ▪ Local and provincial governments have also been allocating their own budgets for health sector activities, which is increasing over the years (see details below). ▪ Sequential planning and budgeting between three levels of government has allowed subnational governments to align their plans and budget to federal plans and budget. Federal budget was prepared by 15 Jestha (end of May), provincial budget by end of Jestha (mid-June) and local level budget by 10 Ashad (59approx. 25 June). ▪ In FY 2021/22 MoHP provided training to local government finance staff, with the support of Financial Comptrollers General Office (FCGO) for planning and financial reporting including on LMBIS and HMIS. Orientations to federal health stakeholders were held on Mid-term Expenditure Framework for the prioritisation of health programmes. Provincial finance staff were trained on PLHIMS and HMIS. MoHP provided hands-on technical support to provincial governments on LMBIS entry as needed. ▪ Evidence through the various surveys – NHFS 2021, NDHS 2022, MMR Study 2021/22, and regular management data through the MISs have been used for planning purposes. Other knowledge products, policy dialogues and meetings have also been contributed to planning (e.g., NHRC Policy Briefs, further analysis of survey data) ▪ Provinces have been developing tailored strategies and policies for their own context. For example, Karnali Province prepared Health Policy 2076; Provincial Health Act in 2078; Provincial Health Sector Strategic Plan (2079-87). Lumbini Province prepared Provincial Health Policy 2020 (2077); and Provincial Public Health Act has been drafted Madhesh Province has started drafting a health policy).

3.4.2 Major initiatives

- **Intergovernmental fiscal transfer –** Figure 9 shows that federal government's overall conditional grant showed an increasing trend for four years and had a marginal dip in 2023/24. In the same period, fiscal equalisation grant showed a marginally increasing trend and had a dip of 13% in 2023/24. The same period shows that health sector conditional grant showed year on year increase, including an increase of 11% in 2023/24. However, greater reduction in equalisation grant to overall conditional grant indicates that the pot of discretionary funds of sub-national governments, other than their own source revenue, decreased in 2023/24 in the five years. However, the trend indicates that more funds are being channelled more to the provincial and local levels.

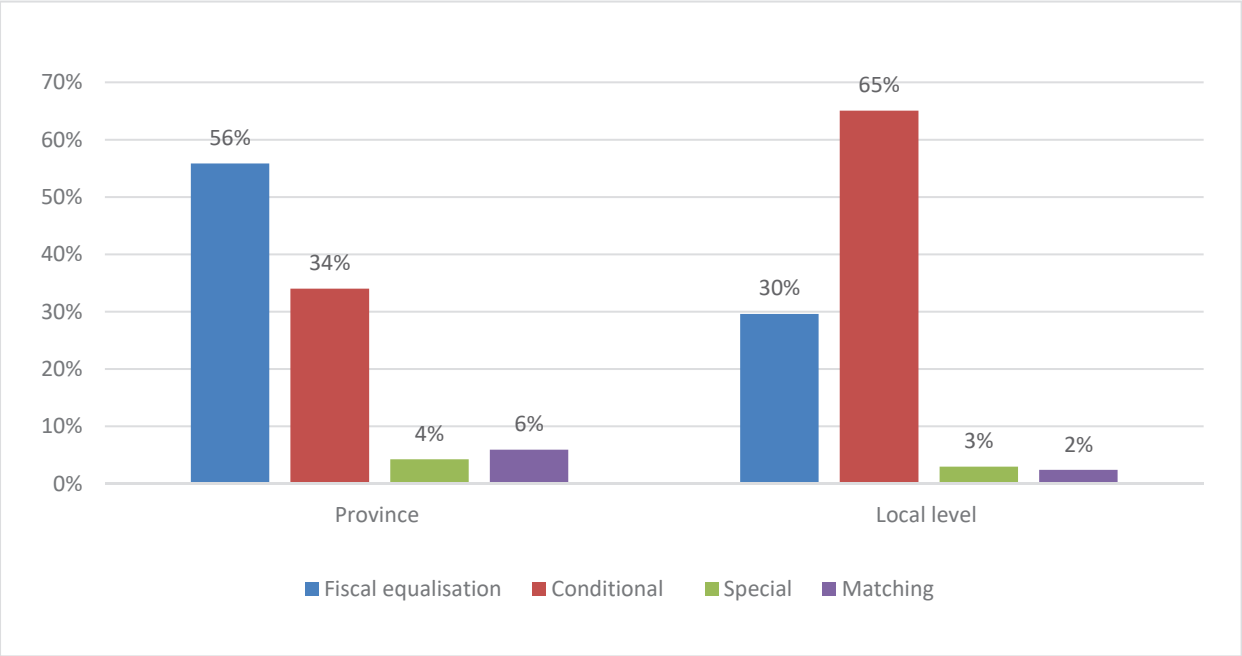
Figure 9: Trend on Inter Governmental Fiscal Transfer, including health sector (federal)



Source: Red Books, MoF and MoHP budget record

The data in Figure 10 shows that in the case of provincial level, the fiscal equalisation grant share is larger with 56% indicating that Provincial Governments have greater fiscal autonomy than local governments whose fiscal equalisation grant share is 30% only. This situation will remain until federal financing through conditional grant transfer is reduced.

Figure 10: Composition of Inter-governmental Fiscal Transfer for Provincial and Local Levels (all sectors) FY 2022/23



Source: Red Book, MoF, 2023

The volume of the various types of grants allocated by the federal government in 2023/24 is shown in Table 3.16. For FY 2023/24, an average of NPR 391.8 million down from 398.9 million in 2022/23 was provisioned per local level in the form of equalisation (NPR 116 million), conditional (NPR 254.8 million) special (NPR 11.6 million) and matching (NPR 0.93 million) grants. The volume of per-

province grants from the federal level for FY 2023/24 was NPR 15009.5 million lower than FY 2022/23 grant of NPR 18,494.4 million.

Table 3.16: Summary of the grants to provinces and local levels as provisioned by federal government, FY 2023/24 (all sectors) (In million NPR)

Description	Fiscal equalisation	Conditional	Special	Matching	Total	
					Total	Average per level
(A) Province	58668	35720	4458	6222	105067	15010
(B)Local level	87353	191895	8727	7046	295020	392
Metro (B1)	2693	7291	173	164	10320	1720
Sub metro (B2)	3263	6746	192	222	10422	948
Municipality (B3)	37746	87011	3709	2747	131214	475
Rural Municipality (B4)	43651	90846	4653	3913	143064	311
Total (A+B)	146020	227615	13185	13267	400087	0

Source: Red Book, MoF, 2023

A comparative scenario of federal grants (equalisation and conditional grants) to selected two local governments per province, covering all types of local governments for FY 2022/23 and FY 2023/24 is presented in Table 3.17. The data shows that the flow of grants is not uniform across local levels. For example, Pokhara Metro and Aalital Rural Municipality Dadeldhura have highest percentage reduction in grant (equalisation and conditional grants combined) in 2023/24.

Table 3.17: General pattern of the federal grant to selected local levels (all sectors) (in Lakh NPR)

SN	Palika	Fiscal equalisation			Conditional			Total		
		2022	2023	% change	2022	2023	% change	2022	2023	% change
1	Itahari Sub Metropolitan, Sunsari	3497	3017	-14%	4676	4380	-6%	8173	7397	-9%
2	Sabha Pokhari Rural Municipality, Sankhuwasabha	1012	890	-12%	1245	1209	-3%	2257	2099	-7%
3	Gaur Municipality, Rautahat	1349	1191	-12%	2168	2204	2%	3517	3395	-3%
4	Janakpur Dham Sub-Metropolitan, Dhanusha	3764	3250	-14%	5810	5964	3%	9574	9214	-4%
5	Hetauda Sub Metropolitan, Makawanpur	3575	3104	-13%	7120	7904	11%	10695	11008	3%
6	Shivapuri Rural Municipality, Nuwakot	981	867	-12%	2192	2360	8%	3173	3227	2%
7	Pokhara Metropolitan, Kaski	6586	4870	-26%	18580	16905	-9%	25166	21775	-13%
8	Modi Rural Municipality, Parbat	1064	939	-12%	2776	2916	5%	3840	3855	0%

Table 3.17: General pattern of the federal grant to selected local levels (all sectors) (in Lakh NPR)										
SN	Palika	Fiscal equalisation			Conditional			Total		
		2022	2023	% change	2022	2023	% change	2022	2023	% change
9	Butwal Sub-Metropolitan City, Rupandehi	3480	3017	-13%	4523	4592	2%	8003	7609	-5%
10	Tribeni Rural Municipality, Rolpa	1074	952	-11%	2203	2077	-6%	3277	3029	-8%
11	Birendra Nagar Municipality, Surkhet	2657	2289	-14%	5465	5307	-3%	8122	7596	-6%
12	Kharpunath Rural Municipality, Humla	732	710	-3%	1646	1487	-10%	2378	2197	-8%
13	Aalital Rural Municipality, Dadeldhura	945	829	-12%	1983	1738	-12%	2928	2567	-12%
14	Dhangadhi Sub-metro, Dhangadhi	3280	2842	-13%	5818	5694	-2%	9098	8536	-6%

Note: Conditional grant does not include provincial grant transfer and federal special or matching grant.
Source: MoHP budget records

Of the selected 14 local governments, only Hetauda Sub Metro Makawanpur (3%) and Shivapuri Rural Municipality, Nuwakot (2%) had an increment in grant. In one local government- Modi Rural Municipality- in Parbat grant remained the same as previous year and the rest 11 local governments had reduction. All 14 local governments had reduction in fiscal equalisation grant with Pokhara Metro topping the list with 26% decrease.

Eight local government conditional grant was reduced and six had an increase. Aalital Rural Municipality had the highest conditional grant decrease at 12% whereas Hetauda Sub Metropolitan had the highest increase in conditional grant at 11%. This indicates that the basis for resource allocation to local governments is being adjusted to the needs, performance and revenue-generating capacity, which are the two major components that define equalisation and conditional grants to local levels.

The Local Government Institutional Capacity Self-Assessment (LISA) results showed that the aggregate capacity score of the local levels increased from 51.9 in 2020/21 to 59.1 in 2021/22 and to 63.22 out of total optimum score of 100.

Table 3.18 shows that as as compared to FY 2022/23, health sector conditional grant to provinces shows a decrease trend while to local levels there is an increase.

Table 3.18 Summary of the conditional grants in the health sector to provinces and local levels as provisioned by federal government, FY 2022/23 and 2023/24 (In million NPR)					
Description	Total Grant 2022-23		Total grant 2023-24		
	Total	*Average per level*	*Total*	*Average per level*	*% Change*
Province (a)	6266.8	895.3	6127.2	875.31	(2.23)
Local level (b)	27444.3	36.5	30176.5	40.07	9.78
Metropolitan	607.8	101.3	663.80	110.63	9.21
Sub-metropolitan	635.6	57.8	664.40	60.4	4.45
Municipality	11896.5	43.1	12912.3	46.78	8.54
Rural Municipality	14304.4	31.1	15936.0	34.64	11.38

Table 3.18 Summary of the conditional grants in the health sector to provinces and local levels as provisioned by federal government, FY 2022/23 and 2023/24 (In million NPR)					
Description	Total Grant 2022-23		Total grant 2023-24		
	Total	*Average per level*	*Total*	*Average per level*	*% Change*
Total (a+b)	33711.1		36303.0		
Source: MoHP budget records					

3.5 IMPROVED SECTOR MANAGEMENT AND GOVERNANCE

This outcome demanded restructuring of MoHP's organisational structure to create an institutional set up that aligns with the federalised health system. NHSS aimed to channel external financial support through government's systems and better alignment of technical assistance to the government's priorities. In the strategy, MoHP also committed to strengthen financial planning, auditing and transparency measures with particular emphasis on reducing financial irregularity and improved accountability. There are five outputs under this outcome:

- The MoHP structure is responsive to health sector needs
- Improved governance and accountability
- Improved development cooperation and aid effectiveness
- Strengthened multisectoral coordination mechanisms
- Improved PFM.

3.5.1 Progress on NHSS priority interventions

NHSS proposes key priority interventions to achieve the outcome 'Improved Sector Management and Governance' and progress on these interventions is presented in Table 3.19.

Table 3.19: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
1	MoHP organisational review and restructuring to create a decentralised health system that is responsive to federalised health sector needs	▪ The organisational structure of MoHP and health service delivery system were revised and staff adjustments at federal, provincial and local levels have been completed. ▪ PPSCs have already started to recruit staff as per the approved new organograms. ▪ Federal Civil Service Act has not yet been enacted. The federal Act will clarify the staff recruitment and management jurisdictions and pathways between three levels of government. Lack of such clarity has led local and provincial governments to rely on the temporary arrangement of human resources through federal deputations and short-term contractual recruitments. This has also created ambiguity on existing staff's career progression scope and avenues. ▪ At the provincial level, the MoSD/MoHP, PHLMC, Provincial Public Health Laboratory (PPHL) and PHTCs have been established and are functional. A separate ministry was established in four provinces (Koshi, Bagmati, Gandaki and Lumbini) to oversee and manage health sector functions. In 2079-80, Madhesh Province created a separate health ministry. ▪ Organisation and Management (O&M) survey of provincial and federal hospitals have been completed and submitted to MoF and are awaiting approval.

Table 3.19: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
		▪ Some preliminary work has been completed for establishing the CDC, FDA, National Health Accreditation Authority at the federal level
2	Improved governance and accountability, Develop State non-state/public-private partnership policy in health sector; right to information; transparency of major decisions; health sector social audit and social accountability; grievance handling	▪ Policy commitments to partner with non-state actors are indicated in the Public Health Service Act (Section 5), Health Policy 2076 (Section 6.6), and the Public Private Partnership and Investment Act 2075. However, mechanisms for such partnerships to take place are yet to be developed. ▪ Public Health Service Act and regulations have provisioned for right to information, Information Officer/focal point in each government office. Accordingly, government offices have appointed such officer/focal point. Information is provided as requested. ▪ Key government entities in health and other sectors have websites where they major decisions are shared. ▪ National Health Policy 2019 makes a provision for public hearing and social audit of health services provided by all health institutions. This reaffirms the federal government's commitment to social accountability in the health sector. As per MoHP National Annual Review Report – 2018 (2075 BS), social audits were implemented in 2,138 health facilities in FY 2017-18 across all 77 districts -386 more than the 1,752 social audits implemented in 2016-17. Later COVID-19 impacted on health sector social audit as 'lockdowns' and social distancing needs created constraints on gathering people. ▪ DoHS rolled out a revised Health Sector Social Audit Guidelines (Federal Directives on Social Accountability in Health Sector) 2020 (2077). Some local governments have included social audit provisions in their Health Policy. Many local governments have organised health sector social audit. Health Facility Operation and Management Committees have been formed at different health facility levels. ▪ There are various grievance redressal mechanisms in use. Until FY 2022/23 end, a total of 287 health sector greivances were filed at CIAA of which 71% were settled; 511 health sector related complaints were filed at Hello Sarkar of which 20% were settled and others were in investigation. From 17 July to 17 Oct 2023, a total of 114 complaints were made at CIAA of which 36.8% were settled and others were under investigation. Likewise, 194 health sector related complaints were filed at Hello Sarkar of which 29.8% were settled and others were under investigation.
3	Policies, Acts, Guidelines and Structures prepared to improve on health sector governance and accountability during NHSS (2016-22) period	Following policies, Acts, Guidelines were prepared to improve on health sector governance and accountability during NHSS (2016-22) period: ▪ Nepal Health Sector Strategic Plan (2023-2030) ▪ National Health Financing Strategy (2023-33) ▪ National Nursing and Midwifery Strategy, 2022 ▪ National Healthcare Quality Assurance Framework 2022

Table 3.19: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
		▪ National Strategic Plan to End Tuberculosis in Nepal (2021/22-2025/26), 2022 ▪ Integrated Health Information Management System Roadmap, 2022 ▪ Universal Health Coverage: Strategic Framework, 2021 (draft) ▪ National Ambulance Guideline, 2021 ▪ National HIV Strategic Plan (2021-2026), 2021 ▪ Geriatric Health Service Strategy 2021 ▪ Geriatric Health Service Operational Guideline and Geriatric Health Service Protocol ▪ National Roadmap for Zero Leprosy Nepal (2021-2030) ▪ National Leprosy Strategy and Action Plan (2021-2025) ▪ Maternal and Perinatal Death Surveillance and Response (MPDSR) programme implementation ▪ guideline 2021 ▪ Guideline for the Integration of Typhoid Vaccine in Routine Immunisation Programme and Vaccination Campaigns ▪ Safe Abortion Service Implementation Guideline 2021 ▪ Implementation Guideline for Maternal and Neonatal Health Security Programme 2021 ▪ Public Health Service Regulation, 2020 ▪ National Strategy for Viral Hepatitis 2023-2030 ▪ TB Free Initiative Program Implementation Guidelines, Second Edition (2078) ▪ National Malaria Strategic Plan 2014-2025, Updated 2020 ▪ National Malaria Surveillance Guidelines 2019 ▪ Private Sector Engagement Guidelines in Malaria, 2019 ▪ National Adolescent Health and Development Strategy 2030, 2020 ▪ Nepal Human Resource for Health Strategy 2020/21 ▪ Immunisation Act, 2016 ▪ National Strategy on Reaching the Unreached (2015-2030), 2015 ▪ National eHealth strategy, 2017 ▪ Health Insurance Act, 2017 ▪ Disability Management (Prevention, Treatment and Rehabilitation) Policy, 2019 ▪ Strategy and 10 Years Action Plan (2017-2026), 2017 ▪ The Right to Safe Motherhood and Reproductive Health Act, 2018 ▪ Disaster Risk Reduction National Strategic Plan of Action, 2018 ▪ Social and Behaviour Change Communication (SBCC) Strategy, 2018 ▪ Public Health Service Act, 2018 ▪ National Health Policy, 2019 ▪ National SMNH Roadmap 2030, 2019
4	Development cooperation and aid effectiveness; database of development assistance to	▪ The Development Cooperation Policy was prepared in 2019 which re-affirmed the sector-wide approach (SWAp) which was adopted in the health sector since 2005.

Table 3.19: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
	the health sector, policy dialogue; review mechanism for INGOs involved in health sector	▪ JAR and national review have been combined to organise National JAR since 2018 to foster development cooperation. Discussions are underway on how JAR can be more effective to review the sector progress together with partners for donor harmonisation. ▪ JCMs have been held with HDPs twice a year: one pre-budget and another post budget to ensure sector priorities and programmes have been properly translated into activities by AWPB. ▪ MoHP's NGO Coordination Section holds meeting every three months with Association of INGOs (AIN) for necessary coordination. AIN have been working in coordination with MoHP to create a digital mapping space for INGO's priority activities which will provide a knowledge of INGO priorities towards realisation of NHSS (2023-30).
5	Development cooperation and aid effectiveness; database of development assistance to the health sector, policy dialogue; review mechanism for INGOs involved in health sector	▪ MoF has a mechanism to collect and disseminate the development assistance database. ▪ NHSS Coordination Committee has been formed and met regularly to discuss the strategy implementation issues as well as formation of new NHSS (2023-30).
6	Multi-sectoral coordination mechanisms strengthened	▪ Public Health Service Act has provisioned a committee to promote multi-sectoral coordination; first meeting of National Public Health Committee has been held. ▪ JAR and JCMs also promote multi-sectoral coordination spaces. Health policies/acts also emphasise and cover other sectors (like water and sanitation). ▪ Multi sectoral action plan has been prepared for non-communicable diseases. ▪ Multi Sectoral Nutrition Programme (MSNP) has been developed and implemented.
7	Improved public financial management; mechanism to gradually capture revenue and expenditure data; predictability of health sector budget; on-budget and off-budget reporting mechanism; improvement on budget allocation and expenditure practices	▪ Federal and provincial level use Revenue Management Information System (RMIS) to capture revenue, federal and provincial level use LMBIS and PLMBIS respectively for budgeting purpose and CGAS for capturing expenses. SuTRA captures revenue, budget and expenditure for local levels. ▪ GoN has developed a Financial Management Information System (FMIS) to capture the expenditure from federal and provincial government entities. Sectoral ministries were also provided access to retrieve integrated expenditure of various institutions operating under MoHP. ▪ MoF/Financial Comptroller General Office (FCGO) annually issue Budget Implementation Guidance for all levels of government which provides guidance on spending and maintaining financial discipline. ▪ Health Sector Financing Strategy provides health sector baseline, targets and milestones for achievement of targets. JCMs provide basis for predictability of donor funding,

Table 3.19: Progress status on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
		supported by pool fund and bilateral engagements. Additionally, LMBIS, PLMBIS, SuTRA, CGAS, RMBIS provide required data and information to create predictability of needs in health sector. ▪ Preparation has been done by MoF, MoHP and MoWCSC to create a dashboard for on-budget and off-budget reporting mechanism. ▪ Inter-governmental Financial Management Act has provisioned for federal, provincial and local governments to prepare medium-term expenditure framework including expenditure prediction of three forthcoming years. This provision has helped in bringing synergy between periodic plans and annual plans and budgets. ▪ National Health Financing Strategy also provides a direction of travel for budget allocation. ▪ Practice of preparing consolidated annual procurement plan (CAPP) also helps in improving budget allocation and expenditure practices. ▪ The PFM committee consisting of MoHP and EDPs decided to study the implementation status of Provincial Financial Management Improvement Plan (FMIP) and Procurement Improvement Plan (PIP) for Madhesh and Lumbini provinces. The study took place in 2023 drawing lessons and paving the way for potential replication by other provinces.
8	Strengthen implementation of internal control procedures	▪ The Internal Control System Guideline for MoHP was endorsed by the Ministry in 2021 and is being implemented. ▪ The Internal Control System Guidelines for DoHS was endorsed in 2022 as per the Financial Procedures and Fiscal Accountability Act, 2076 (2019) and its Regulation 2077 (2020). Provincial governments have not yet prepared such acts. ▪ There is a need of development and use of such guidelines at the subnational level
9	Improve financial reporting (timing and content) and audit process including response to irregularities	▪ Integrated financial report of MoHP is regularly submitted by MoHP to FCGO on time. ▪ Audit queries against the audited amount decreased (4.58%) in FY 2021/22 audit, while it was 3.35% in the previous FY (2020/21) audit. 83.92% of federal MoHP related entities responded to the preliminary OAG audit report as required within 35 days. ▪ The MoHP audited financial statements of FY 2021/22 was submitted to the OAG; the audit report was certified by the OAG on 10 May 2023 which was also shared with the HDPs
10	Effectively implement LMBIS	MoHP entities use LMBIS for AWPB. Staff are trained in LMBIS operation and data entry and for activity planning. Provincial governments do the same using PLMBIS.

Disbursement-linked indicator (DLI) achievement during the NHSS period

Table 3. 20: presents the progress status on the DLI during the NHSS period (2016-22).

Table 3.20: DLI achievements								
DLI No	DLI Indicators	Year I	Year II	Year III	Year IV	Year V	Year VI	Year VII
1	% contracts managed by the MD through the PPMO's online procurement portal	Achieved	Partially Achieved	Achieved	Achieved	Achieved	Achieved	N/A
2	Establishment and functioning of web-based grievance redressal mechanism	N/A	Achieved	Achieved	Achieved	Achieved	In process	In process
3	% of procurements done by MD using standard specifications	Achieved	Partially Achieved	Achieved	Achieved	Achieved	Achieved	N/A
4	Central medical stores and medical stores of Provinces report through eLMIS	N/A	Achieved	Achieved	Achieved	Achieved	Achieved	N/A
5	% reduction of less than minimum stocks (understock) of tracer health commodities in sub provincial medical stores	N/A	N/A	N/A	Achieved	Achieved	Not Achieved	In Process
6	% improvement in EVM Score over 2014 baseline	N/A	Achieved	N/A	N/A	Achieved	N/A	N/A
7	% of the FMoHP spending entities submitting annual plan and budget using eAWPB	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	N/A
8	% of the FMoHP's annual spending captured by the TABUCS	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	N/A
9	% of audited spending units responding to the OAG's primary audit queries within 35 days	Achieved	Achieved	Achieved	Achieved	Achieved	In process	Achieved
10	Health facilities reporting annual	Achieved	Achieved	Achieved	Achieved	Achieved	In process	In process

Table 3.20: DLI achievements								
DLI No	DLI Indicators	Year I	Year II	Year III	Year IV	Year V	Year VI	Year VII
	disaggregated data using District Health Information System (DHIS2) in a timely manner							
11	MoHP to provide guidance and support to the subnational governments on citizen engagement mechanism	N/A	Not Achieved	Achieved	Partially Achieved	Achieved	In process	In process
12	Equity in Essential Health Service Utilisation	Achieved	Partially Achieved	Partially Achieved	Partially Achieved	Not done	Not done	Not done
13	Equity access to immunisation services in targeted districts improved: Equity gap in poor performing districts reduced	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
14	Infrastructure: health infrastructure better able to withstand earthquakes.	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved

3.6 IMPROVED SUSTAINABILITY OF HEALTHCARE FINANCING

Ensuring adequate funding and rationale use of resources in the health sector are key issues in mitigating high out-of-pocket (OOP) spending and enhancing access to health services without imposing any financial burden to citizens. This approach aims to prevent individuals from falling into impoverishment due to healthcare costs. NHSS focused on increasing investments in the health sector, improving mobilisation of existing resources and better pooling of resources and risks. It also committed to develop Health Sector Financing Strategy to guide MoHP and development partners towards these efforts.

For improved sustainability in healthcare financing, NHSS focuses on increasing investment in the health sector and social health protection mechanisms as reflected in the two outputs listed below:

- Strengthened health financing system.
- Strengthened social health protection mechanisms.

3.6.1 Progress on NHSS priority interventions

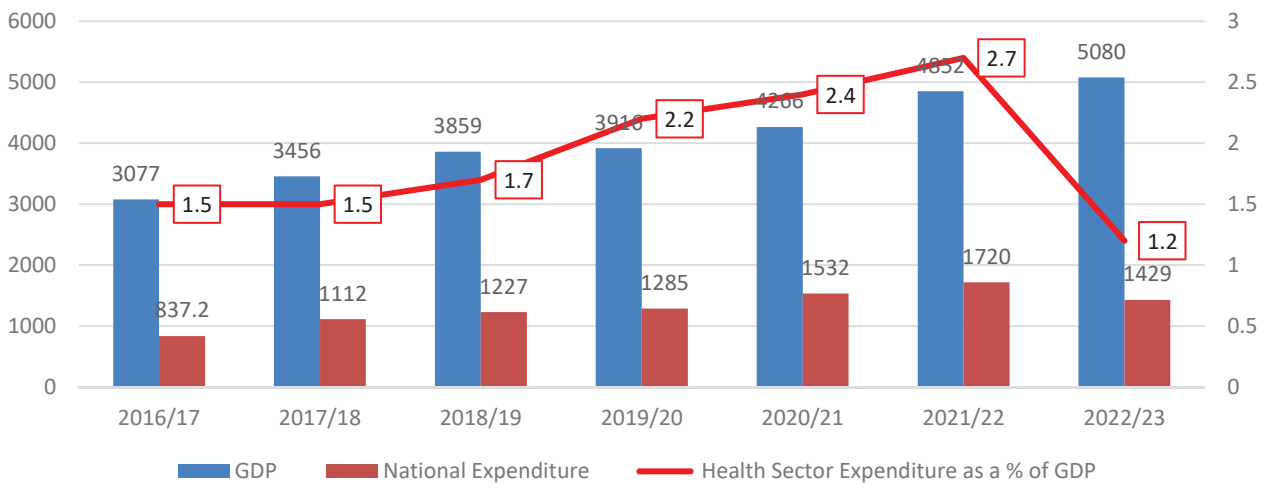
NHSS proposes key priority interventions to achieve the outcome ‘Improved sustainability of healthcare financing’ and progress on these interventions is presented in Table 3.21

Table 3.21: Progress status on NHSS key strategic interventions		
SN	**Key priority interventions**	**Progress status**
1	Health financing system strengthened by developing a health financing strategy, regular review of health sector expenditure through National Health Accounts, estimation of resource need for delivering service packages	▪ National Health Financing Strategy (2023-33) was developed and endorsed in 2023. ▪ NHA reports have been published for FY 2016/17; 2018/19 to 2019/20 in 2023. PPMD is the focal point for National Health Accounts on a regular basis. ▪ Basic Health Services costing draft is being prepared. ▪ MoHP annually carried out the budget analysis of health sector for a five-year period and expenditure for preceding four years at federal level. Budget analysis of subnational governments was also done in some provinces (e.g., Madhesh, Lumbini and Sudurpaschim).
2	Social health protection mechanisms strengthened; legal framework to govern and strengthen institutional arrangement for social health protection schemes; harmonisation and integration of different social health protection schemes	▪ Guideline for Enrolment of Families of Workers Going to Foreign Employment in Health Insurance Programme, 2022 (2078) adopted. ▪ Guidelines on Co-payment Mechanism in Health Insurance Programme, 2023 (2079) drafted. ▪ Guideline for Contractual Employees Service and Benefits drafted. ▪ Draft Health Insurance Strategic Road Map, 2024-2030 (work in progress) ▪ Monitoring and Evaluation Guideline, 2023 (2079) adopted. ▪ Training Manual of IMIS for Service Providers prepared. ▪ Training Manual for Enrolment Officers, Enrolment Assistants and Training of Trainers Manual for Enrolment Assistants prepared. ▪ Data Sharing Protocol, 2023 (2080) drafted. ▪ Guideline to Implement Livelihood Allowance for Cancer, Kidney and Paralysed Patients from Spinal Injuries 2018 (2074) adopted. ▪ Some local and provincial governments have topped up on federal government provided social security allowances. ▪ Social Health Security Programme (SHSU) is integrated in hospital system. ▪ The government announced integration of Destitute Citizen Treatment Plan (DCTP) into health insurance in 2021/22 as a pilot with a view to harmonise all social security provision. After the pilot and learnings, DCTP responsibility has been given back to Nursing and Social Security Division (NSSD).
3	Initiate implementation of social health security programme (health insurance)	▪ The health insurance programme is operational in all 77 districts of Nepal, covering 749 local levels out of 753. ▪ By the end of FY 2022/23, a total of 7.2 million people up from 5.9 million people in 2021/22 (24.59% up from 20.44% of the total population in 2021/22) have been enrolled in the health insurance scheme. In 2022/23, 61.27% enrolled from 14,35,080 families renewed their insurance.

3.6.2 Major initiatives

Government health spending as percentage of GDP - Over the years, government spending on

Figure 11: Trend on government health sector spending as a percentage of GDP
(Amount in NPR billion)



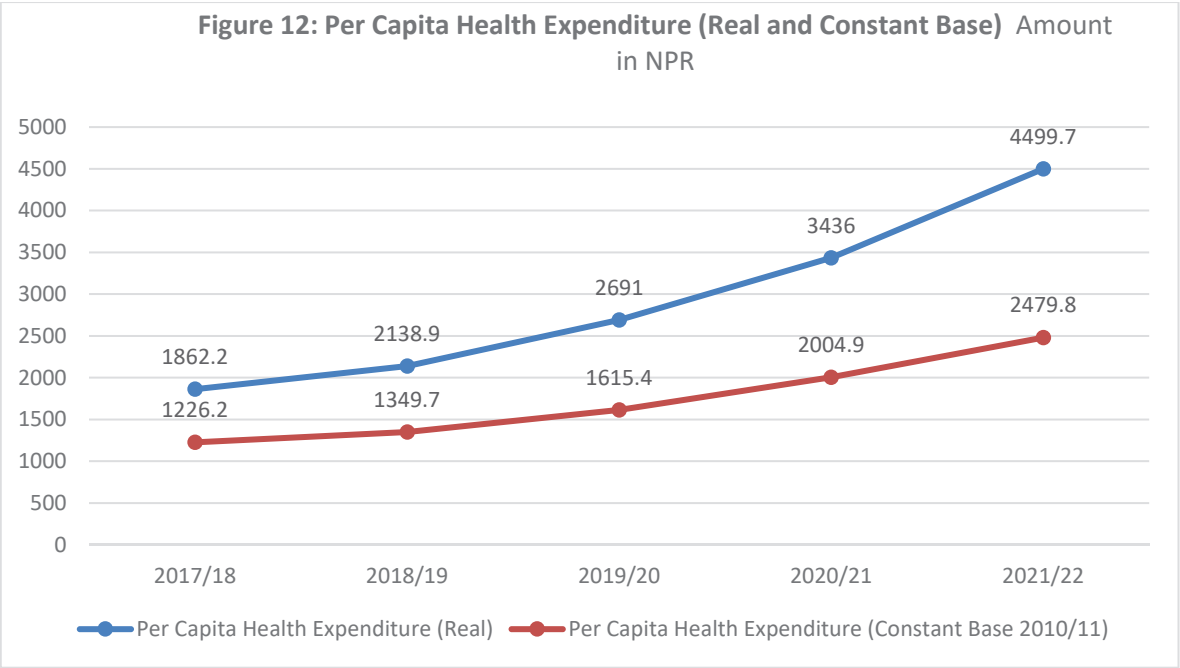
Source: Health Sector Budget Analysis: First Five Years of Federalism, 2022 and MoHP, FMIS Expenditure Data 2022

health as a share of GDP has been increasing, albeit marginally (Figure 11). The year 2022/23 showed a decline after four years with health's share to GDP reducing to 1.2% from 2.7% in 2021/22. The government spending on health includes the budget allocated to the MoHP, other line ministries, and the health budget from provincial and local governments. Per capita government spending gradually increased from NPR 1,862 (USD 17.8) in FY 2017/18 to NPR 4,499 (USD 37.5) in FY 2021/22 in real terms (Figure 12). However, in constant terms (base year fixed to FY 2010/11), within the same time period, per capita government health spending has increased very little, from NPR 1,226 (USD 11.7) to NPR 2,471 (USD 20.6).

Since FY 2017/18, per capita health expenditure has also included expenditure from Provincial Government and local level internal sources and other fiscal transfers in addition to conditional grants. The Chatham House report, among other recent evidence, recommends that low-income countries need to spend USD 86 per capita to promote universal access to primary care services (McIntyre, 2014). This implies that per capita public spending in Nepal is far behind the level recommended to achieve universal access to primary care services.

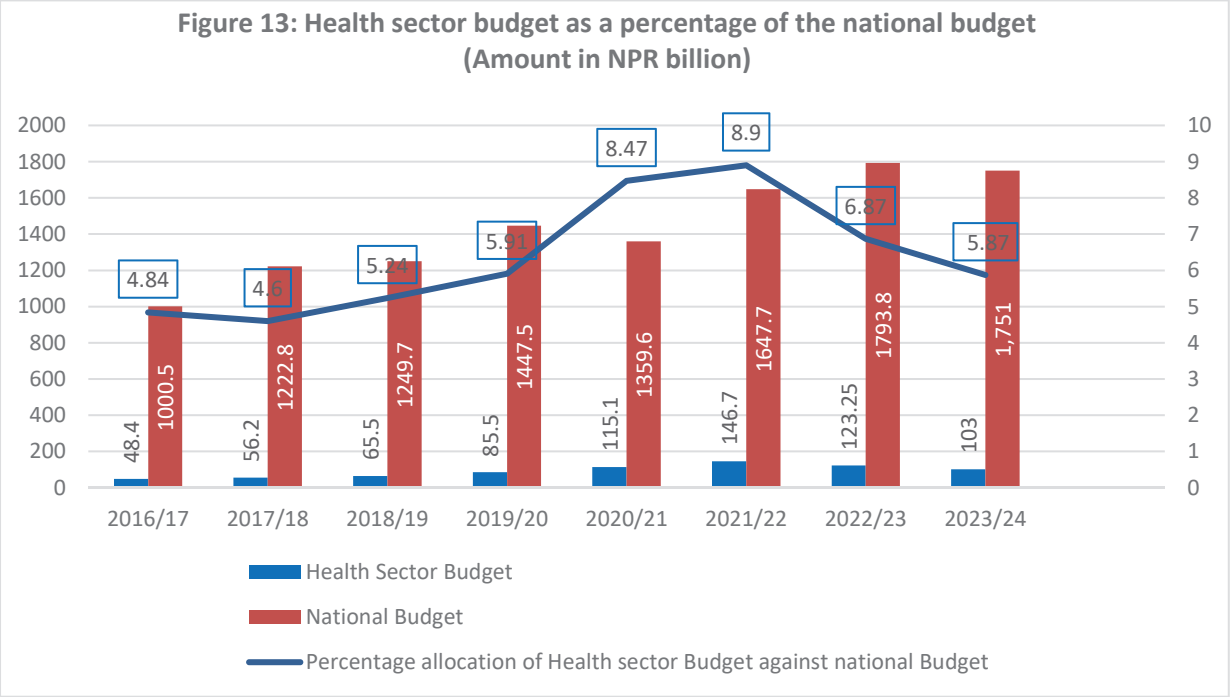
The OOP expenditure remains to be a dominant component in healthcare financing (with its share ranging between 55 to 60 (54.2% in 2019/2012) in the latest years despite the implementation of various programmes aiming to reduce it. It demands further strengthening of the social health protection mechanisms in the country to accelerate the pace toward SDG.

[12] National Health Accounts 2019/20, MoHP



Source: Budget Analysis Report 2022

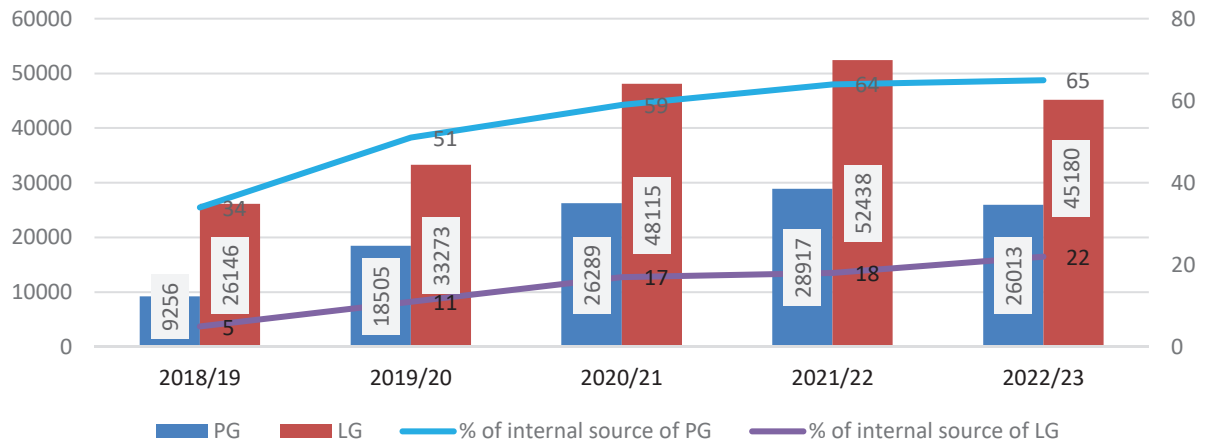
Health sector budget against total national budget - Between FY 2016/17 and FY 2023/24, the share of health sector budget against total national budget has slightly 4.84% in 2016/17 to 5.87% in 2023/24 (Figure 13). Due to COVID-19 pandemic, the share of health sector budget shot up to 8.47% in 2020/21 and to 8.9% in 2021/22.



Source: Red Book, MOF (exclusive of allocation from internal resources by province and local levels)

Health sector budget at province and local level - Over the years, the share of internal sources in Provincial Government health budget allocation has increased, from 34% in FY 2018/19 to 65% in FY 2022/23 (Figure 14). The share of internal sources in health budget allocation has increased from 5% in FY 2018/19 to 22% in FY 2022/23 at the local level. The trend indicates that both provincial and local governments are increasingly able to fund their context specific health issues through their own resources.

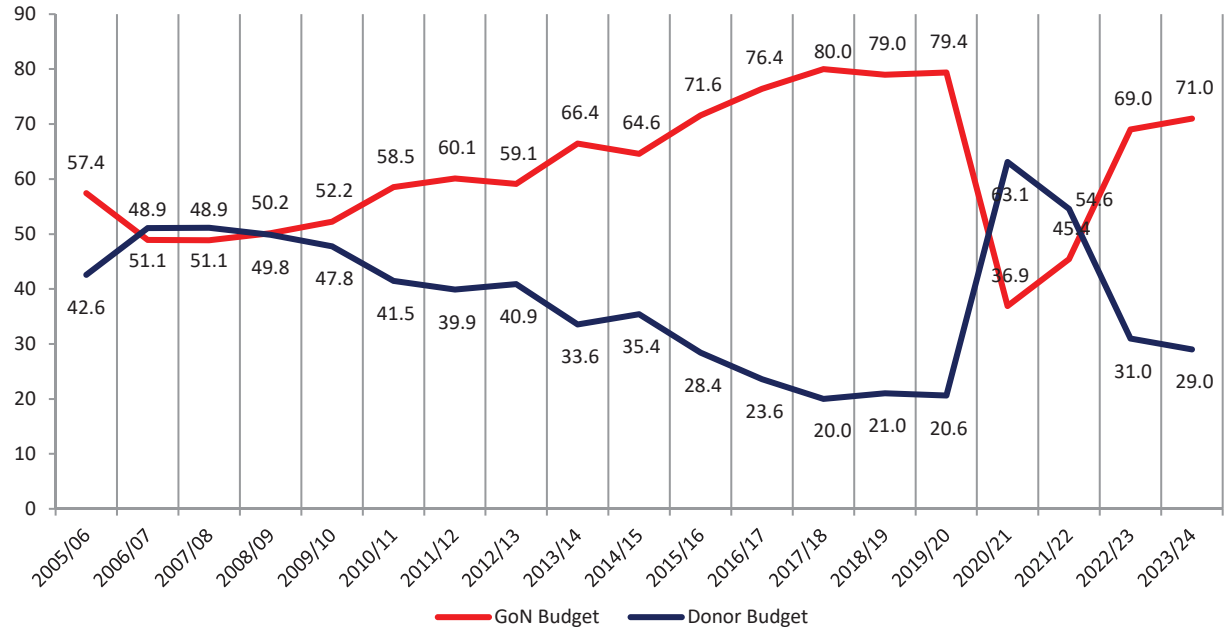
Figure 14: Health budget at province and local level in reference to internal source (Amount in NPR million)



Source: Health Sector Budget Analysis: First Five Years of Federalism, 2022.

GoN and HDP share in health budget - At the start of NHSS health development partners' percentage share to GoN budget was between 20% to 24%, with a sliding trend continuing until 2019/20 (Figure 15). In 2020/21 the HDP contribution shot up to 63% and in 2021/22 it slid down to 45% further sliding down to 31% in 2022/23 and 29% in 2023/24. The spike was due to COVID-19.

Figure 15: Share of GoN and HDPs in Health Budget



The National Health Financing Strategy was developed for the effective mobilisation of adequate funds in the health sector. The strategy has twin objectives of ensuring easy access of people to

quality health services; and achieving efficient fiscal management by arranging financial resources needed for health services.

Health insurance coverage - By the end of FY 2021/22, a total of 5.9 million people (20.44%) of the total population had been enrolled in the health insurance scheme (Table 3.22). This shows an increase of about 1.3 million at the end of 2022/23 reaching 7.12 million and a percentage increase by 4.15 from 2021/22. The insurance renewal rate in 2020/21 was 60.5%, with utilisation rate standing at 28.6%; renewal rate in 2021/22 was 68.2% with utilisation being 36.8%; and renewal rate in 2022/23 was 76.2% with utilization standing at 38%.

Table 3.22: Health Insurance Coverage until 2022/23

Total families insured	% of insured families	Total population insured	% of population insured	Insured people accessing insurance	% of population accessing insurance service	People renewing insurance	% of people renewing insurance	Number of families renewing insurance
22,12,827	33.19	71,71,843	24.59	31,16,875	43.45	43,94,394	61.27	14,35,080

***Source: Health Insurance Board, Teku**; Figures are cumulative to the end of 2022/23*

The health insurance coverage showed a year-on-year increase between 2019/20 and 2021/22 in all provinces, with 4.6% national increase from 2019/20 to 2021/22 (Table 3.23).

Table 3.23: Province wise Health Insurance Coverage from 2019/20 to 2022/23

Province	Population Coverage % 2077/78 (2019/20)	Population Coverage %2078/79 (2020/21)	Population Coverage % 2079/80 (2021/22)	% increase between 2077/78 & 2079/80
Koshi	24.6	27.3	26.5	1.9
Madhesh	2.8	5.1	5.1	2.3
Bagmati	10.6	14.4	18.0	7.4
Gandaki	15.6	21.7	26.9	11.3
Lumbini	11.1	12.9	13.5	2.4
Karnali	7.9	11.8	15.7	7.8
Sudurpaschim	9.4	12.9	13.2	3.8
National	11.5	14.7	16.1	4.6

Entities listed for health insurance reached 440 by the end of 2022/23, with 197 government hospitals, 185 primary healthcare centres and 58 private/community hospitals mandated to implement health insurance scheme (Table 3.24).

Table 3.24: Enlisted Institutions for Health Insurance

Province	Government Hospital	Primary Health Centre	Private / Community Hospital	Total
Koshi Province	48	37	22	107
Madhesh Province	15	33	8	56
Bagmati Province	55	31	14	100
Gandaki Province	27	23	5	55
Lumbini Province	23	30	4	57

Table 3.24: Enlisted Institutions for Health Insurance				
Province	**Government Hospital**	**Primary Health Centre**	**Private / Community Hospital**	**Total**
Karnali Province	15	15	3	33
Sudurpaschim Province	14	16	2	32
Total	197	185	58	438
Source: Health Insurance Board, Teku				

3.7 IMPROVED HEALTHY LIFESTYLES AND ENVIRONMENT

Recognizing the wider determinants of health, NHSS focuses on improving healthy lifestyle and environment for improvement of overall health status of the people. For this NHSS emphasises multisectoral collaboration with other line ministries and stakeholders from other sectors. The Public Health Service Act 2018 and the Public Health Regulation 2020 also highlight the need for a multi-sectoral collaboration for addressing socio-cultural and other determinants of health[13,14]. In line with this, a number of initiatives have been undertaken during the period of NHSS implementation to improve healthy lifestyles and the environment.

[13] Public Health Service Act 2018, Government of Nepal
[14] Public Health Service Regulations 2022, Government of Nepal

3.7.1 Progress on NHSS priority interventions

Table 3. 25: Progress on NHSS priority interventions

SN	NHSS priority interventions	Progress status
1	In collaboration with Ministry of Education, review/revise current approaches for School Health Programme emphasizing health promotion, nutrition, sports, resilience from substance-use and sexual health	NHEICC, in collaboration with Curriculum Development Centre (CDC) of Ministry of Education, Science and Technology, is undertaking review of school curriculum related to health. The initial findings of the review have indicated a serious need for a thorough revision of school curriculum for ensuring 'health literacy' for all school students as an effective preventive measure so that individuals, family and the state do not have to invest much for treatment of avoidable diseases/health conditions. Please see below for details.
2	Expand psychosocial, psychiatric and curative care for gender based and sexual violence	94 OCMCs have been established covering all the districts of Nepal to provide integrated services to GBV victims. OCMC provides services to GBV victims and their children for health services, shelter and legal services. Mental health service is now included in the Basic Health Service Package and the 98 free medicines listed in the BHS package include medicine for mental health.
3	Promote healthy lifestyles through health facilities and community health workers as an integral part of health system	▪ NHEICC has developed and rolled out: • Health Promotions Strategy 2022-2030 • Advocacy package for Sambridha Nepal/ Swastha Nepali • Communication Strategy on Tobacco Control • Update on SAFER initiative ▪ Ayurveda health institutions and citizen wellbeing centres regularly conduct Nagarik Arogya Karyakram (Citizen Wellbeing Programme) at the community level
4	Leverage community groups such as mothers' groups and forestry user groups for promoting healthy lifestyles and behaviours	Mothers' groups in leadership of Female Community Health Volunteers have been instrumental in promoting healthy lifestyles and behaviours at the community level. Local governments have been leveraging community groups for promoting healthy lifestyles and behaviours but there is no mechanism established for monitoring the progress made at the local level.
5	Develop and implement urban health interventions in collaboration with local levels	A number of local levels have established urban health promotion centres for addressing urban health issues in general. Please see below for details.
6	Implement surveillance of road traffic accidents	Road traffic accidents (RTA) surveillance is managed by Nepal Police. In 2022 RTA mortality ratio is reported at 9.4 per 100,000 population (Police Mirror 2022). The SDG target is to reduce it to 4.96 per 100,000 population by 2030.
7	Generate evidence on impact of climate change on human health	A number of research studies on environmental health, occupational health and climate change and its impact on health are carried out in Nepal (See below list). Developing a climate resilient health system is high on Nepal's policy agenda. Nepal developed the Health National Adaptation Plan (H-NAP) 2017-2021 and its updated version 2023-2030 is in approval process.

Table 3. 25: Progress on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
		Several policies focus on sector-wide responses to the climate crisis, including the National Health Policy 2015, National Climate Change Policy 2019, the National Adaptation Plan (2021-2050) and Nepal Health Sector Strategic Plan (2023-2030) which focus on health impacts of climate change. National Health Training Centre provides regular training on climate change and health, NHRC provides training on climate change and health research methods.
8	Monitor changes in vector and disease pattern	All seven provinces are monitoring vector and disease patterns through longitudinal surveillance. Entomological laboratories are in operation in Sudurpaschim province and other provinces are in the process of establishing the labs. The epidemiological changing pattern of the disease will be analysed once the data collection is complete.

3.7.2 Major initiatives

Some of the Key Studies on Climate Change

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3. **Dhimal, M**., Kramer, I. M., Phuyal, P., Budhathoki, S. S., Hartke, J., Ahrens, B., ... & Müller, R. Climate change and its association with expansion of vectors and vector-borne diseases in the Hindu Kush Himalayan region: A systematic synthesis of the literature. Advances in Climate Change Research, 2021, 12(3): 421-429, https://doi.org/10.1016/j.accre.2021.05.003

4. **Dhimal, M**., Bhandari, D., Dhimal, M. L., Kafle, N., Pyakurel, P., Mahotra, N., ... & Mueller, R. Impact of Climate Change on Health and well-being of People in Hindu-Kush-Himalayan (HKH) region-A Review. Frontiers in Physiology, 2021, 12, 1139.

5. **Dhimal M**, Ahrens B, Kuch U. Climate change and spatiotemporal distribution of vector- borne diseases in Nepal - a systematic review of literature. PLoS One, 2015,10 (6): e0129869.

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Nagarik Arogya Karyakram

- Local Citizen Health Committees (*Sthaniya Nagarik Arogya Samiti)* have been formed in 150 places and 25 local Citizen Health Groups have been formed to conduct Citizen Health

Campaigns. Guidelines have been developed for training of community health nurses on healthy lifestyle and behaviour change.

- "My health, My responsibility" campaign is being promoted through the citizen wellbeing programme (Nagarik Arogya Karyakram), Ayurveda and Yoga Programme at School and healthy lifestyle programme (Swastha Jivan Saili Karyakram). A total of 301,120 people received the service this year.
- To prevent non-communicable diseases and mental diseases, Ayurveda, yoga and lifestyle management work were carried out in collaboration with the local level, and public awareness was enhanced by conducting citizen health campaigns and community health education programmes through citizen wellbeing group (Nagarik Arogya Samuha). A total of 150,560people received the service this year.
- Open GYM have been built in the centres of all seven provinces to enhance public awareness about healthy lifestyle.
- *Bhanchha Sudhar Karyakram* (Kitchen improvement programme) has been launched for the management of communicable and non-communicable diseases through lifestyle modification in Lumbini Province.
- Screening, diagnosis, treatment and counselling of major non-communicable diseases (Diabetes, Heart and Blood Vessel related Diseases, Cancer, COPD) have been provided by Bagmati province under the Chief Minister Janata Health Programme.
- To reduce the health problems of traffic police caused by air pollution, Bagmati Province conducted the health problem reduction programme (Nashya) and provided awareness and remedial services.

Review of school curriculum related to health: National Health Education, Information and Communication Centre (NHEICC), in collaboration with Curriculum Development Centre (CDC) of Ministry of Education, Science and Technology, is undertaking review of school curriculum related to health. The review has revealed that health is an optional subject for grade 9, 10, 11 and 12. Some health contents are included in compulsory subject '*Samajeek Adhyan Tatha Jiwanupayogi Sikshya*' (Social Studies and Life Education) but the content is grossly inadequate as only about two periods per year is allocated for health chapter(s). Health and health related subjects are included as optional subjects from grade 9 to 12.

Urban Health Promotion Centre - Some local governments have established or are in the process of establishing Urban Health Promotion Centres (UHPC) to take the basic health services to the doorsteps of the people targeting the unreached and disadvantaged groups to leave no one behind. An UHPC is relatively new structure established after federalisation in the urban area, with the aim of integrating Ayurveda services with modern health system at the municipality level[15].

[15] Originally the concept of Urban Health Promotion Centre (UHPC) was initiated by Kathmandu Metropolitan City and Budanilkantha Municipality in 2073/74 to address the unique health needs of urban population in the context of rapid urbanisation. Recognizing the rationale and importance of UHPC, the MoHP, in 2074, issued 'Urban Health Promotion Centre Establishment and Operation Guidelines 2074' as a guiding framework for Metropolitan Cities, Sub-Metropolitan Cities and Municipalities in the country to establish at least one UHPC in one municipality. The services UHPC offers include: OPD (basic and advance); Maternal, neonatal and child health; Infectious diseases; Public health inspection and supervision; Referral; Healthy environment promotion; Geriatric health; Epidemic control and disaster management; Ayurveda and traditional medicine; and non-communicable diseases and healthy life related services. The organogram of an UHPC as proposed by the Guidelines include Medical Officer (1), Public Health Officer (1), Staff Nurse/Public Health Nurse (3), Health Assistant (1), Lab Assistant (1), Kabiraj (1), Administration Staff (1) and Support staff (1).

3.8 STRENGTHENED MANAGEMENT OF PUBLIC HEALTH EMERGENCIES

Implementation of NHSS began in the aftermath of the 2015 earthquakes and passed through COVID-19 pandemic (2019-2022). Health emergencies over this period heightened the importance of preparedness for and effective management of public health. Drawing upon the lessons of the earthquake 2015, NHSS focused on improving preparedness for and strengthening response to public health emergencies and disaster.

3.8.1 Progress on NHSS priority interventions

Table 3.26 summarises the progress on NHSS priority interventions.

Table 3.26: Progress on NHSS priority interventions

SN	NHSS priority interventions	Progress status
1	Revise national level protocols and operational guidelines for emergency situations with clear roles and responsibilities	A large number of national and sub-national level protocols and operational guidelines have been developed for preparedness and response of health emergency situations with clear roles and responsibilities of stakeholders including three spheres of government, health clusters, Rapid Response Team, Emergency Medical Team with focus on intra and inter sectoral coordination. Hospital Disaster Preparedness and Response Plan has been developed. The documents developed have been well disseminated to the stakeholders through the HEOC website. All this received great focus during the COVID-19 pandemic.
2	Preposition buffer stocks of supplies and medicines at strategic locations at national and sub-national levels for outbreaks	With the enhanced capacity for preparedness and response to health emergencies, federal, provincial, and local levels have been able to pre-position buffer stock of medicines and supplies at strategic locations for effective and timely response with focus on high-risk areas. Emergency Medical Logistics Supplies Warehouses with stockpiles have been established in 10 hub hospitals in 2019. It is important to conduct an assessment how these have been utilized for overall improvement of the emergency medical supply chain system.
3	Finalise and implement integrated disease surveillance system	Gandaki province has taken initiative for development of integrated disease surveillance system and has requested TA from WHO through MoHP. The National Alert and Response Framework (ARF) has been drafted and is in the process of endorsement. The ARF guides organized collection, monitoring, assessment, and interpretation of structured (e.g., EWARS) and unstructured ad hoc information regarding public health events, which may present an acute risk to health. Additionally, One Health Integrated Disease Surveillance and Zoonotic Influenza Distribution Assessment and Ranking (ZIDAR) system has been piloted at the national level and in Gandaki and Lumbini provinces for identifying hotspots and cold spots for influenza transmission and spillover. Data on the human population, animal density, land coverage, bird density, climatic data, and animal infection were taken and mapped along with

Table 3.26: Progress on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
		identification of the risk factors. The process has mapped hot spots and cold spots for influenza transmission. Bioinformatic analysis of the available sequence is ongoing, which shall assist in further refining the developed model. The final report shall also help assess ILI and SARI's currently allocated sentinel sites for early warning and preparedness for zoonotic influenza. Regarding the finalization of list of Infectious Diseases and formulation of prioritized infectious diseases for Nepal, the next steps are to include dissemination workshop for the completed activity, develop surveillance case definitions for the prioritized diseases, and develop reporting timeline for the prioritized infectious diseases.
4	Establish trauma management capacity in hospitals near highways and in major urban centres	MoHP has prioritised establishing/upgrading health facilities near highways and major urban areas to manage trauma cases. Provinces have also initiated capacitating health facilities near highways to manage trauma cases. Gandaki Province has developed trauma management capacity at three facilities - Damauli Hospital at Tanahu, Primary Health Centre at Waling, Syangja and Tilar Health Centre at Dimuwa, Parbat to provide emergency medical services to those injured in road accidents in the highways. These facilities are equipped with an MBBS doctor, nurse, and an ambulance with a health assistant and a GPS fitted in it. Training of Trainers have been provided to 87 frontline health workers from Hub and satellite hospitals. These national trainers trained about 200 frontline providers of emergency unit of Global Emergency and Trauma Care Initiative (GETI) sites (Koshi, Narayani, Bharatpur, Pokhara Academy of Health Sciences, Bheri, Surkhet and Seti Hospital) on Basic Emergency Care (BEC). To date, all 25 hub hospitals have 2 trainers of Basic Emergency Care (BEC) course. And in the Global Emergency and Trauma Care Initiative (GETI) sites, 291 frontline health workers have completed 5-day BEC course. In 2023, the Emergency Care Toolkit has been endorsed and is being implemented.
5	Establish emergency response funds at national, regional and district levels	Public Health Service Act and Regulations have provisioned establishment of health emergency fund. Specific Regulation, Guideline and SOP are under the process of development. MoHP is coordinating with Ministry of Home Affairs for utilising the overall disaster fund for the health emergency. Recommendations from Nepal's JEE further include support for allocation of finances to costed planning documents that contribute to strengthening IHR core capacities.
6	Establish regional level health emergency management centres	Provincial Health Emergency Operation Centres (PHEOC) have been established and are operational in all seven provinces. It is important to manage adequate and skilled human resource and financing for its sustainable operations moving forward.

Table 3.26: Progress on NHSS priority interventions		
SN	**NHSS priority interventions**	**Progress status**
7	Develop human resources mobilisation plan during emergencies	National EMT and RRT guidelines are developed. Based on the guidelines MoHP deploy human resources from one Hub Hospital network to another hospital (EMT); and RRT from one province to another and from one local level to another. Capacity building initiatives need to be supported for effective operationalization of EMT and RRT. Some of the key capacity building initiatives include: ▪ Field Epidemiology Training Program (FETP) ▪ Laboratory expertise on genomic sequencing, biosafety and biosecurity, and expansion of in-country capacity for detection or emerging and re-emerging pathogens ▪ AMR stewardship ▪ Learning Resource Package (LRP) development for risk communication and community engagement or RCCE ▪ Ambulance driver training ▪ Basic emergency medical technician (BEMT) training ▪ Hospital Preparedness for Emergencies (HOPE) training ▪ Various national guidance and learning resource packages in the areas of case management and infection prevention and control (IPC) for COVID-19, biomedical equipment training, oxygen systems training, MPox, acute respiratory distress syndrome (ARDS) and the national IPC guidance and implementation manual.
8	Capacitate Rapid Response Teams (RRTs), at all levels, to respond to public health emergencies	Institutional and human capacity for preparedness and response to health emergencies has been enhanced at federal, provincial, and local levels through a large number of trainings and orientations. Improved monitoring of these trainings and refresher courses, as required, would be important moving forward. Understanding the target number of personnel per health worker type for specific trainings and laying these in a comprehensive strategic plan is an essential step for demonstrating impact.
9	Develop Mass Casualty Management plan for all hospitals above 50 beds and test those plans periodically	All hospitals develop mass casualty management plans. After COVID-19 pandemic, 25 hub hospitals updated hospital disaster preparedness and response plan which incorporated mass casualty and infectious disease. Similar types of plans will be replicated in the remaining satellite hospitals. Orientation of such plans to new personnel and regular testing of such plans through skills-based approaches such as drills or simulation exercise need to be conducted on a regular basis by ensuring budget allocations through AWPB of the respective facilities.
10	Mobilise and manage trained human resources during emergencies with financial and nonfinancial incentives	EMT and RRT guidelines are in place. Financial and nonfinancial incentives are being managed on need basis. Operational details for mobilization and management of trained human resource need to be iterated in the respective SOPs.

National level protocols and operational guidelines, 2022-2023

A number of plans, standard operating procedures, and protocols have been developed in collaboration with relevant stakeholders to ensure readiness for and response to health emergencies. These have provided a robust source of recommendations for disaster and public health emergency preparedness, readiness, and response from multisectoral, multistakeholder consultations. Major reports with concrete recommendations include four components of the IHR monitoring and evaluation framework (1) State Party Self-Assessment Annual Reporting or SPAR; (2) COVID-19 Intra Action Review (COVID-19 IAR) held 29-30 Mar 2022; (3) Nepal Health Sector Simulation Exercise (SimEx) held 19-23 Sep 2022; and (4) Joint External Evaluation (JEE), conducted 28 Nov to 02 Dec 2022. Other major review meetings and workshops include but not limited to:

- Strategic Toolkit for Assessing Risks (STAR), a recommendation from the IHR-JEE, in April 2023.
- National case management symposium, 29-30 Dec 2022
- Hub and Satellite Hospital Network national conference, 12-13 Jun 2022
- National IPC symposium, 30-31 Jul 2022
- Public health laboratory review, 21-22 Mar 2022
- COVID-19 laboratory review, 18 Apr 2022

These recommendations are to be considered while developing the National Action Plan for Health Security including the International Health Regulations.

A Joint External Evaluation (JEE) was held in November-December 2022 to fully assess compliance to the International Health Regulations (IHR). JEE is a voluntary, collaborative, multisectoral process to assess country capacities to prevent, detect and rapidly respond to public health risks whether occurring naturally or due to deliberate or accidental events.

3.9 Improved Availability and Use of Evidence in Decision Making Processes at All Levels

NHSS aspires to make all existing routine information systems functional and interoperable, with focus on generation of information using multiple sources to better inform policy and planning processes. It emphasises increasing access to and use of information through leveraging information and communication technologies (ICT). NHSS aims for improved availability and use of evidence in decision making processes at all levels through practice of integrated information management approach; survey, research and studies in priority areas; and improved health sector review with functional linkage to planning process.

3.9.1 Progress on NHSS priority interventions

Table 3.27 summarises the progress on NHSS priority interventions under the outcome ‘improved availability and use of evidence in decision making processes at all levels.

Table 3.27: Progress on NHSS key initiatives

SN	NHSS priority interventions	Progress status
1	Develop and implement e-health strategy	In 2017, MoHP endorsed the national e-health strategy with the aim of improving cost effectiveness and ensuring secure use of information and communication for health workers, the general

Table 3.27: Progress on NHSS key initiatives		
SN	**NHSS priority interventions**	**Progress status**
		public and policy makers. An action plan has been developed to facilitate implementation of the e-health strategy but there has been slow progress in implementation of the proposed activities.
2	Roll out unified codes to ensure interoperability of different information systems	MoHP developed unified coding system and web-based health facility registry in 2017 to integrate information systems within the Federal structure. The unified coding system provides a unique code for each health facility in terms of their ownership, type and location. The unified coding system is a milestone as the sector moves towards data exchange across various interoperable information systems. The web-based health facility registry has helped to keep health facilities up-to-date and synchronised with MoHP policies. Some initiatives have been taken to establish interoperability between HMIS and some other systems like Routine Data Quality Assessment (RDQA), BHS Monitoring Dashboard, SSU and OCMC Monitoring Systems. However, standard codes for services, human resources, supplies and programmes have not been developed so far. As a move towards this, recently, a Standards and Interoperability Lab has been established at the MoHP. Please see below.
3	Create central data repository to house data generated from routine information systems and national surveys	Despite the increased realisation of need of developing a central data repository among the stakeholders and decision makers, very little has been progressed in yielding tangible output in this area. There is a strong need for enhancing the institutional capacity to lead the initiative with more concentrated efforts in collaboration with development partners. A digital dashboard has been developed using data from HMIS, NDHS, NHFS to share the progress on NHSS and SDGs. The dashboard also provides a digital platform for monitoring basic health services. The dashboard is hosted at the MoHP website and has been instrumental in monitoring equity in distribution of health service, its utilisation and health outcomes.
4	Build institutional capacity on generation, processing, analysis and use of information at all levels	All 753 local levels are capacitated to report health service utilisation data through HMIS using DHIS2 platform, operate eLMIS, SUTRA, etc. Automatic generated dashboards of routine health information systems are in place. Public Health Analytics Guideline has been drafted focusing on data analysis and use of data for decision making. More efforts are required to improve the quality of data and its use for planning and decision-making purposes.
5	Create a common platform among MoHP, councils, other line ministries and non-state sectors on generation, availability and use of information	Government Integrated Data Centre (GIDC) under the Ministry of Communication and Information Technology, has been providing a common platform for management and sharing of data. More concentrated efforts are needed for creating a common platform among MoHP, councils, other line ministries and non-state sectors on generation, availability and use of information.

Table 3.27: Progress on NHSS key initiatives		
SN	**NHSS priority interventions**	**Progress status**
6	Establish a data quality assurance mechanism for all sources of information	RDQA system is established and is in operation as a data quality assurance mechanism for improving HMIS data. Different programmes like immunisation, TB, HIV are using RDQA system.
7	Initiate electronic recording and reporting system at health facilities	e-Reporting of HMIS and LMIS has been expanded to all 753 local levels. Over the years, there has been gradual increment in the proportion of health facilities practicing e-reporting of HMIS and LMIS. Among 7,430 institutions reporting in HMIS, 5,363 (72%) facilities self-reported in DHIS2 platform (highest in Lumbini and Lowest in Madhesh) in FY 2022/23.. Electronic health record system has always been a priority of federal and provincial governments in terms of its reflection in the AWPB. However, the initiatives have remained fragmented due to inadequate standards, institutional set up, infrastructure, budgetary provisions and leadership/championship at all levels to take this forward.
8	Develop national priority areas for health research, implement them and feed to planning, monitoring and evaluation	The Nepal Health Research Council has been conducting national level surveys and research on NCDs/CDs and producing policy briefs. Health Research Areas of Nepal 2019 had been developed and the findings for the studies are being used for planning, monitoring, and evaluation. NHRC, in collaboration with MoHP, has developed national priority areas for health research with focus on national priority programmes in 2022/23. More concentrated efforts are needed to develop a systematic mechanism for use of findings from the studies.
9	Develop health sector survey plan; implement; feed to the planning, monitoring and evaluation	Health Sector Monitoring and Evaluation in Federal Context, including survey plan was developed in 2018 and is in operation.
10	Conduct impact evaluation of priority programmes for continuation, replication, modification and scale up.	DoHS has the practice of conducting annual assessment of Aama programme, one of the priority programmes of GoN. This has helped MoHP take appropriate corrective measures for improving effectiveness of the programme. NHRC conducted evaluation of some programmes like oral substitution therapy program, Bipanna Nagarik programme, Geriatric services in programme implementing hospitals, integration of social security programme etc. upon the request from concerned division and sections. There is a strong need to expand the practice of evaluating other priority programmes to guide continuation, replication, modification and scale up.
11	Regularly produce standardised policy briefs to inform decision makers	There is increasing practice of producing policy briefs utilizing national level surveys, periodic reviews to inform decision makers. For instance, last year, NHRC has developed five policy briefs on the five strategic objectives of the Nepal Health Sector Strategic Plan. Please see below.

Table 3.27: Progress on NHSS key initiatives		
SN	**NHSS priority interventions**	**Progress status**
12	Assess cost effectiveness and efficiency of major public health interventions	Current periodic surveys like NDHS, NMICS and NHFS; and routine information systems like HMIS, provide general reflection on effectiveness of public health interventions but there is a strong need of undertaking comprehensive assessments for assessing cost effectiveness and efficiency of major public health interventions.
13	Strengthen institutional capacity of National Health Research Council and M&E wings of MoHP at different levels	Institutional capacity of NHRC has strengthened over the years. NHRC has established provincial set up in five provinces. Further enhancing its institutional capacity would lead to better regulation of health research in the country; and improved practice of feeding evidence to the MoHP for formulating evidence informed policies as envisioned by NHSS. Similarly, there is a strong need to enhance the institutional capacity of M&E wings of MoHP at different levels. M&E technical working group has been set up in each province with representatives from government entities and health development partners.
14	Align annual national review and joint annual reviews	National Annual Review and Joint Annual Review have been combined in the form of National Joint Annual Review since 2018.

3.9.2 Major initiatives

Health Management Information System - Health Management Information System (HMIS) collects service utilisation data from health facilities all over the country and has been instrumental in informing policy makers and programme managers in monitoring and decision-making processes. In line with the Public Health Service Act 2075 and the Public Health Service Regulation 2077, which define basic health service (BHS) and the package, HMIS, has been revised in 2078/79 to be able to monitor utilisation status of BHS. This revision also aims to meet data needs of different programmes and the new health sector strategy.

- Integrated Health Information Management Section, Management Division, DoHS, in collaboration with development partners (GIZ, BEK, WHO) has been working towards building interoperability among different health information systems including the programme specific info systems like that of HIV and TB programmes. This year the IHIMS focused on customisation of DHIS2 as per revised tools, development of Standards Operating Procedures (SOP) and User Access Management Guidelines, and capacity building on DHIS2 customisation and use.
- HMIS has published “Nepal Health Facts Sheet 2023” to supplement the NJAR 2023 report. The facts sheet is available at www.hims.gov.np

e-Logistics Management Information System (eLMIS) - eLMIS is a key health system strengthening intervention to improve supply chain operations and performance. The overall objective of eLMIS is to ensure that there is one supply chain management system for all health commodities inventory management and reporting on a consolidated single platform to ensure countrywide data visibility, availability, accuracy, and ownership. By digitalizing inventory management activities like Ha. Fa., Dakhila, and stock book etc. eLMIS has minimised the user's workload. Also, data safety is ensured. For real-time data and data-based decision-making for the

supply chain planning, the Management Division initiated eLMIS rollout in 2018. As of now, eLMIS has been implemented at central, provincial, health offices and local level warehouses as well as some service delivery points. Scaling-up of eLMIS continued to health facilities by utilizing identified eLMIS trainers and facilitators from GoN in close coordination with the PHD. There are a total of 3570 live sites including 2547 service delivery points, 753 local levels, 77 Health Offices, and provincial and federal stores (Table 3.28).

Table 3.28: eLMIS online sites

Health Facility Type	Number	Province Name	Number
Central Stores	9	Koshi Province	527
PHLMC Stores	7	Madhesh Province	541
NPHL/PHL	8	Bagmati Province	760
District Health Offices	77	Gandaki Province	281
LLG Stores	753	Lumbini Province	734
Hospitals	169	Karnali Province	283
HP/PHC/ Urban Health Centres /CHU/BHC/others	2547	Sudurpaschim Province	444
Total	**3570**	**National**	**3570**

- IHMIS is coordinating with PHD and development partners to roll out eLMIS at all service delivery points throughout the country. Several Local Level Governments have also allocated budgets for eLMIS rollout in their respective local levels and have requested support from IHIMS for technical assistance. This demonstrates their commitment, ownership, and utilisation of the system at the local level of government.
- As eLMIS is gradually expanding to service delivery points, the service delivery points where eLMIS is not yet implemented are sending monthly LMIS forms to local levels for monthly data entry in eLMIS system. DoHS decided to change monthly LMIS reporting system from quarterly effective from FY 2078/79 aiming to have on-time logistic data. It also allows the LLG to provide feedback to the service delivery points for addressing supply chain issues.

Monitoring of BHS - By Constitution, fee basic health service is fundamental rights of every Nepali citizen. Though local governments are mandated for delivery of BHS free of cost to the citizen, each level of government is required to monitor availability, accessibility, uitliation and qulaity of BHS at the facilities under their jurisdiction. To facilitate each level of government to monitor BHS, Curative Service Division (CSD), the focal entity overseeing the implementation of BHS, has initiated the process of developing BHS Monitoring Framework. This framework proposes to develop BHS monitoring system (BHSMS) which draws information/data from various sources like routine information systems (HMIS, eLMIS, TIMS, MSS), periodic surveys (NDHS, NHFS and others), administrative records, and field observation. The BHSMS is envisioned to be interoperable with the routine information sytems so that the annual data from various sources get auto updated once the data gets finalised. The BHSMS includes an interactive digital dashboard hosted at the MoHP website to facilitate its use by all levels of governments and their relevant entities. Currently the dashboard displays data by province and palika for 89 indicators for service utilisation and data by province for 20 indicators related to BHS availability. The dashboard also includes a standard definition for each of these indicators. The dashboard can be accessed at http://128.199.69.221:8888/.

Birth Registration Management System (BRMS) - Population Management Division, MoHP, has developed Birth Registration Management System (BRMS), a web-based information system which records the birth information from the birthing centre, generates certificate and notifies the local registrar through VERSP-MIS managed by Department of National ID and Civil Registration

(DoNIDCR). The BRMS is interoperable with Vital Event Registration System Management Information System (VERS-MIS) and Health Management Information System (HMIS). BRMS and VERS-MIS are well-integrated, that unique identification number (UIN) assigned to an individual at birth serves as common key to share data between the two systems. Furthermore, this system enhances national civil identification system, which allows linkage between CR and National ID system. The system continuously updates an individual's information on vital events throughout the person's life cycle, from birth registration to death registration.

- MoHP has recently conducted BRMS district level training in Kailali district, covering all 13 Local Levels (one sub-metropolitan city, six urban local levels and six rural local levels). A total of 176 health personnel from 64 birthing centres have been trained in the use of the BRMS and 33 have already started using the system.

Death Registration Management System (DRMS) - Management Division, Department of Health Services, MoHP, in coordination with Department of National ID and Civil Registration (DONIDCR), National Statistics Office (NSO), Provincial Health Ministry and Health Directorate, with technical support from WHO conducted training on medical certification of cause of death (MCCoD) in Biratnagar, Koshi Province including 18 major federal and provincial hospitals from 11 – 15 September 2023 as part of continuous effort to strengthen the CRVS system in Nepal. It is a web-based system which helps to record all the deaths happening in health facilities, and the cause of death. The DRMS tool has been embedded with ICD (International Classification of Diseases) 11 to assign cause of death for international comparison. Similarly, the guidelines on MCCoD have been issued in accordance with Article 64 of the Public Health Service Act 2075 and to comply to Article 38, 59 and 60 of the same.

Insurance Management Information System (IMIS)- Health Insurance Board has upgraded Open Insurance Management System (Open IMIS) which manages beneficiaries, claims and also allows the stakeholders to view reports. Open IMIS is linked with Nagarik App so the beneficiaries can see their balance and can renew their policy from Nagarik App itself. OpenIMIS handles almost 25K plus claims per day. More than 5000 Enrolment Assistants use Mobile Application to capture photo and other related data during their home visit for enrolment of families. A total of 6.8 million families have been registered in the system (https://eservice.hib.gov.np/dashboard/). Beneficiaries can renew their policy using online Payment Gateway like Connect IPS, Khalti, e-Sewa. 4452 Families have renewed their policy online. The Open IMIS now uses random sampling of claims to help process huge number of pending claims. The system was recently upgraded to use FHIR Standard API, which enables hospitals to send claim data through API for quick beneficiary verification and faster claim submission. More than 120 health Facilities are sending claims through API.

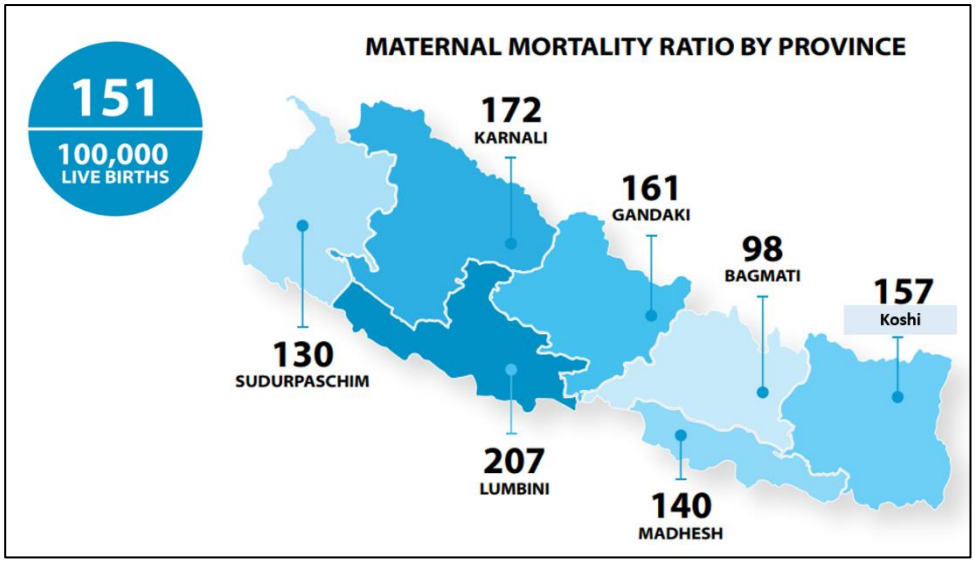
Standards and Interoperability Lab - Despite the policy landscape emphasis on interoperability of health information systems[16], health sector continues to have substandard fragmented systems that are yet to be fully functional and interoperable. Quality Standards and Regulation Division, MoHP, therefore, has initiated the process of establishing Standards and Interoperability Lab at the ministry. The lab is a safe and equipped space where government, private sector, innovators, and

[16] The **ICT Policy 2015** includes the provision on the development of appropriate ICT infrastructure at all levels of the healthcare system to support the collection, use, management, and dissemination of healthcare information. The **Digital Nepal Framework 2018** emphasises the use of interoperability and standards in the digital framework, wherein health is one of the prioritised sectors. The **eHealth Strategy 2017** of MOHP emphasises interoperability and standards as one the foundations of eHealth Strategy. It highlights that standards should be adopted and that an interoperability layer should be established to integrate various applications. The **eHealth Roadmap** of MOHP coded and geo-referenced health facility list for interoperability.

academia can work together to enable interoperability among various software. It is expected that the lab can function as centre for training and standards, development of tools and knowledge products, and research. Beyond resolving interoperability issues the lab could be instrumental in collaboration among stakeholders, promoting the formation of partnerships and facilitating the exchange of knowledge.

Maternal Mortality Study - The Population Management Division, MoHP, in collaboration with National Statistics Office - NSO (formerly Central Bureau of Statistics - CBS), Nepal Health Research Council (NHRC), HDPs(WHO, UNICEF, UNFPA, USAID, BEK, GIZ), completed a population-based maternal mortality study 2021. This study has captured all pregnancy related deaths and live births notified by the Census 2021 to determine the level of maternal mortality ratio and cause deaths. Given this is the census of all maternal deaths that took place across the country during the one-year period of the census, provides MMR at provincial level, for the first time in Nepal. The study thus provides programmatically useful information that informs investment and interventions directed toward the improvement of maternal health in Nepal. The study has revealed that MMR has declined from 239 in 2011 to 151 in 2021. By province, Bagmati reported the lowest MMR at 98 and Lumbini the highest at 207 Per 100,000 live births.

The study provides crucial data and evidence for evaluation of existing national maternal health programmes and helps to identify and address implementation gaps. It guides policymakers as well as organisations at the federal, provincial, and local levels in determining the future strategic directions for identifying and implementing tailored interventions to improve maternal health outcomes and achieve the SDG target. The study process involved orientation/training of at least one local health worker from each local level in the country to conduct verbal autopsy of pregnancy related deaths, this study is expected to further strengthen the MDSR (maternal death surveillance and response) system.



NDHS 2022 - The 2022 Nepal Demographic and Health Survey (NDHS) is the sixth survey of its kind in Nepal since 1996, implemented as part of the worldwide Demographic and Health Surveys (DHS) Programme supported by United States Agency for International Development (USAID). The Key Indicators Report of the NDHS 0222 was published in October 2022 and the detailed main report in June 2023. Though the NDHS series takes place every five years interval, data collection for the 2022 NDHS was delayed by one year due to COVID-19 pandemic. The 2022 NDHS is a key data source for monitoring of the Nepal Health Sector Strategy (NHSS) 2016–2022, Fifteenth Periodic Plan and the Sustainable Development Goal (SDG) indicators. The 2022 NDHS is crucial as it sets the baseline of the new health sector strategy 2022-2030. Recognizing that the NDHS is the largest population-based surveys with focus on health and it provides much needed data on

specific areas of interest to the planners and programme managers, the MoHP, for the first time, has also produced a summary report in Nepali language. This year (2023), the MoHP is undertaking further analysis studies on specific areas/issues as part of the follow-up to the 2022 NDHS.

Further Analysis of 2021 NFHS and 2022 NDHS

2021 NHFS: Further analysis of 2021 Nepal Health Facility Survey is in progress in the following areas:

- Changes in service availability, readiness, process of care and caregiver satisfaction of child curative service: A comparison between the 2015 and 2021 NHFS
- Changes in service availability, readiness, process of care and client satisfaction of maternal health service: A comparison between the 2015 and 2021 NHFS
- Changes in service availability, readiness, process of care and client satisfaction of family planning service: A comparison between the 2015 and 2021 NHFS

2022 NDHS: Furthe analysis of 2022 Nepal Demographic and Health Survey is in plan in the following areas:

- Trends and determinants of neonatal mortality rates in Nepal are linked with care-seeking behaviors, service readiness, and availability.
- Trend analysis of disparity in key health outcomes and service utilization by major socio-demographic characteristics (province, place of residence, wealth quintile, education, sex)
- Trends and determinants of adolescent pregnancy and the unmet need for family planning; factors associated with stagnation in modern contraception use; declining fertility rates; and increasing abortion and traditional methods.
- Do the most common forms of violence experienced by women vary according to the perpetrator (intimate partner vs. non-intimate partner)?
- Analysis of key Basic Health Service indicators: status and factors associated with basic health service utilization.
- Trend analysis of immunization coverage and factors behind increasing rate of no immunization

Policy briefs - MoHP, in collaboration with NHRC and BEK, developed 5 policy briefs based on the extensive review of literature, mid-term and rapid review of Nepal Health Sector Strategy (2015-2020), national joint annual review reports, expert consultation, and evidence gathered from discussion at the national and sub national levels. The policy briefs include the following:

  - Addressing wider determinants of health
  - Towards Universal Health Coverage: Addressing Financial Hardship and Improving Access to Healthcare in Nepal
  - Promote equitable access to quality health services
  - Enhancing efficiency and responsiveness of the health system
  - Management of Population and Migration in Nepal
  - These policy briefs are available at NHRC website (https://nhrc.gov.np/publication-category/policy/).

Ayurveda Health Management Infromation System (AHMIS) - All the government Ayurveda institutions i.e.,3 federal level hospitals, 3 provincial level hospitals, 76 district level health centres and 305 local level dispensaries have started reporting in AHMIS in DHIS2 platform. Non-public Ayurveda health facilities within Kathmandu Valley have been oriented in recording and reporting of Ayurveda services.

NHRC Research – The council conducted 33 ressearch studies during the fiscal year 2022/2023 (Table 3.29)

Table 3.29: List of the research /studies conducted by NHRC in FY 2022/23

SN	Title
1	Exploring the Enablers and Barriers to the Lymphatic Filariasis Mass Drug Administration (LF-MDA) Program at Selected Districts of Nepal
2	Population-based prevalence of selected Non-Communicable Diseases among children and adolescent in Nepal: A cross-sectional pilot study
3	Mapping of vectors and eco-bio-social determinants under varying climatic conditions in Nepal
4	Impact of Health-related Technical School Leaving Certificate (TSLC) Programs
5	Integrated Biological and Behavioral Surveillance Survey among Female Sex Workers in Pokhara Valley, Nepal: Round VI- Mix-method Study.
6	A Study on the Effectiveness of the Payment System of Social Health Security Program
7	Feasibility study on Nurse Practitioner Program in Nepal
8	Assessment of Health Status of Older Adults of Selected Districts of Nepal
9	An Economic cost analysis of Inpatient's Expenditure at NICU in Tertiary Care Centers in Nepal
10	Behavioral determinants of child marriage and adolescent pregnancy in Nepal: Qualitative study
11	Documentation of experiences of dengue outbreak 2022: An exploratory study in Kathmandu Valley, Nepal
12	Effectiveness of an educational intervention on Knowledge, Attitude and Practice regarding Pharmacovigilance among Healthcare Professionals of Nepal
13	Identifying incidence, patterns, trends and mortality of cancer cases in Nepal: Population Based Cancer Registry, Nepal
14	Clinical Manifestation of Dengue Fever Amongst Patients Admitted In Tropical Disease Hospital of Nepal
15	Factors Affecting Childhood Exposures to Urban Particulates in Nepal (FACE-UP)
16	COVID-19 vaccine post-introduction evaluation (cPIE) in selected sites of seven provinces of Nepal
17	A baseline study to assess Prevalence of Acute Malnutrition in Siraha District, Madhesh Province.
18	Investigation of cholera outbreak in Kathmandu: A case-control study
19	Epidemiology of Rabies cases reported at Sukraraaj Tropical and Infectious Disease Hospital - (STIDH)
20	Epidemiology and burden of snakebite among reported victims at Sukraraj Tropical and Infectious disease hospital (STIDH)
21	Study on Hemoglobinopathies and G6PD deficiency in Terai Districts of Nepal
22	Introduction of a clinical guideline to manage type-2 diabetes by Ayurvedic practitioners in Nepal: intervention development and feasibility study
23	Identifying cause of death from verbal autopsy in selected municipalities in Nepal.
24	Impact of Covid-19 Pandemic on Health Care Delivery system for Non-Communicable Diseases in Nepal
25	Assessment of Maternal Mortality in Nepal using Population and Housing Census 202
26	Measuring access to assistive technology in Nepal: A nationwide survey using the WHO rapid Assistive Technology Assessment (rATA) tool
27	Assessment on Feasibility and Implementation Status of Geriatric Health Service at Selected Hospitals of Nepal
28	Situational Assessment of Antibiotics Use and its Resistance in Nepal
29	Operational research on Implementation of Integrated Disease Surveillance System in Nepal

Table 3.29: List of the research /studies conducted by NHRC in FY 2022/23	
SN	**Title**
30	Psychological Impact of COVID-19 Pandemic among Cancer Patients in Kathmandu Valley: An Analysis from Population Based Cancer Registry
31	Prevalence of rheumatic musculoskeletal pain and disability in Western Nepal- a cross-sectional community-based study adopting WHO-ILAR COPCORD Stage I protocol
32	Randomized Evaluation of Covid-19 Therapy (RECOVERY) Trial
33	Factors affecting health seeking behaviors among people in Nepal-Exploratory study on institutional delivery, routine child immunization and COVID-19 vaccination

4 POPULATION MANAGEMENT

With the significant decline in mortality rates, fertility rates, and population growth rates and improvements in life expectancy[17], Nepal is seeing a gradual demographic transition over the last three decades. Currently, there is a relatively larger working-age population compared to the dependent population and implies there will be greater productive capacities going forward. While this transition presents ample opportunities to make long-term development gains over the next 25 years (till 2047 AD)[18], it could also pose challenges with regard to population management, and achieving desired health outcomes. If well managed, the transition can accelerate economic activities helping Nepal make gains from the demographic dividend. A major challenge of population management in Nepal has been rapid urbanisation and both internal and external migration. These demand active policy and action that enables the growing populations in the rural areas to benefit from planned settlements, better economic opportunities and social progress within their own contexts. And this also calls for active management of the additional demands on resources that large urban areas will have.

This section highlights the key initiatives undertaken and the achievements made in the last FY (2022/23).

4.1.1 Major activities

- Population Management Division has initiated preparatory work for conducting a survey related to infertility and its management in Nepal. A draft questionnaire has been developed in consultation with the stakeholders and experts.
- Preparatory tasks are underway for the development of Population Information Management System. Optimal use of available modern ICT ensuring interoperability with other routine information systems have been the key considerations for its development.
- Population Management Division, in coordination with the Department of National ID and Civil Registration, under Ministry of Home Affairs, has developed the Birth Registration Management System (BRMS) to be deployed at health facilities. The BRMS is being used in all basic hospitals and birthing centres in Kailali district, Sudurpaschim Province. Prior to this, all health workers in the health facilities were trained in the use of the system.
- Population Management Division has developed Death Registration Management System (DRMS) and the doctors/health workers and medical recorders working in hospitals in Koshi Province have been oriented in use of the system. The system records the cause of death of all deaths occurring in selected health facilities.
- Population Management Division completed an indicative survey for mobility mapping at entry points in Nepal-India border. Data collection has been accomplished and analysis of the data is in progress.
- Population Management Division is in the process of revising the Population Policy 2071 based on the changing population dynamics as reflected in the Census 2021.
- The GoN has endorsed the GESI Strategy developed in the federal context on 2080/05/21. Population Management Division is now in the process of developing an action plan for its effective implementation.

[17] In the last decade, Nepal's population grew by 0.93 percent annually on an average, the lowest in the last 80 years, while the average population growth rate of the previous census was 1.35 percent (Census 2021). Life expectancy of Nepal is reported at 70.9 years (male: 68.9, and female 72.7 years), which puts Nepal at 116 rank in the World Life Expectancy ranking (Source: https://www.worldlifeexpectancy.com/nepal-life-expectancy).

[18] Paper presented by Dr YB Gurung, Senior Demographer, during the National Population Conference, 2023 held in September 2023.

- Population Management Division has developed and rolled out online recording and reporting of the services provided by the SSU and OCMC. The concerned health staff have been oriented on use of the system.
- In FY 2022/23, a total of 4 OCMC and 26 SSUs have been established. Geriatric Wards are established in 25 hospitals.
- MoHP organised National Conference on Population and Development on 15 September 2023. Following this, MoHP organised a National Validation Workshop on 1 November 2023 to share and discuss the major findings and way forward gathered from Nepal's consultative ICPD (International Conference on Population and Development, 1994) National Review Process.
- A cross border mapping survey of migrants crossing the border through ground crossing points has been accomplished in co-ordination with IOM Nepal.

5 LEARNING AND WAY FORWARD

5.1 KEY LEARNING

This section presents key learning drawn from implementation of NHSS from 2015-2023. The learnings have been classified into five broad areas to support smooth implementation of the next health sector strategy:

- Efficiency and responsiveness of health system
- Wider determinants of health
- Equitable access to quality health services
- Sustainable financing and social protection in health
- Population and migration

5.1.1 Efficiency and responsiveness of health system

Legal and policy framework: There are sufficient legal and policy frameworks, except in few areas, to make the health system efficient and responsive to needs of the people. The main challenge now is to translate the legal and policy provisions and spirits into practice for benefit of the people. This requires a strong coordination mechanism for health system functions which cross over the vertical tiers of government.

Health infrastructure: Health sector has witnessed major progress in health infrastructure during implementation of NHSS in terms of the quantity, quality and geographical coverage of health facilities. There is a need to shift focus from earthquake-resistant infrastructure to the development of multi-hazard-resistant, climate-resilient, and environment friendly health infrastructure by incorporating green technology. The multi-hazard resilience perspective needs to be fully integrated into mainstream infrastructure policies. The monitoring framework for the development of basic hospitals is in place, but effective implementation is a concern. This could have a significant impact on the delivery of these hospitals. It is crucial to ensure construction quality aligns with the approved design and complies with the established monitoring framework. Continued investment in capacity enhancement is necessary to improve technical skills at both the federal and sub-national levels, targeting managerial and technical staff. It is essential to further strengthen evidence-based decision-making through strengthening of Health Infrastructure Information System (HIIS). Procurement laws and regulations are primarily designed for the construction of new infrastructure. When it comes to repair, retrofitting and rehabilitation of existing infrastructure, the provisions in procurement regulations are often found to be inadequate.

Human resource for health - Despite a large number of health professionals are registered in various professional councils, the health system continues to face challenges in ensuring adequate health workforce at the point of service delivery. A large number of sanctioned posts remain unfulfilled, adversely affecting the quality of health services. Moreover, the current national policy for expansion of the network of public health facilities even demands an increased number of human resources. Addressing this increased demand across federal, province and local level requires a robust mechanism for comprehensive projection, production, post creation, distribution and retention. Promulgation of Federal Public Service Act at the earliest will contribute towards ensuring availability of appropriate human resource skills mix across all spheres of government. Provisioning of human resources in provincial and federal hospitals through an O&M survey as soon as possible will ensure effective service delivery.

Procurement and supply chain management - Progress has been observed at each of the federal, provincial and local governments (health entities) responsible for the procurement and

supply chain management of medicines and medical supplies in terms of standardising list of basic medicines and medical supplies, with clearer standards, specifications, forecasting, procurement, storage, distribution, and transportation of health commodities to health facilities. Despite this, health sector continues to face challenges in terms of stock out of basic medicines and shortage of health supplies and equipment at the service delivery sites. The challenges also include limited organisational capacity for pharmacovigilance, quality control, limited domestic production, and limited warehouse capacity. Thus, it is important to reform the procurement and supply chain management system with increased focus on domestic production of quality medicines, diagnostics, and health products and enhancing regulatory mechanisms to ensure uninterrupted availability at the service delivery points.

The Public Health Service Act clearly provisions the prescription of medicine in a 'generic' name. However, its implementation remains poor. There is a need to develop a strong regulatory mechanism to ensure that the legal provisions are implemented effectively.

Following actions would contribute towards enhancing procurement processes

- Ensure that the TSB is regularly updated to maintain uniformity and quality standards for medicines, diagnostics, and bio-medical equipment at all healthcare levels.
- Implement regulations for use of high-tech bio-medical equipment by conducting health technology assessments to guarantee their safety, efficacy, and compliance with standards.
- Establish inventory management system for regular inventory review, forecasting, and monitoring of bio-medical and other equipment to ensure the continuous availability of appropriate and adequate equipment.
- Develop and implement repair and maintenance protocols for the repair, maintenance, and disposal of biomedical equipment to ensure their safe and effective operation.
- Establish biomedical equipment repair and maintenance workshops at federal and provincial levels to provide timely maintenance and repair services for healthcare equipment, promoting their longevity and functionality.

Availability and use of evidence in decision making - There has been increased focus on generating quality data, using the data for evidence-based planning and implementation across the three spheres of government. There are various information management systems and periodic surveys and research in place to feed into the decision-making process. But the linkage between the systems is inadequate and the availability of the quality and disaggregated data and its use remain a challenge hindering the use of evidence in decision making process. The current initiatives in the area of strengthening information management systems have remained fragmented.

Strengthening the overall process of evidence generation and data management leveraging modern technologies with a particular focus on their use would be crucial for ensuring evidence-equity based planning at three levels of government. There needs to be compatible linkage and interoperability between the systems avoiding duplication of work and enhancing efficiency in reporting. Standardisation and expansion of electronic health record system in public and private hospitals, and promotion of quality health research in priority areas, among others, need to be prioritised in the next strategy.

The existing LMIS/e-LMIS is not comprehensive enough to inform the quantification and forecasting of all medicines and equipment. So, continued scaling-up of the scope of e-LMIS and rolling out of the e-LMIS to all facilities is necessary with technical and functional support through help desk, particularly to the subnational governments.

Governance, leadership and accountability - Implementation of NHSS has led to the increased understanding and realisation that governance, leadership and accountability are keys to strengthening health system and to achieving desired health outcomes. Implementation of NHSS during the transition to federalism called for initiation of some game changing reform initiatives like establishment of Centre for Disease Control (CDC), Food and Drug Administration (FDA), National Health Accreditation Authority (NHAA) and development of Umbrella Act for academies, hospitals, councils and research centres. However, these and some other reform agendas have remained unfinished agendas of this NHSS, to be prioritised by the next health sector strategy.

Local government's institutional capacity on managing complex functions of the health systems remains a challenge. This challenge should be recognised, and their capacity be enhanced. Evidence based proven initiatives for enhancing governance, leadership and accountability among three spheres of government; institutionalisation and strengthening of citizen engagement platforms; improved public financial management would be instrumental in strengthening health system and achieving desired health outcomes.

Implementation of NHSS has further highlighted the following needs for ensuring improved governance, leadership and accountability at all levels of government:

- Functional mechanisms or operational framework to foster public private partnerships in healthcare delivery as envisioned by Public Health Service Act and Health Policy.
- Locating the health sector social audits through multi-sectoral social audit initiatives in a context where local governments work in multiple sectors.
- Promoting GESI agenda through strengthening mechanisms at the provincial and local levels ensuring that there is required disaggregated data and the agenda draws attention during policy and programme formulation.
- Effective implementation of gender-responsive budget guideline and LNOB Budget Marker Guideline at federal, provincial and local levels.
- Effective implementation of the PFM strategic framework and internal control system for overall improvement of financial management.
- Through capacity building, there is a potential for Health Facility Operation and Management Committees to play more effective role in health governance and in improving service delivery.
- As online planning, budgeting and accounting trends are increasing, all three levels of government need robust technical infrastructure capacities and training on operating software for a more effective health sector governance.

Sector Wide Approach: The SWAp has been regarded as an innovative approach to channel aid to better address national priorities and promote harmonisation in programme implementation. The next health sector strategy needs to continue and strengthen SWAp by improving the existing coordination mechanism with the developmental partners. The technical assistance from federal government to subnational governments and from the development partners needs to be tailored to address the needs of the provincial and local level. A comprehensive TA framework agreed by the government and the development partners could be instrumental in improving the efficiency and effectiveness of health system delivery.

Emergency preparedness and response - During NHSS implementation phase Nepal demonstrated its capability in effectively responding to mega disasters like Nepal Earthquake 2015 and COVID-19 pandemic. However, the process has also shown the areas to improve regarding preparedness and response to health emergencies in future. Nepal needs to focus on further strengthening of institutional capacity of federal, provincial and local governments for more effective and timely preparedness and response of public health emergencies.

There are designated emergency response units/point personnel designated across different government ministries, institutions and offices. However, there has been little planning for coordinated action among them. There is a strong need for improved coordination among stakeholders including MoHP, Ministry of Home Affairs, Security Forces, Agriculture and Livestock Development & Forests and Environment.

5.1.2 Wider determinants of health

Implementation of NHSS, particularly responding to Nepal Earthquake 2015 and COVID-19 pandemic, has led to improved understanding among government, private sector, development partners and other stakeholders on wider determinants of health and the need of multisectoral collaborative efforts for addressing them. This realisation is also reflected in the annual workplan and budgets of GoN, Public Health Service Act 2018 and Public Health Service Regulation 2020, which propel the immediate need for multi-sectoral collaboration for addressing wider determinants of health. Now there is a strong need to strengthen collaborative efforts to address wider determinants of health based on the existing foundations and learnings. For this there might be a need to reform the institutional and policy arrangements governing wider determinants of health.

5.1.3 Equitable access to quality health services

Despite an impressive progress in increasing access and utilisation of health services over the years health sector continues to face challenges in ensuring quality of service and in reducing the equity gaps among different population strata, in terms of geography, provinces, wealth quintile and education. For example, despite appreciable progress at the national level, there is a remarkable gap in MMR and NMR across seven provinces in Nepal. There is a need to accelerate interventions tailored to the local needs to achieve universal coverage of basic health services and meet the Sustainable Development Goal (SDG) targets.

A wide range of standards and guidelines and programme-specific protocols provide the overall framework to govern the quality of care. The quality improvement initiatives are still fragmented and need a coherent strategic framework. The routine reporting of the information and data obtained from periodic surveys is insufficient for robust monitoring of quality of healthcare. Addressing these gaps demands development and effective implementation of an overarching regulatory framework provisioned by the Public Health Service Act 2018.

All health services included in the basic health service package as defined in the Public Health Service Regulation are not available in all public health facilities designated for delivery of free basic health services. The federal and provincial hospitals mandated for delivery of free BHS are providing the services with cost to the clients. In line with the national policy (National Health Policy and Nepal Health Sector Strategic Plan 2022-2030) to expand BHS to all public health facilities, a mechanism needs to be developed for ensuring that all public health facilities designated for BHS delivery provide free BHS to the citizens leaving no one behind.

5.1.4 Sustainable financing and social protection in health

There has been low level of public financing in the health sector resulting into high level of out-of-pocket spending for the utilisation of health services. Nepal's graduation from Least Developed Country status in 2026 should be carefully watched and coping strategies should be developed if there is any impact on health sector donor funding. Securing adequate funds for the health sector is going to be more challenging in this context. Continuation of regular tracking of the expenditure in the health sector through robust budget analysis and national health accounts would be instrumental in mobilisation of public investment in health.

Implementation of NHSS has further highlighted the following needs for sustainable financing and social protection in health:

- Strengthened coordination among MoHP, National Natural Resources and Fiscal Commission (NNRFC), MoF, MoFAGA, OAG to ensure financial accountability and regular health expenditure reporting.
- Continued investments in building institutional and human resource capacities to operate online systems for budgeting, financial management and reporting.
- SuTRA has emerged as an effective tool for local governments in planning, budgeting and accounting. However, it still does not have effective linkages with provincial and federal government systems to allow for a joined-up planning and budgeting process.
- Budget allocations for health should be increased at all levels using domestic financing
- Low budget absorption capacity at all three levels of government continues to create challenge in effective planning as unfinished plans roll over to next year.
- Effective implementation of National Health Financing Strategy.
- Effective harmonisation of social security schemes like BHS, health insurance, free health services.
- Effective implementation of International Development Cooperation Policy, 2019 ensuring INGO programs are more closely aligned to NHSS (2023-30).
- Organization and Management survey of Insurance Board should be endorsed to open up permanent recruitment of staff in the board. Investment should be done to establish a permanent organisational structure (organogram) for the health insurance board to deliver effective management of the health insurance programme. Concerted efforts and bold reforms are required to improve effectiveness and efficiency of the health insurance scheme.
- Work with stakeholders to create a robust system to identify poor people in order to provide them health insurance security.
- Greater reliance on public investment and other funding sources will be essential to accelerate progress towards achieving universal health coverage.
- Strengthen collaboration and partnerships with development partners

5.1.5 Population and migration

Population management is cross-cutting multisectoral issue for ensuring overall development of a country. Population Management Division under the MoHP is the institutional home for addressing population management issues in Nepal. The current organogram, institutional capacity and the priorities set in AWPB reveal that the institutional capacity of Population Management Division needs to be enhanced for addressing larger population management issues in more effective and sustainable way.

Population management initiatives in the coming years need to focus on effective utilisation of the demographic dividend for development and managing migration and urbanisation.

5.2 WAY FORWARD

In the context when Nepal is in the process to graduate from the least developed country (LDC) category, the next health sector strategic plan should serve as a strategic instrument to address major unfinished health agendas towards ensuring the Constitutional fundamental rights of the citizen to free basic health services and achieving UHC. The new strategic plan should prioritise strengthening of the Sector Wide Approach (SWAp) and harmonise the technical assistance to better serve the needs of the federal, provincial and local governments. The legal and policy instruments developed during the NHSS period have provided a sound foundation to establish a strong financing mechanism and strengthen the partnerships with improved predictability of the

support. The operational level learning drawn from implementation of NHSS (2015-2023) should be fully capitalised to improve efficiency and effectiveness of health system.

The learning drawn from implementation of NHSS (2015-2023) in five areas in above section are in alignment with the priorities set by the next sectoral strategic plan – Nepal Health Sector Strategic Plan, 2023-2030.

Nepal Health Sector Strategic Plan (NHS-SP), 2022-2030 has five major strategic objectives with the overall goal of improving health condition of every citizen. The NHS-SP has set 14 outcomes and 29 outputs to achieve the goal. The five strategic objectives and 29 outcomes of the NHS-SP (2023-2030) are listed below.

1. Enhance efficiency and responsiveness of health system
   - Skill-mixed human resources for health produced and mobilised
   - Evidence - and equity-based planning
   - Safe and people-friendly health infrastructure
   - Uninterrupted availability of quality medicines and supplies
   - Improved governance, leadership and accountability
   - Effective management of public health emergencies
2. Address wider determinants of health
   - Reduce adverse effects of wider determinants on health
   - Citizens responsible for their own, family and community health
3. Promote sustainable financing and social protection in health
   - Improved public investment in the health sector
   - Improved social protection in health
4. Promote equitable access to quality health services
   - Improved quality of health services
   - Reduced inequality in health services
5. Manage population and migration
   - Demographic dividend maximised and demographic transition managed in development process
   - Systematic migration and planned settlement practiced

The NHS-SP 2023-30 is the first national sectoral strategic plan developed after implementation of federalism. As in the previous sector strategy, the NHS-SP has also been developed jointly by the GoN and the HDPs. Major health sector development partners are listed in table 5.1. Besides these there are several other development partners contributing to the sector program. The HDPs have expressed their commitment to support the GoN in effective implementation of the NHS-SP. Table 5.2 summarises the key initiatives that the HDPs would support in 2023/24, the first fiscal year of NHS-SP 2023-30 implementation. For the FY 2023/24, the HDPs' have committed ~USD 179 million for FY 2023/24, of which 61% (~USD 109 million) is financial assistance and 39% (~USD 70 million) is technical assistance. Of the total financial assistance of USD 109 million, 41% (~USD 44.7 million) is through fiscal aid and the rest 59% (~USD 58.9 million) through loans (JCM, 07 November 2023).

Table 5.1: Major Health Sector Development Partners

Bilateral	Multilateral
▪ FCDO* ▪ USAID* ▪ KFW*/GDC/GIZ ▪ JICA ▪ KOICA	▪ Multilateral Financing Agencies: GFATM, Gavi* ▪ European Union ▪ UN Agencies: UNICEF*, UNFPA*, WHO*, FAO, IOM, UNAIDS ▪ Multilateral Development Banks: WB, ADB
*JFA signatories	

As a part of support to implementation of the next sectoral strategy, USAID through its Health Direct Financing Project has committed USD 25 million to strengthen the capacity of MoHP, MoSD Karnali province and selected local governments to effect health policy reform and implement and monitor evidence-based health interventions. Global Fund has committed USD 59,630,753 for HIV, tuberculosis (TB), malaria and building resilient and sustainable systems for health (RSSH) for the period from August 2024 to July 2027.

The Government of Nepal and the World Bank have signed the Nepal Quality Health Systems Program for Results (USD103.84 million) to facilitate the implementation of the Nepal Health Sector Strategic Plan until FY2028.

Table 5.2: HDP support areas for implementation of NHS-SP in 2023/24

SN	NHS-SP Strategic Objectives	HDP Support Areas
1	Enhance efficiency and responsiveness of health system	Procurement and supply chain management, financial management, local health governance, pharmaceuticals & drug quality, interoperable & integrated health information systems, surveillance, IHR, emergency response, reconstruction, CRVS collaboration, eHealth
2	Address wider determinants of health	Multi-sectoral nutrition, climate resilient health system, water and sanitation governance, clean air, safe water, WASH in health care facilities including healthcare waste management, climate sensitive disease surveillance, chemical safety, alcohol and SAFER initiative, addressing harmful social practices, entomological survey, adolescent health
3	Promote sustainable financing and social protection in health	National health accounts and health financing strategy, costing of BHS package, FP sustainability roadmap, health insurance reform, improving effectiveness and equity in healthcare financing
4	Promote equitable access to quality health services	Promote MSS, quality of care, midwifery program, OCMC, EmONC, PEN package, GESI responsive planning and budgeting, HIV testing & treatment, adolescent reproductive health, maternal & child health in urban & rural areas
5	Manage population and migration	National Population Policy and Population Perspective Plan, strengthen CRVS, web-based platform for socio-demographic data, pre-departure and post-departure health check-ups, strengthen point of entries, MMR survey

Source: JCM, 07 November 2023

ANNEXES

ANNEX 1: NHSS RESULTS FRAMEWORK

Results Chain				
Code	Output	Code	Outcome	Goal
OP1a1	Improved staff availability at all levels with focus on rural retention and enrollment	OC1	Rebuilt and strengthened health systems: HRH management, Infrastructure, Procurement and Supply chain management	Improved health status of all people through accountable and equitable health delivery system
OP1a2	Improved human resource education and competencies			
OP1b1	Health infrastructure developed as per plan and standards			
OP1b2	Damaged health facilities are rebuilt			
OP1b3	Improved management of health infrastructure			
OP1c1	Improved procurement system			
OP1c2	Improved supply chain management			
OP2.1	Health services delivered as per standards and protocols	OC2	Improved quality of care at point-of-delivery	
OP2.2	Quality assurance system strengthened			
OP2.3	Improved infection prevention and health care waste management			
OP3.1	Improved access to health services, especially for unreached population	OC3	Equitable utilization of health care services	
OP3.2	Health service networks including referral system strengthened			
OP4.1	Strategic planning and institutional capacity enhanced at all levels	OC4	Strengthened decentralized planning and budgeting	
OP5.1	Ministry of Health and Population (MoHP) structure is responsive to health sector needs	OC5	Improved sector management and governance	
OP5.2	Improved governance of private sector			
OP5.3	Development cooperation and aid effectiveness in the health sector improved			
OP5.4	Multi-sectoral coordination mechanisms strengthened			
OP5.5	Improved public financial management within MoHP			
OP6.1	Health financing system strengthened	OC6	Improved sustainability of health sector financing	
OP6.2	Social health protection mechanisms strengthened			
OP7.1	Healthy behaviors and practices promoted	OC7	Improved healthy lifestyles and environment	
OP8.1	Improved preparedness for public health emergencies	OC8	Strengthened management of public health emergencies	
OP8.2	Strengthened response to public health emergencies			
OP9.1	Integrated information management approach practiced	OC9	Improved availability and use of evidence in decision-making processes at all levels	
OP9.2	Survey, research and studies conducted in priority areas; and results used			
OP9.3	Improved health sector reviews with functional linkage to planning process			

ANNEX 2: MAPPING BETWEEN NEPALI FISCAL YEARS AND THE CORRESPONDING GREGORIAN YEARS

Nepali Fiscal Year	Corresponding Gregorian Year	Nepali Fiscal Year	Corresponding Gregorian Year
2060/61	2003/04	2073/74	2016/17
2061/63	2004/05	2074/75	2017/18
2062/63	2005/06	2075/76	2018/19
2063/64	2006/07	2076/77	2019/20
2064/65	2007/08	2077/78	2020/21
2065/66	2008/09	2078/79	2021/22
2066/67	2009/10	2079/80	2022/23
2067/68	2010/11	2080/81	2023/24
2068/69	2011/12	2081/82	2024/25
2069/70	2012/13	2082/83	2025/26
2070/71	2013/14	2083/84	2026/27
2071/72	2014/15	2084/85	2027/28
2072/73	2015/16	2085/86	2028/29

ANNEX 3: NATIONAL JOINT ANNUAL REVIEW 2023: AGENDA (DRAFT)

Objectives of the review

- Jointly review the annual progress of health sector strategy and plan
- Identify the strategic priority areas based on progress, and challenges
- Share the strategic actions to be included in the next year's Annual Work Plan and Budget (AWPB)

Date: 23 and 24 November 2023 (7 and 8 Mangsir 2080); Thursday and Friday

Venue: Aloft Kathmandu, Thamel

Agenda - Draft

Day	Activity
Day I: 7 Mangsir 2080 23 November 2023 Thursday	Registration Welcome and Objectives Inauguration by Hon. Minister, MoHP
	Health sector progress - MoHP
	Health sector implementation progress – DoHS, DoAM, DDA, DUDBC
	Moderated discussion
	Provincial reflection – 7 provinces
	Moderated discussion
Day II: 8 Mangsir 2080 24 November 2023 Friday	Registration
	Reflection from Pre-NJAR field visit
	Panel Discussion: Reflection on SDG localization: Progress, Key issues, and Way forward
	Reflections: ▪ Health Insurance Board (HIB) ▪ Federal hospitals ▪ Academia ▪ Councils ▪ Association of Private Medical College ▪ APHIN (Association of Private Health Institutions Nepal) ▪ Consumers' forum
	Moderated discussion
	Reflection from health development partners: HDPs and AIN
	Moderated discussion
	Closing Key actions from the review Closing session

Supported by:

Disclaimer:- This material has been funded by UKaid from the UK Government; however the views expressed do not necessarily reflect the UK government's official policies.