

Progress of the Health and Population Sector, 2018/19

NATIONAL JOINT ANNUAL REVIEW REPORT – 2019 (2076 BS)



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Abbreviations

AA	Anaesthetic Assistant
AMR	Anti-Microbial Resistance
ANC	Antenatal Care
ANM	Auxiliary Nurse Midwife
APP	Annual Procurement Plan
ART	Anti-Retroviral Treatment
AWPB	Annual Work Planning and Budget
BCG	Bacilli Calmette- Guerin (Vaccine)
BHCS	Basic Health Care Services
BMI	Body Mass Index
BOR	Bid Opening Report
BPKIHS	B.P. Koirala Institute of Health Sciences
BS	Bikram Sambat
CAPP	Consolidated Annual Procurement Plan
CAPP-MC	Consolidated Annual Procurement Plan Monitoring Committee
CBS	Central Bureau of Statistics
CEONC	Comprehensive Emergency Obstetric and Neonatal Care
CHD	Child Health Division
CHE	Current Health Expenditure
CHU	Community Health Unit
CMS	Contract Management System
CMU	Contract Management Unit
CPR	Contraceptive Prevalence Rate
CS	Caesarean Section
CSD	Curative Services Division
CTEVT	Council for Technical Education and Vocational Training
DC	Delivery Care
DFID	Department for International Development
DG	Director General
DHO	District Health Office
DLI	Disbursement Linked Indicators
DoA	Department of Ayurveda
DoHS	Department of Health Services
DPHO	District Public Health Office
DPT-HepB-Hib	Diphtheria Pertussis Tetanus - Hepatitis B and Hemophilus influenza type b (Vaccine)
DRR	Disaster Risk Reduction
DUDBC	Department of Urban Development and Building Construction
EDCD	Epidemiology and Disease Control Division
EML	Essential Medicine List
EDP	External Development Partners
e-GP	Electronic Government Procurement
e-LMIS	Electronic Logistics Management Information System
F-CAPP	Federal Consolidated Annual Procurement Plan
FCHV	Female Community Health Volunteer
FED	Free Essential Drugs
FHD	Family Health Division
FMIS	Financial Management Information System
FMR	Financial Management Report

FP	Family Planning
FY	Financial Year
GBV	Gender Based Violence
GDP	Gross Domestic Product
GESI	Gender Equality and Social Inclusion
GoN	Government of Nepal
HEDMU	Health Emergency and Disaster Management Unit
HEOC	Health Emergency Operation Centre
HFOMC	Health Facility Operation and Management Committee
HFS	Health Financing Strategy
HIIS	Health Infrastructure Information System
HMIS	Health Management Information System
HP	Health Post
HRH	Human Resources for Health
HURIC	Human Resource Information Centre
ICB	International Competitive Bidding
ICT	Information and Communication Technology
IEC	Information, Education and Communication
IHDP	Integrated Health Infrastructure Development Project
IHME	Institute for Health Metrics and Evaluation
IMAM	Integrated Management of Acute Malnutrition
IMNCI	Integrated Management of Newborn and Childhood Illness
IMS	Inventory Management System
IoM	Institute of Medicine
IP	Implementation Plan
JAR	Joint Annual Review
JCM	Joint Consultative Meetings
JICA	Japan International Corporation Agency
KAHS	Karnali Academy of Health Science
KfW	German Development Bank
KOICA	Korean International Cooperation Agency
LCD	Leprosy Control Division
LG	Local Government
LMBIS	Line Ministry Budgetary Information System
LMD	Logistics Management Division
LMIS	Logistics Management Information System
LNOB	Leaving No-One Behind
MD	Doctor of medicine
MDGP	Master's Degree in General Practice
M&E	Monitoring and Evaluation
mhGAP	Mental Health Gap Action Programme
MMR	Maternal Mortality Ratio
MoF	Ministry of Finance
MoFAGA	Ministry of Federal Affairs and General Administration
MoHP	Ministry of Health and Population
MPP	Master Procurement Plan
MR	Measles and Rubella (Vaccine)
MS	Master of Surgery
MTR	Mid-Term Review
NA	Not Available
NAMS	National Academy of Medical Sciences

NCB	National Competitive Bidding
NCD	Non-Communicable Diseases
NDHS	Nepal Demographic and Health Survey
NHIDS	National Health Infrastructure Development Standards
NHFS	Nepal Health Facility Survey
NHP	National Health Policy, 2019
NHRC	Nepal Health Research Council
NHSS	Nepal Health Sector Strategy (2015-2020)
NHSSP	Nepal Health Sector Support Programme
NHSPSF	Nepal Health Sector Procurement Strategic Framework
NHTC	National Health Training Centre
NLSS	Nepal Living Standards Survey
NMC	Nepal Medical Council
NMICS	Nepal Multiple Indicator Cluster Survey
NNC	Nepal Nursing Council
NNMSS	Nepal National Micronutrient Status Survey
NPR	Nepalese Rupees
NSSD	Nursing and Social Security Division
O&M	Organisation and Management
OAG	Office of the Auditor General
OC	Outcome
OCMC	One Stop Crisis Management Centres
OOPE	Out of Pocket Expenditure
OP	Output
OPMCM	Office of the Prime Minister and Council of Ministers
ORS	Oral Rehydration Solution
OT	Operation Theatre
PAS	Procurement Audit System
PBO	Public Bid Opening
PCAS	Procurement Compliance Audit System
PCL	Proficiency Certificate Level
PEN	Package of Essential Non-Communicable Diseases
PFM	Public Financial Management
PG	Provincial Government
PHCC	Primary Health Care Centre
PHCRD	Primary Health Care Revitalisation Division
PHD	Provincial Health Directorate
PHS	Public Health Service
PHLMC	Provincial Health Logistics Management Centre
PIP	Procurement Improvement Plan
PNC	Postnatal Care
PPA	Public Procurement Authority
PPFM	Procurement and Public Financial Management
PPICD	Policy, Planning and International Cooperation Division
PPMO	Public Procurement Monitoring Office
PPR	Public Procurement Regulations
PRA	Procurement Risk Analysis
PSCM	Procurement and Supply Chain Management
PTSD	Post-Traumatic Stress Disorder
QAP	Quality Assurance Plan
QSRD	Quality, Standards and Regulation Division

RDQA	Routine Data Quality Assessment
RF	Results Framework
RMP	Risk Mitigation Plan
RRT	Rapid Response Team
RTA	Road Traffic Accident
SBA	Skilled Birth Attendant
SBD	Standard Bid Document
SC	Steering Committee
SCM	Supply Chain Management
SD	Standard Deviation
SDG	Sustainable Development Goals
SHI	Social Health Insurance
SNG	Sub-National Governments
SOP	Standard Operating Procedures
SSU	Social Service Units
SWAp	Sector-Wide Approach
TABUCS	Transaction Accounting and Budget Control System
TB	Tuberculosis
ToR	Terms of Reference
ToT	Training of Trainers
TSB	Technical Specification Bank
TWG	Technical Working Group
U5	Under five years old
UHC	Universal Health Coverage
USAID	United States Agency for International Development
USD	United States Dollar
VfM	Value for Money
WHO	World Health Organization
YLL	Years Life Lost

Executive Summary

The Ministry of Health and Population (MoHP) developed the Nepal Health Sector Strategy (NHSS) in 2015 to guide the health sector for the next five years. The vision of the NHSS is “All Nepali citizens have productive and quality lives with highest level of physical, mental, social, and emotional health” and the mission is to “Ensure citizen’s fundamental rights to stay healthy by utilising available resources optimally and through strategic cooperation between service providers, service users, and other stakeholders.” It foresees nine outcomes and 26 outputs. They are measured through 29 outcome level indicators with 56 corresponding output level indicators. This report summarises the major progresses in the health sector in the fiscal year (FY) 2018/19, key highlights of the activities in FY 2019/20 against the NHSS outcomes along with existing challenges and the ways forward.

The NHSS was developed while the country was in a unitary system of governance. However, as the country has imparted on federalism, multiple changes have been adapted in the governance system which have implications for the implementation of the NHSS. The constitution has defined three levels of governance and their mandates with local levels mandated to deliver the basic health services. The management of health services in the provinces is the responsibility of provincial governments. The development of standards and policies, management of tertiary level hospitals, addressing outbreaks and disasters, and international cooperation remain with the federal government. The federal government will also play a supporting role in enhancing the capacity of local and provincial governments.

Major factors that have impact on the NHSS at the national level, in the current context, are:

- Three levels of governance: federal, provincial, and local
- Functional Assignments which define the responsibilities of the federal, provincial, and local levels
- Distribution of financial resources across federal, provincial and local governments
- Adjustment and posting of the staff to their respective working area
- Various activities were needed to align with the new governance structure by the MoHP.

Major Achievements

MoHP carried out various activities in the FY 2018/19. The majority of the activities were continuity of the previously carried out programmes as per the NHSS (2016-2021) while new activities and adaptation were introduced in the annual work plan and budget process to comply as per the federalism. As a result, various programmes and activities have been rearranged across federal, provincial and local governments.

The major achievements of the progress in 2018/19 are summarised below:

- National Health Policy 2076 was endorsed by the Cabinet. It has 25 policy statements; each having multiple strategies.
 - The approach paper of 15th periodic plan (with chapters on health and nutrition and population and migration) has been approved.
-

- Public Health Service Act and Safe Motherhood and Reproductive Health Act have been enacted and are in action:
 - Regulations related to Safe Motherhood and Reproductive Health and Health Insurance have already been endorsed. The regulation for Public Health Services Act has been drafted and has been shared with other relevant ministries for their inputs.
 - The organisational structure in the health sector and health service delivery system has been revised for federal, provincial and local levels and staff adjustments have taken place. At the province level, the Ministry of Social Development, Health Directorate, Logistics Management Office (PLMO) and Health Training Centres have been established.
 - Health Offices have been established in each of 77 districts under the Health Directorate and previously existing District (Public) Health Offices have been dissolved.
 - The Basic Health Care Package has been defined, costed and is in the process of approval.
 - The Minimum Service Standards (MSS) for various levels of Hospitals and Health Posts are prepared and approved. Orientation to the federal and provincial hospitals has been carried out for its roll out.
 - For the establishment of the health facilities as per the national policy, standards of the health facilities including cost sharing criteria have been prepared and approved.
 - The Health Sector Gender Equality and Social Inclusion (GESI) Strategy was prepared and submitted for the cabinet approval.
 - After complementing the mapping of existing health facilities, grant amount was transferred to respective local levels for the construction of health facilities as per approved standards in 1200 wards having no health facilities in 2018/19 while budget is provisioned for 1390 wards in 2019/20.
 - An interaction program with provinces was carried out by the MoHP to discuss on progress and challenges in the health sector in September 2018.
 - The Gender Responsive Budgeting Guidelines in Health Sector, National Disability Inclusive Health Service Guidelines, One-Stop Crisis Management Centre (OCMC) Operational Guidelines, have been developed/ revised and approved.
 - A guideline for 'Health Sector M&E in Federal Context' has been developed.
 - Pre-bid and post-bid information systems including electronic Technical Specification Bank (TSB), electronic Logistics Management Information System (e-LMIS), Grievance Handling and Redressal Mechanism (GHRM) and e-CAPP modules have been prepared, updated and being implemented.
 - As per the agreement in 2018 NAR, the concept of transforming PIP into an umbrella strategic document on procurement and supply chain management is being progressed by drafting the Nepal Health Sector Public Procurement Strategic Framework (NHSPPSF). Similarly, Nepal Health Sector Financial Management Strategic Framework has been drafted to guide the financial management procedures.
 - Two Standard Operating Procedures (SOPs) for procurement and electronic Government Procurement (e-GP) have been endorsed and disseminated and its implementation continues across three levels of governments.
 - Standardization of procurement process through new standard bid documents (SBD) and e-GP-II implementation in the bidding process is now enhanced and implemented. This
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Electronic Bidding System executed as electronic government procurement (e-GP) in FY 2018/19 is increased at the highest level 98% of CAPP value comparing 83% in FY 2017/18.

- Audit queries against total audit amount has been reduced from 7.01% (in FY 2016/17) to 4.77% (in 2017/18).
- Trachoma elimination achieved and certified by the World Health Organisation (WHO).
- Nepal has been able to control rubella and congenital rubella syndrome (CRS) by achieving more than 95% reduction in rubella incidence between 2008 and 2017 with international standard surveillance which was certified by SEA Regional commission.

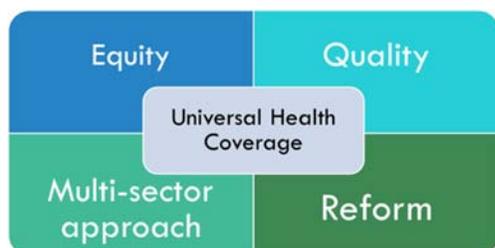
Key highlights of the achievements in 2019/20 (until November) are summarised below:

- Nepal has been declared "Open Defecation Free" country.
 - The programme implementation guideline for FY 2019/20 (for the programme of provincial and local level) was prepared and made public through the MoHP website.
 - Approximately 2.3 million people have enrolled in health insurance scheme which is being implemented in 49 districts and 471 Local levels.
 - The market analysis of pharmaceutical products has been designed and survey completed as of October 2019.
 - Federal level CAPP prepared and endorsed in FY 2018/19 and the implementation progress is being monitored by PFM Committee of MoHP and CAPP Monitoring Committee of DoHS. Online preparation of the federal CAPP (e-CAPP) has been initiated from 2018/19 and e-CAPP for 2019/20 captures 97% of the total procurement budget of the MoHP.
 - Internal Control Guidelines were updated and are incorporated into the TABUCS platform.
 - The process of updating FMIP has been started. It is now updated as financial management strategic framework. Timely submission of Financial Management Report (FMR) in every trimester. The DLIs are included in the FMR templates.
 - Independent review of internal audit has been completed. The findings of the report has been presented in the PFM committee meeting.
 - The new chart of account and new OAG formats are updated in TABUCS.
 - Provincial review of health sector has been conducted in five provinces while Karnali Province and Province 2 plan to hold reviews in the month of Mangsir 2076.
 - MoHP secured funding from the Global Environment Facility to implement the project entitled Building Resilience of Health Systems in Asian Least Developed Countries to Climate Change.
 - The number of districts with OCMCs has reached to fifty-four.
 - Total of thirty-five Social Service Units (SSUs) have been established in referral hospitals.
 - Geriatric health services are available in twelve referral hospitals.
 - Health Emergency Operations Centres (HEOC) have been established in three provinces functional; and its establishment in remaining provinces is in pipeline.
 - Annual report on population for the FY 2018/19 has been produced highlighting major progresses in the sub-sector
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1. Introduction

1.1 Background

The Nepal Health Sector Strategy (NHSS) was developed in 2015 to outline the key priorities that should guide the health sector over a five year period. NHSS aims to progressively expand both health packages and services, while at the same time ensuring the quality of care being delivered, making services affordable, and covering the population in need – in particular the vulnerable and poorest in Nepal society.



The focus of the NHSS is on universal health coverage and have four strategic areas: equitable access, quality health services, health systems reform, and a multi-sectoral approach. These four areas are delivered through nine outcomes and 28 outputs. In accordance with the NHSS, the Ministry of Health and Population (MoHP) has developed an Implementation Plan which provides a broad list of interventions to be implemented in the five-year period.

A Joint Annual Review (JAR) has been held every year since 2004 in accordance to the Nepal Health Sector Strategy: An Agenda for Reform (2004). The JAR is jointly organised by the MoHP and the External Development Partners (EDPs) to review the annual progress and harmonise support in the health and population sector. At the JAR meeting, the achievements of the last fiscal year are reviewed and major action points are identified for the coming fiscal year. During the JAR, support from external development partners are also discussed. An “aide memoire”, is agreed at the end of the JAR which summarises strategic action points to be prioritised in the next year. The JAR and National Annual Review, which used to happen separately in the past, were organised as a single combined event in 2018. FY 2018/19¹ is the third implementation year of the NHSS (2015-2020) for which National Joint Annual Review (NJAR) is being organized as a combined event during 4-6 December, 2019.

This report focuses on overall progress in the health sector and is intended to contribute to informed discussion and decision making in the annual National Joint Annual Review. The report is organised in terms of the outcomes, outputs and interventions as defined in the NHSS and its Implementation Plan (IP) and measures progress towards achieving the stated goals and objectives. Major achievements made during FY 2018/19, highlights of FY 2019/20, existing challenges, and the ways forward are captured in this report. The report also presents progress made against NHSS indicators as defined in the results framework. The progress on the policy and programme for the FY 2018/19 is presented in Annex 1 and the progress in Disbursement Linked Indicators is in Annex 2.

Nepal is experiencing a transition towards federalism. Various laws have been enacted impacting on the health sector. Restructuring is still ongoing to comply with the spirit of the Constitution. The following overarching actions have been taken towards the implementation of federalism:

¹ Mapping between Nepali Calendar Years and Gregorian Years for last five years is provided in annex 11.

- Organizational restructuring of the health sector and its overall governance is now complete.
- The adjustment of staff to better fit the new organisational structure is almost complete, although there are some challenges that remain in the posting of some staff which MoHP is addressing.
- Four different types of grants and revenue transfer mechanisms have been used to distribute financial resources to federal, provincial and local levels as per the constitution. Provinces have channelled equalisation and conditional grants to local levels.
- Provincial Annual Reviews of the health sector for FY 2018/19 have been conducted in five provinces while Province 2 and Karnali Provinces have planned to carry out their reviews in the month of Mangshir, 2076.

Nepal has embraced international commitments towards meeting the Sustainable Development Goals (SDG) and Universal Health Coverage (UHC) and is continuing to expedite activities. Under the leadership of the National Planning Commission, the cost implications of the SDGs and an accompanying financing strategy has been developed in order to meet Nepal's SDG targets.

1.2 Status of Aide Memoire

The National Joint Annual Review (NJAR) of FY 2017/18 was held in 17-19 December 2018 in Kathmandu. The third day of the NJAR was a business meeting between Ministry of Health and Population and External Development Partners. The meeting concluded with the development of an Aide Memoire which identified certain strategic areas to be prioritised in the next FY and was jointly signed by the Secretary of MoHP and the Chairperson of EDPs Forum. Following table shows the progress made towards on the action points of the Aide Memoire.

Table 1: Progress on the Action Points of the 2018 Aide Memoire

	Agreed Actions	Current Status
Annual Review	Organise three days Joint Annual Review (JAR): two days for progress review, followed by one day discussion to agree on priorities and business meeting to draft the aide -memoire. Next JAR on third week of November 2019.	MoHP and EDPs have jointly agreed to hold the JAR in the first week of December 2019 (two days for progress review, followed by one day discussion to agree on priorities and business meeting).
Digitalize recording and reporting for health information management in federal context.	All 753 local governments, 7 provincial governments and federal government report on HMIS and start the scale up of electronic Logistics Management Information System (eLMIS)	<ul style="list-style-type: none"> • 100% of local governments have reported on HMIS information • eLMIS has been implemented in 57 public entities
	At least one health facility in each province introduces electronic health record system (EHR)	EHR has been initiated in: <ul style="list-style-type: none"> • Sudur Paschim Province: Doti and Bayalpata Hospitals • Karnali Province: Salyan and Dailekh hospitals • Province 5: Gulmi, Rapti Academy • Gandaki Province: Dhaulagiri and Baglung hospitals • Province 3: Nuwakot hospital, Dolakha Charikot hospital,

		<ul style="list-style-type: none"> Province 2: Gajendra Narayan Singh Hospital Province 1: Mechi, Ilam, Pachthar, Dhankuta, Bhojpur, Taplejun hospitals Federal Hospitals: Maternity Hospital, Patan Hospital, Police Hospital, Army Hospital
	Ensure budget in next Annual Workplan and Budget (AWPB)	<ul style="list-style-type: none"> MoHP and DoHS have allocated budget in AWPB 2019/20 for EHR
Public Financial Management	Improve public financial management	<ul style="list-style-type: none"> MoHP has revised and endorsed Internal Control Guidelines on the basis of FCGO's "Internal Control System Directives, 2019" MoHP has drafted Public Financial Management Strategic Framework (PFMSF). TABUCS system has been updated in the context of Government Finance Statistics Manual (GFSM) 2014. Chart of Activities have been incorporated in the TABUCS Platform
	Quarterly release of hospital grant to be linked with HMIS and TABUCS reporting	MoHP is in internal consultation to link the hospital grants with overall performance status of the hospitals including progress in MSS
	Ministerial Development Action Committee (MDAC) to review the hospital performance based on HMIS and TABUCS reporting and the grant provided	In FY 2018/19, three MDAC were held, the latest one on 28th November 2019. Progress on hospitals' performance and the OAG performance audit were discussed in the MDAC.
	Update financial management improvement plan (FMIP) and Procurement Improvement Plan (PIP) in the federal context	MoHP has developed a draft Nepal Health Sector Public Procurement Strategic Framework (NHSPFSF) and Nepal Health Sector Financial Management Strategic Framework (NHSFMSF).
	Endorsement of Basic Health Care Services (BHCS) package by end of April 2019	MoHP has processed for the endorsement of package by incorporating it into the public health services regulations.
	Basic Health Care Services (BHCS) package costed by May 2019	Costing of the package has been conducted.
Mid-year Review	Conduct joint mid-year review by March 2019	Completed in May 2019
Human Resources for Health	Endorse the HRH strategy by July 2019	HRH Strategy was drafted in 2018 and is being revised to comply with the Federal context. Expert group meeting are also being conducted. A wider consultation is planned to further refine the draft strategy.
	Endorse the HRH registry (database template) by July 2019.	Draft of the HRH registry database template has been prepared.
	Update HRH database in HRH strategy and share its status in the next health sector annual review	Data from all professional councils are being collected and summary data are included in this report.
Develop and implement strategic framework for health sector procurement and supply	Conduct an assessment of procurement and supply chain management of drugs and health commodities in federal context and present the findings in next JAR	<ul style="list-style-type: none"> Draft report has been prepared and shared for the feedback. Preliminary findings of the assessment are included in this report.

Health Facility Survey	Commission Health Facility Survey - Finalize tools and identify the implementing agency by end of 2019	<ul style="list-style-type: none"> Health Facility Survey Process has been initiated including the formation of Technical Advisory Group and Technical Working Group Consultation with respective divisions and centres is in progress to define the scope and finalize the tools The process for the selection of the local implementation partner is in progress. Local partner contracted by December 2019
Health Financing	Develop health financing strategy integrating different social protection schemes, capturing sub-national investment in health	<ul style="list-style-type: none"> Landscape analysis conducted and roundtable discussions held. Policy notes are expected to be produced by February 2020.
Minimum Service Standards	All central hospitals implement and report on Minimum Service Standards (MSS)	<ul style="list-style-type: none"> MSS developed for all levels of hospitals and health posts and endorsed; MSS for specialty hospitals is being developed MSS implementation guideline prepared and implementation is in progress Resources persons to implement MSS trained for primary, secondary and tertiary hospitals
Quality of drugs	Develop plan to establish drug quality testing laboratory	BSL3 biological lab was planned to establish on the 3 rd floor but was dropped due to the DUDBC report which raised concern on the inadequacy of the space.
	Develop and implement drug quality monitoring tools to drug inspectors	Developed drug quality monitoring tools: "Handbook for Drug Inspectors"
Ayurveda and Alternative Medicine	Develop health promotion package considering Ayurveda principles.	Health promotion activities conducted at different levels linking with yoga/ayurveda e.g. Nagarik Aarogya Program/Swasthya Jiwan Program at district level and healthy lifestyle and yoga at schools

2. NHSS Result Framework

2.1 Background

The NHSS Results Framework defines major health sector indicators and targets in accordance with the NHSS goal and outcomes. The Results Framework has 10 goal level indicators, 29 outcome level indicators and 56 output level indicators. Progress against each indicator of the NHSS Results Framework is available on the MoHP website (www.nhssrf.mohp.gov.np). This section of the report highlights progress in the 10 goal level indicators and selected outcome level and output level indicators.

2.2 Overview of the Progress

Improvement in overall health outcomes has been observed over last two decades (Table 2.1). The maternal mortality ratio (MMR) (pregnancy-related mortality ratio) of 539 per 100,000 live births in 1996 has declined to 239 in 2016² and recent 2019 estimates indicate a level of 186 per 100,000 live births. Under-five mortality rate has declined from 118 per 1,000 live births in 1996 to 39 per 1,000 live births in 2016. Similarly, neonatal mortality rate has declined from 50 per 1,000 live births in 1996 to 21 per 1,000 live births in 2016. Overall, the nutritional status of children (stunting) has improved. The percentage of children under five years who are stunted (% below -2SD³) has declined from 41% in 2011 to 36% in 2016.

Table 2.1: Progress in major health indicators

Indicator	Year				
	1996	2001	2006	2011	2016
Maternal Mortality Ratio (per 100,000 live birth) (NHSS RF ⁴ G1)	539	NA	281	NA	259
Under-five child mortality rate (per 1,000 live births) (NHSS RF G2)	118	91	61	54	39
Neonatal mortality rate (per 1,000 live births) (NHSS RF G3)	50	39	33	33	21
Children stunted (%) (NHSS RF G5)	48	51	49	41	36
Fully immunized children (%) (NHSS RF OC3.2)	43	66	83	87	78
Institutional delivery (%) (NHSS RF OC3.3)	8	9	18	35	57
Demand satisfied for family planning (%) (NHSS RF OC 3.4)	47	59	66	64	69

*MMR has been measured using pregnancy related deaths except in 2016 NA- not available

Source: Data for 1996 from Nepal Family Health Survey (NFHS), 2001-2016 NDHS

² The NDHS measures maternal mortality every ten years. NFHS 1996 and NDHS 2006 measured only pregnancy-related maternal deaths per 100,000 live births for the seven-year period before the survey whereas NDHS 2016 also estimated the maternal mortality ratio (239 per 100,000 live births). Figures in the table are of pregnancy related deaths.

³ Standard Deviation

⁴ Results Framework

There has been a large improvement in the proportion of women delivering at a health facility, increasing from 8% in 1996 to 57% in 2016. The percentage of demand satisfied for family planning among currently married women has increased from 64% in 2011 to 69% in 2016. The percentage of children aged 12-23 months who had received all eight basic vaccinations had increased from 47% in 1996 to 87% in 2011 but this has decreased to 78% in 2016. Although there has generally been progress across many of the indicators, inequalities persist by geographic location and socio-economic groups.

The UHC service coverage index for Nepal was estimated to be 52% in 2010 and has increased to 59% in 2019. In 2019, 10.7% of people spent more than 10% of their household's total expenditure on health care and access to essential medicines is 72%. Table 2.2 shows progress against the ten NHSS goal level indicators with achievements in 2019 against the 2020 targets.

Table 2.2: Progress against the NHSS Results Framework goal level indicators

Code	Indicators	Baseline			Achievement		2020
		Data	Year	Source	2019	Source	Target
G1	Maternal mortality ratio (per 100,000 live births)	190	2013	WHO	186	Estimates 2017 (WHO, 2019)	125
G2	Under five mortality rate (per 1,000 live births)	38	2014	NMICS ⁵	39	NDHS 2016	28
G3	Neonatal mortality rate (per 1,000 live births)	23	2014	NMICS	21	NDHS 2016	17.5
G4	Total fertility rate (births per 1,000 women aged 15–19 years)	2.3	2014	NMICS	2.3	NDHS 2016	2.1
G5	% of children under-5 years who are stunted	37.4	2014	NMICS	35.8	NDHS 2016	31
G6	% of women aged 15-49 years with body mass index less than 18.5	18.2	2011	NMICS	17.3	NDHS 2016	12
G7	Lives lost due to road traffic accidents per 100,000 population	34	2013	Nepal Police	9.5	Nepal Police, 2075/76	17
G8	Suicide rate per 100,000 population	16.5	2014	Nepal Police	19	Nepal Police, 2019	14.5
G9	Disability adjusted life years lost due to communicable, maternal and neonatal, non-communicable diseases, and injuries	8,319,695	2013	BoD, IHME ⁶	9,015,320	Nepal Burden of Disease, 2017	6,738,953
G10	Incidence of impoverishment due to out-of-pocket expenditure in health	NA	2011	NLSS ⁷	NA		Reduce by 20%

Road Traffic Accidents (RTA)

Road traffic accidents (RTA) are the leading killer of children and young adults worldwide and more than half of global traffic deaths are among pedestrians, cyclists and motorcyclists⁸. With

⁵ Nepal Multiple Indicator Cluster Survey

⁶ Institute for Health Metrics and Evaluation

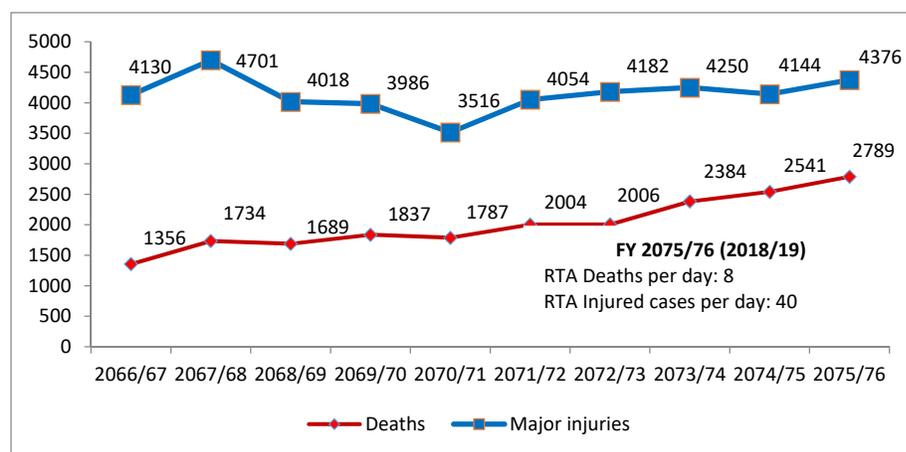
⁷ Nepal Living Standards Survey, Central Bureau of Statistics

⁸ World Health Organisation, Global Status Report on Road Safety. 2018

the increase in urbanization, the expansion of the road network and the rapid rise in the number of vehicles, road traffic accidents in Nepal increasing.

In Nepal road accidents with human injuries are reported to Nepal Police. An analysis of RTA cases reported to Nepal Police over the last 10 years shows that the number of RTA deaths has doubled from 1,356 in 2066/67 to 2,789 in 2075/76 (Figure 2.1). This data implies that an estimated eight people die and 40 people get injured from RTA every day in Nepal and the RTA mortality rate is 9.5 per 100,000 population (Table 2.3)⁹.

Figure 2.1: Trend of RTA Deaths and Injuries in Nepal



Reducing RTA needs multi-sectoral engagement and the MoHP is collaborating with the Nepal Police and the Road Department in order to increase coordination. Currently there is one National Trauma Centre in Kathmandu and MoHP plans to establish at least one trauma centre near the major highway of each Province.

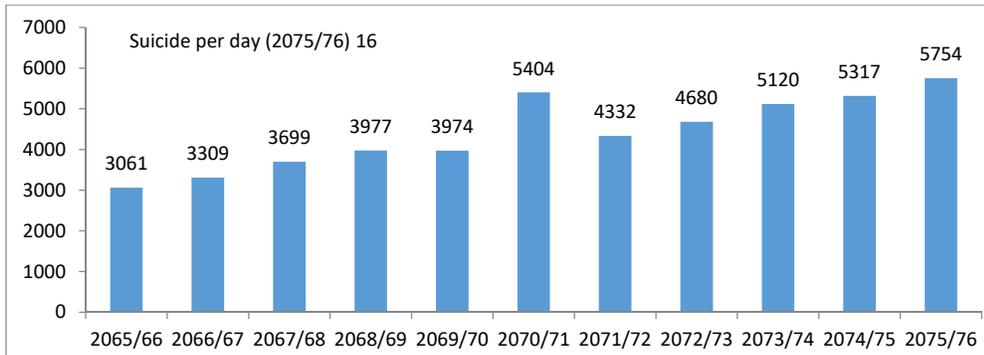
Suicide

Suicide is a growing public health concern both globally and nationally and is often linked with mental health disorders, conflicts and life crisis situations. According to data from the Nepal Police, suicide almost increased by two folds in the last decade reaching a total of 5,754 suicide cases in 2018/19 (Figure 2.2). This data indicates that 16 people commit suicide every day and the suicide mortality rate is 19 per 100,000 population. Globally, the suicide is the second leading cause of death among the 15-29 year old age group¹⁰.

⁹ World Health Organisation, Global Status Report on Road Safety (2018) has estimated RTI mortality ratio per 1,000 to be 15.9.

¹⁰ <https://www.who.int/news-room/fact-sheets/detail/suicide>

Figure 2.2: Trend in Suicide Related Deaths



Suicides in Nepal follow a similar pattern with forty percent of the suicides occurring in the 19-35 year old age group. The second highest proportion is 36-50 year age group (Figure 2.3).

Figure 2.3: Suicide Rate by Age group, 2075/76 (2018/19)

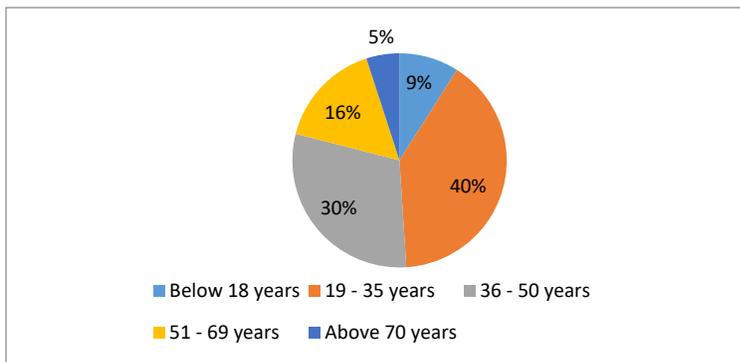


Table 2.3 show progress against NHSS outcome level indicators and 4 of the 10 indicators are on-track or have been achieved. Three indicators do not have data for this reporting year and the OC 4.1 indicator is no longer relevant in the federal context. There are a number of indicators that seem relevant in the federal context and are presented below in Table 2.4.

Table 2.3: Progress against NHSS Results Framework Selected Outcome Level Indicators

Code	Indicators	Baseline			Achievement		2020/21
		Data	Year	Source	2018/19	Source	Target
OC 1.4	% of health facilities with no stock out of tracer drugs	70	2013/14	LMIS	1.5	Survey Report ¹¹	95
OC 2.1	% of health facilities meeting minimum standards of quality of care at point of delivery	0.7	2015	NHFS	--	Information not available	90
OC 3.1	% of children fully immunized	70	2015/16	HMIS	68	HMIS 2018/19	>90
OC 3.3	% of institutional delivery	55	2015/16	HMIS	61	HMIS 2018/19	70
OC 4.1	% of MoHP's [district] budget disbursed as block grant	na	2015	Budget analysis	39.6% budget to SNG	Budget Analysis 2017/18	5% increment
OC 5.1	Budget absorption rate (% expenditure of budget)	75.1	2013/14	FMR	80.4	Budget Analysis 2018/19	95
OC 6.1	Government health expenditure as percentage of GDP	1.4	2013/14	Budget analysis	1.9	Budget Analysis 2018/19	2
OC 7.1	Prevalence of diarrheal diseases among children under five years (%)	12 (422)	2014 (2015/16)	NMICS (HMIS)	na (385)	Population based data not available. (HMIS)	10
OC 8.1	Case fatality rate per 1000 reported cases due to public health emergencies	7.0	2013	Disaster Surveillance System (DSS)	na	DSS 2018/19	na
OC 9.2	Children below one year whose births are registered (%)	32.8	2014	BMICS	56	CRVS/MoFAGA	41

Table 2.4: NHSS RF indicators that need reconsideration in the federal context

Code	Indicator
OC4.1	% of MoHP's district budget disbursed as block grant
OC4.2	Proportion of district development fund (DDF) allocated for health
OP4.1.1	Number of districts (DHO & DPHO) submitting DDC approved annual plan to DoHS on specified time by development region
OP4.1.3	% of flexible budget provided to districts (DPHO/DHO) in total district programme budget
OP5.4.1	% of districts with functional District Health Coordination Committee
OP6.1.3	% of districts receiving budget based on identified needs and output criteria
OP8.1.1	Number of districts having health emergency response plan
OP9.1.2	Number of districts with functional integrated disease surveillance system

Progress on Tracer Indicators by Programme

Table 2.5 presents progress on tracer indicators from different programmes across three years and by the seven provinces using HMIS data.

¹¹ Preliminary findings of the survey on factors contributing to the stock out of the essential medicines in government facilities in Nepal in 2019 which captured data from 275 health facilities out of 21 districts of seven provinces.

Table 2.5: Tracer indicators for different programmes, 2016-2019 and achievement by province

Programme Indicators	National level			FY 2075/76 (2018/19) by Province							National Target	
	2073/74 (2016/17)	2074/75 (2017/18)	2075/76 (2018/19)	1	2	3	Gandaki	5	Karnali	Sudur Paschim	2020	2030
Number of health facilities												
Public hospitals	123	125	125	18	13	33	15	20	12	14		
PHCCs	200	198	198	40	32	43	24	30	13	16		
HPs	3808	3808	3808	648	745	640	491	570	336	378		
Non-public facilities	1715	1822	2122	138	175	1402	107	180	73	47		
Total	5846	5953	6253	844	965	2118	637	800	434	455		
Reporting status by type of facilities (%)												
Public facilities	96.8	95	98.68	99.5	99.9	95.2	96.87	100	100	100	100	100
Public hospitals	93	96	89	100	97	68	91	99	100	99	100	100
PHCCs	98	98	99.2	100	100	97	98.9	100	100	100	100	100
HPs	100	98	99.5	99.5	100	98.7	98.6	100	100	100	100	100
Non-public facilities	47	49	36.59	51	29	31.98	69.65	35.82	91	57	100	100
FCHVs	90	72	74.2	79.7	85.7	50.4	82.9	81.2	87	84.8	100	100
Immunization status (%)												
BCG coverage	91	92	90.9	86.8	107.2	81.1	71.8	98	101.5	84.4		
DPT-HepB-Hib3 coverage	86	82	86.4	83	105.3	71.4	74.1	90.3	99.3	82.2		
MR2 coverage (12-23 months)	57	66	72.8	75.3	70.6	60.1	76.7	84.3	78	74.6		
Fully Immunized children*	73	70	67.9	71.2	71.4	54.4	61.2	74.2	79.2	71.3	90	95
Dropout rate DPT-Hep B-Hib 1 vs 3 coverage	4.7	7.4	4.3	2.9	7.9	3.2	2	4	2.5	2.7	0	0
Pregnant women who received TD2 and TD2+	64	73	64.3	59.2	83.4	48	51.6	72.5	69.2	63		
Nutrition status (%)												
Children aged 0-11 months registered for growth monitoring	85	84	84.4	78.3	77.6	69.1	92.4	100	117.2	86	100	100
Underweight children among new GM visits (0-11m)	3.5	3.6	2.9	1.7	4.2	2.1	0.9	3	4.7	3.9		
Children aged 12-23 months registered for growth monitoring	54	56	56.7	48.5	58.7	44.1	69.4	63.6	79.3	57.8	100	100
Underweight children among new GM visits (12-23m)	5.7	5.7	4.5	2.9	5.6	1.8	1.5	5.4	8.5	7.2		
Pregnant women who received 180 tablets of Iron	44	45	50.6	38.9	56.5	29.7	62.2	60.7	61	68.1		
Postpartum mothers who received vitamin A supplements	72	66	64.5	57.1	91.2	41.2	46	65.4	97.8	67.7		
CB-IMNCI status												
Incidence of pneumonia among children U5 years (per 1000)	66	54	82.7	116.3	65.3	55	57.6	76.4	158.4	110		
% of children U5 years with Pneumonia treated with antibiotics	156	165	136.1	128	203	111	145.3	127.3	120.1	113.6		
Incidence of diarrhea per 1,000 under five years children	400	385	375.2	350.7	347.2	240.4	268	404.3	682.9	624.7		

Programme Indicators	National level			FY 2075/76 (2018/19) by Province							National Target	
	2073/74 (2016/17)	2074/75 (2017/18)	2075/76 (2018/19)	1	2	3	Gandaki	5	Karnali	Sudur Paschim	2020	2030
Number of health facilities												
% of children under 5 with diarrhea treated with ORS and zinc	92	95	95.5	89.5	102.3	92.6	97.3	94.4	99	93.9	100	100
Safe motherhood (%)												
Pregnant women who attended first ANC visit (any time)	102	103	110.2	113.7	117.8	105.7	108.2	110.2	127.1	89.8		
Pregnant women who attended four ANC visits as per protocol*	53	50	56.2	61.4	41.4	50.8	70.4	64.5	61.8	57.9	70	90
Institutional deliveries *	55	54	63.2	62	52.7	61.5	47.8	78.8	73.2	71	70	90
Deliveries conducted by skilled birth attendant*	52	52	59.6	61	50.5	60.6	47	73.3	59.4	61.4	70	90
Mothers who had three PNC check-ups as per protocol*	19	16	16.4	8.7	15.2	13.5	13.1	19.3	24.1	31.4	50	90
Family planning												
CPR-unadjusted*	43.6	40.6	40.9	41.9	48.8	33.7	35.4	44.2	37.1	39.5	56	60
CPR (Adjusted)	n/a	40.0	38.9	40.0	45.7	32.0	33.8	42.8	35.1	38.1		
Female Community Health Volunteers (FCHV)												
Number of FCHVs	49101	48172	50166	8990	7536	9004	5709	8795	4072	6060		
% of mothers' group meeting held	86	98	95.2	92	94.8	94.7	93.2	99.1	94.2	97.7	100	100
Malaria												
% of plasmodia falciparum (PF) among Malaria Positive case	13.1	7.1	5.4	26.3	16.7	30.8	17.2	4.6	0.42	3.1		
Tuberculosis												
Case notification rate (all forms of TB)/100,000 pop.	111	109	102.9	94.8	95.1	113.2	92.2	117.6	84.3	106.1		
Treatment success rate	91	87	85.7	87.2	81	84.8	94.1	89.1	91.6	78.9		
Leprosy												
New case detection rate (NCDR) per 100,000 population	11	11	10.9	8.6	23.7	4.5	2.5	13.8	4.4	7.6		
HIV/AIDS and STI												
Number of new positive cases	1781	2013	2360	183	226	1065	196	417	37	236		
Curative services												
% of population utilizing outpatient (OPD) services	72	73.6	78	75.8	58	84.7	106	80.6	91.9	72.1		
Average length of stay at hospital	3	4	3.7	3.1	1.5	4.1	3.5	5.2	2.9	2.5		

Note: *NHSS RF and/or SDG indicators

Immunization: There is a declining trend in full immunization coverage nationally from 73% in 2073/74 (2016/17) to 68% in 2074/75 (2017/18). Coverage was lowest in Province 3 (55%) and highest in Karnali Province (80%). BCG coverage is at 91% at the national level with highest coverage (100%) in Karnali Province and the lowest coverage (72%) in Gandaki province. The coverage of DPT-HepB-Hib3 has improved to 86.4% at the national level with highest rates in Karnali province at 99.3% and lowest in Gandaki province at 72%. The dropout rate has decreased to 4.3% at the national level with highest dropout rate in Province 2 (7.9%).

Nutrition: The number of children ages 0-11 months being registered for growth monitoring has stabilised around 85% and was highest in Karnali province at 117.2%¹² and lowest in Province 3 at 69%. Under-weight children (12-23 months) among new growth monitoring visits has fallen to 2.9% but is still high in Karnali Province (4.7%). Only half of pregnant women are receiving 180 iron tablets has increased (50.6%) with highest levels in Sudur Paschim Province at 68% and the lowest rate reported in Province 3 at 29.7%.

CB-IMNCI: Karnali Province reported the highest incidence of pneumonia among children under five, which is substantially higher than the incidence reported by Province 3 which had the lowest incidence among all provinces. The highest percentage of children under five with diarrhoea treated with oral rehydration solution and zinc was found to be in Province 2 at 102.3% while the lowest rate was in Province 1 at 90%.

Safe motherhood: The percentage of pregnant women who attended four antenatal care (ANC) visits as per protocol has increased at the national level from 50% to 56%. Similarly, institutional deliveries has increased from 45% to 63%. Four ANC was lowest in Province 2 (41%) and institutional delivery lowest in Gandaki Province (48%). It was highest in Sudur Paschim Province at 31.4% and lowest in Province 1 at 8.7%. At the national level the target is to reach 50% coverage by 2020 and 90% coverage by 2030.

Family planning and FCHVs: The contraceptive prevalence rate (CPR) has decreased from 43% to 41% at the national level over the past three years. It was highest in Province 2 at 49% and lowest in Gandaki Province at 34%. The number of FCHVs have increased in recent years and the proportion of FCHVs holding mothers groups is 95%.

Malaria, Tuberculosis, Leprosy, HIV/AIDs: The percentage of PF among malaria positive cases has declined (at 5.4%) at the national level while highest was in Province 3 at 41%. The new case detection rate of leprosy per 100,000 populations has decreased marginally at the national level (11%) while it was highest in Province 2 (24%). The detection of new HIV positive case has increased over the past 2 years with the highest number found in Province 3.

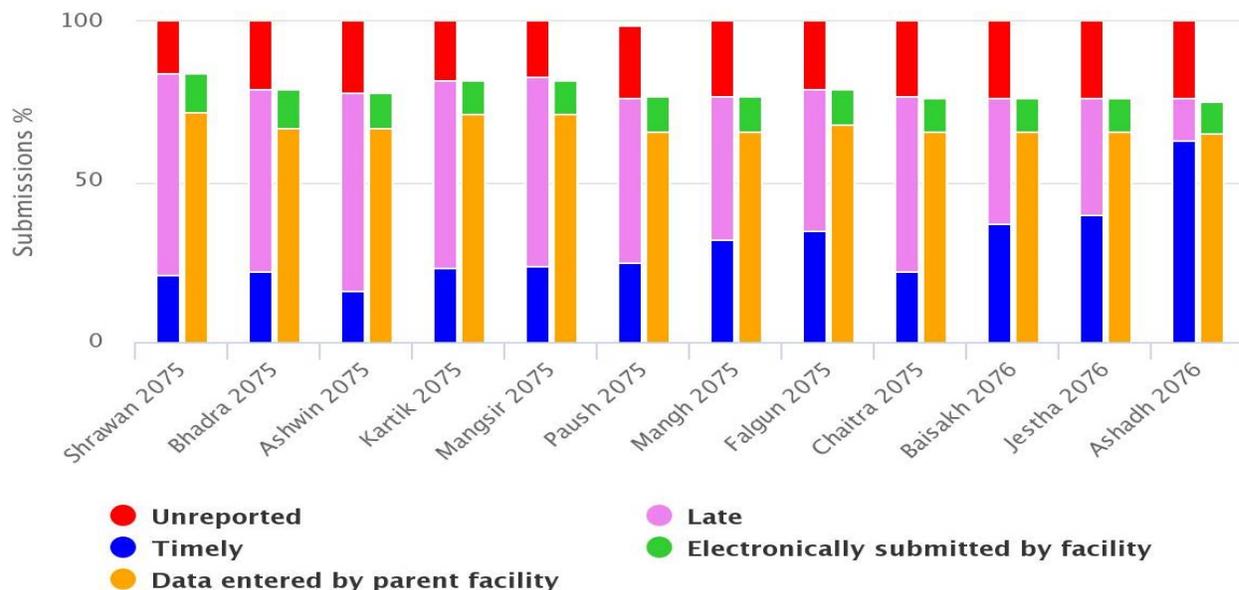
HMIS reporting status: In general more public health facilities are reporting to HMIS. Reporting from non-public facilities remains low.

Health facilities should enter monthly service statistics in the national HMIS database by the 15th day of the following month. Figure 2.4 shows that reporting is lowest in Ashwin 2075 (Sept/Oct, 2017) (16%) and highest in Ashadh 2076 (Jun/Jul, 2019) (63%). The percentage of health facilities reporting late was higher in the earlier months of the fiscal year. About 11 percent of the health facilities sent HMIS data

¹² Percentages larger than one hundred is the result of estimated target population (denominator) being smaller than the number of cases (numerator)

electronically while 68% facilities reported through parent organization, the local level or the (provincial) health office. Up to 21% of health facilities did not report to HMIS in 2018/19.

Figure 2.4: Monthly HMIS Reporting Status, 2018/19



Highcharts.com

2.3 NHSS Mid-Term Review

Context

The Mid-Term Review (MTR) of the NHSS was carried out in 2018/19 by a group of independent consultants under the guidance of the Technical Working Group (TWG) formed by the Ministry. The review assessed the relevance, efficiency, effectiveness of NHSS in relation to health sector priorities using the following tools: Critical Pathway Analysis (CPA); Political Economy Analysis (PEA) at the Provincial and Local levels; a Critical Capacity Analysis (CCA) and a Social and Environmental Impact Assessment (SEIA).

Major Findings

Major findings are organised according to the NHSS outcomes and are summarised below.

Outcomes	Progress	Gaps and Priorities
1. Rebuild and Strengthen Health Systems: Infrastructure, Human Resources for Health, Procurement, & Supply Chain Management	Nepal Health Infrastructure Development Standards (developed); Human resources for health strategic roadmap (being prepared); and Standard bidding documents for health sector procurement (drafted)	Institutional structure and functions of in federal context to be further clarified; Levels of absenteeism of health care providers to be addressed; Delays in procurement to be addressed
2. Improved Quality of Care at point of delivery	National Public Health Act and Safe Motherhood and Reproductive Health Rights Act (prepared); Health Institution Quality Assurance Authority Act (prepared); National action plan for Anti-microbial resistance and the Drug Policy 2074 (drafted)	Roles between quality governance structures and various autonomous entities to be clarified; Practice of analysing routine data to measure quality of care to be institutionalized; Reporting linkages between different levels of government structures to be strengthened

Outcomes	Progress	Gaps and Priorities
3. Equitable Distribution and Utilisation of Health Services	Health care utilization among the poorest quintile increased (e.g. c-section rate); Access to health facilities improved (e.g. time to reach a facility for institutional deliveries reduced; Basic healthcare package (drafted); National Strategy on Reaching the Unreached (endorsed); Remote Area Guidelines for IMNCI (endorsed); Ten Year Action Plan on Disability Prevention and rehabilitation 2073-2083 (endorsed)	Legal framework for the basic health service package to be approved; Service provision in remote areas to be expanded; Alignment between health insurance and free health care program to be strengthened; Neglected health problems (e.g. disability, mental health services, adolescent sexual reproductive health) to be highlighted; A strategy for health equity based on the local context to be strengthened
4. Strengthened Decentralized Planning and Budgeting	Capacity on planning and budgeting functions (enhanced); Budget and planning guidelines (developed), Budget planning as per Local government operation act (implemented); Planning and budgeting based on the federal structure (practiced)	Planning and budgeting practice as per new institutional structure to be reviewed and updated; Conditional grants need to cover the priority programmatic needs; Evidence based planning and budgeting in all three levels of government to be strengthened
5. Sector Management and Governance	Many health sector guidelines (developed); Roles of Provinces and Local Levels being further defined and clarified through practice and communications	Accountability of Local levels to province to be clarified and strengthened; Motivation of health care providers to be maintained, Enabling all facilities to provide basic health care services; Model legislature/regulatory framework for Province & Local level to be developed and practiced; Private sector regulatory framework to be institutionalized; One Health Strategy (among MoHP, Agriculture and Livestock Development & Forests and Environment) to be formalized and strengthened
6. Improved Sustainability of Healthcare Financing	Government health expenditure (increased); Per capita health spending (increased); Health insurance program (expanded)	Expediting expenditure on health to achieve universal access to primary care services; Strategies to reduce out-of-pocket expenditure to be strengthened; Health financing strategy (to be developed), Health insurance program to be strengthened, with focus to poor and to improve annual renewal.
7. Improved healthy lifestyle and environment	PEN protocol (endorsed and piloted); Mental health policy (revised); Health National Adaptation Plan (H-NAP) on climate change (endorsed)	Multi-Sectoral coordination and collaboration to be strengthened; Multi-Sectoral Action Plan for the Prevention and Control of Non-Communicable Diseases to be developed and implemented; Mental health issues to be prioritized by all levels; Services provision on non-communicable diseases to be expanded; Social mobilization and behaviour change communication to improve health lifestyle to be strengthened
8. Strengthened Management of Public Health Emergencies	National protocol and operational guidelines for emergency situation (developed); Partnership with non-government sector and sectorial agencies for emergency management (established); Implementation of NAPA framework for climate change induced disaster (developed)	Guidelines development and allocation of resources for health emergencies to be prioritized; Institutionalization of progress made; Capacity building and mobilization of human resources to address impact of health emergencies

Outcomes	Progress	Gaps and Priorities
9. Improved Availability and Use of Evidence in Decision Making Processes at All Levels	National e-health strategy (developed); DHIS 2 platform for HMIS reporting (updated and functional); Unified coding system and web-based health facility registry (developed); Grievance management system (established); Multiple analytical studies (e.g. NHA-2018, NHFS-2015, NMSS-2016, NDHS-2016 and Steps survey for NCDs) conducted; A guideline and tools for health sector review at all government levels (developed).	e-health initiative at all levels to be standardized, developed and institutionalized; Central data repository to be operationalized; Effective implementation of the guidelines and tools at all levels of government to be promoted.

Key recommendations of the MTR

- A legislative/regulatory framework covering accountabilities of all governments need to be strengthened and greater focus put on dissemination and awareness raising of these frameworks; roles and responsibilities across all levels of government.
- Multi-sectoral coordination among line ministries should to be strengthened and multi-sectoral platforms for lower tiers of government need to be established.
- To ensure equitable distribution of funding, resource-based formulas need to be developed.
- Continuous increases in annual government health expenditure are needed to ensure an adequate flow of funds to health services delivered at all levels of government.
- Expansion of services to deliver equitable services, capacity building of providers for quality of care and ensuring proper recording, reporting and use of data for programmatic use should be further strengthened.
- Improved availability and use of health sector data is needed for all levels. Tailored planning tools with process support are needed to promote bottom up approaches and evidence-based planning and budgeting.
- Further training and capacity development is needed to make budgeting and management systems effective.
- MoHP could consider appropriate models to optimise resource use and ensure specialist services reach all levels.
- MoHP should plan next health sector strategy in a federal context and the federal strategy should serve as the umbrella one for provincial strategic plan and the development should be driven from the local to provincial to federal level.

2.4 Regular Programme Reviews

The MoHP used to organize National Annual Reviews and JAR as two separate events. In the past two years these events have been combined as a National Joint Annual Review (NJAR). The key objectives of the NJAR have been:

- Jointly review the annual progress of Nepal Health Sector Strategy (2015/16 – 2020/2021) and ensure all stakeholders develop a shared understanding of progress in the sector;
- Identify the strategic priority areas that need to be addressed to strengthen health system in the changing context;
- Agree on the strategic actions to be included in the next year's Annual Work Plan and Budget (AWPB).

2.5 Equity Analysis of Key Health Indicators

The neonatal mortality rate (NMR) declined from 33 deaths per 1,000 live births to 21 deaths and the under-5 mortality rate declined from 58 per 1000 live births to 39 deaths from 2011 to 2016 with large provincial variations. Province 4 has the lowest rates both for NMR and under-5 mortality rate at 15 and 27 per 1000 LB respectively, while Province 7 has the highest rates of 41 and 69 deaths per 1000 LB respectively. Province 7 fares well in other health status of children including nutrition status, diarrheal and fever prevalence, and health service utilisation compares to national level, and thus it is important to identify reasons for high mortality in this Province.

Women from Provinces 2 and 6 had lowest timely antenatal first visit, four antenatal visits, which is the current protocol, and institutional delivery among all seven provinces. Coverage and compliance to 90 days Iron Folic acid also is lowest in Province 2 while prevalence of anaemia among married women of reproductive age is highest in Province 2.

While improvement in service utilization was observed during the last few years, HMIS data from 2017/18 shows a decline in service use (e.g. ANC 4 and institutional delivery) especially in some Provinces. It is not yet clear whether the decline is due to declining functionality of service sites or due to incomplete reporting.

Of the total 31,020 estimated people living with HIV in Nepal about 53% (16,428 persons) received ART from 74 ART sites in 59 districts in 2017/18. Of the 330,460 people tested for HIV at 175 sites; 2,101 were tested positive. It is estimated that approximate 8% of people living with HIV are co-infected with TB. Fifty four percent of newly diagnosed TB patients were tested for HIV, as per the 2018 TB report. At the time of TB diagnosis 9,634 persons knew their HIV status (positive). This has increased from 6,307 in 2016/17. The number of TB patients under treatment with ART is 214 in 2017/18 which was 227 in 2015/16.

Equity gap between the 10 high performing districts and the 10 low performing districts

This section analyses the average equity gap across three indicators (contraceptive prevalence rate; % of institutional delivery; and % of children with pneumonia treated with antibiotics)¹³ from 2016/17 to 2018/19) using HMIS data. The green (ten high performing districts) and yellow colours (ten low performing districts) used in the tables and figures reflect the values related to performance with green reflecting good performance. .

The difference between the high and low performing districts has been declining over the past 3 years for CPR and the treatment with antibiotics of U5 children with pneumonia but in the past year has increased for institutional delivery. At the national level, the CPR has marginally from 40% in 2017/18 to 40.9% in 2018/19. The CPR in the high performing districts reflects the national trend. CPR in the poor performing districts has more or less stabilised over the past 3 years. The proportion of women giving birth in a health facility has increased nationally from 54.6% in 2016/17 to 63.2% in 2018/19. Institutional delivery in the top ten performing districts and in the 10 poorest performing districts has also increased.

¹³ Contraceptive prevalence rate; % of institutional delivery; and % of children with pneumonia treated with antibiotics are the DLI indicators.

However, the gap between the average of the best performing districts and the poor performing districts has increased.

Table 2.6: Equity Gap between the 10 high performing and the 10 low performing districts

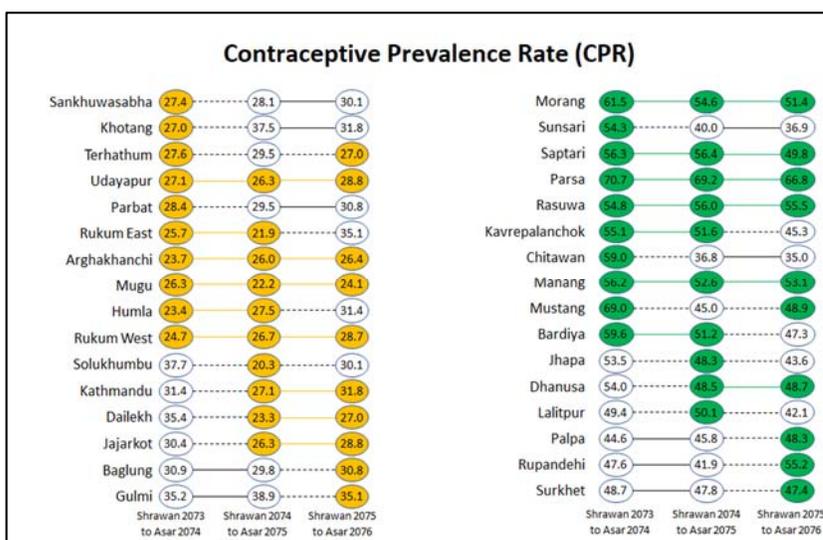
Indicators	FY 2016/17			FY 2017/18			FY 2018/19		
	Average of top 10 districts (%)	Average of bottom 10 districts (%)	Difference (%)	Average of top 10 districts	Average of bottom 10 districts (%)	Difference (%)	Average of top 10 districts (%)	Average of bottom 10 districts (%)	Difference (%)
Contraceptive Prevalence Rate (%)	59.6	26.1	33.5	53.8	24.7	29.1 [13.1]↓	52.5	26.4	26.1 [10.5]↓
Institutional Delivery (%)	88.0	18.4	69.7	88.7	19.1	69.6 [0.1]↓	95.6	20.9	74.6 [7.2]↑
U5 children with pneumonia treated with antibiotics (%)	56.1	14.6	41.5	48.2	9.8	38.4 [7.6]↓	38.2	8.3	29.9 [22.1]↓

In the case of treatment of pneumonia with antibiotics, nationally 32% of U5 were treated in 2016/17, falling to 19% of cases in 2018/19. This national pattern of declining treatment over time is reflected in both the top 10 performing districts and the 10 poor performing districts. However, the difference between the performance of the top and bottom districts has fallen.

The following text looks at the top 10 and bottom 10 performing districts in more detail.

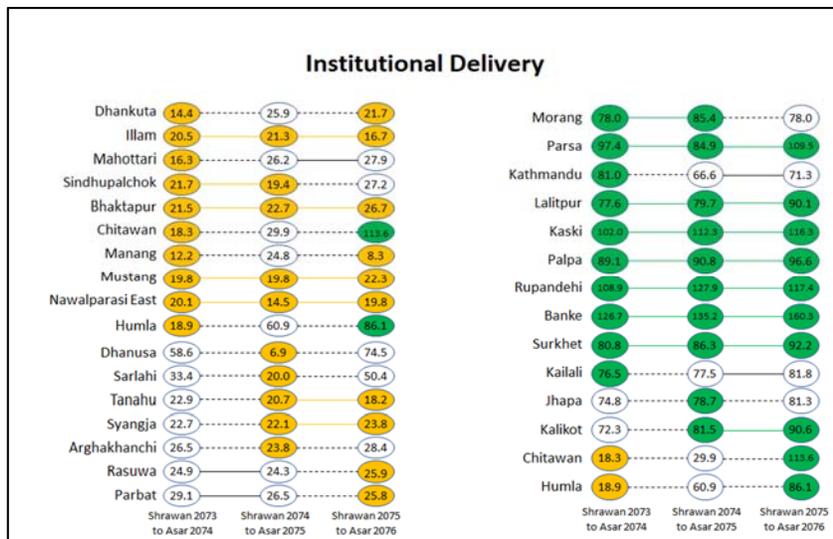
Contraceptive prevalence rate: The 10 low CPR districts have changed a bit over the past 3 years.

Udayapur, Arghakhanchi, Mugu and Rukum West have remained in the 10 poorest performing districts over the 3 year period. Likewise, the districts that have continued to have high CPR include Morang, Saptari, Parsa, Rasuwa, and Manang.



Institutional delivery: There are four districts (Illam, Bhaktapur, Mustang and Nawalparasi East) who remained in the bottom 10 performing districts over the 3 years. Two of the poor performing districts (Chitwan, Humla) moved from the bottom 10 performing

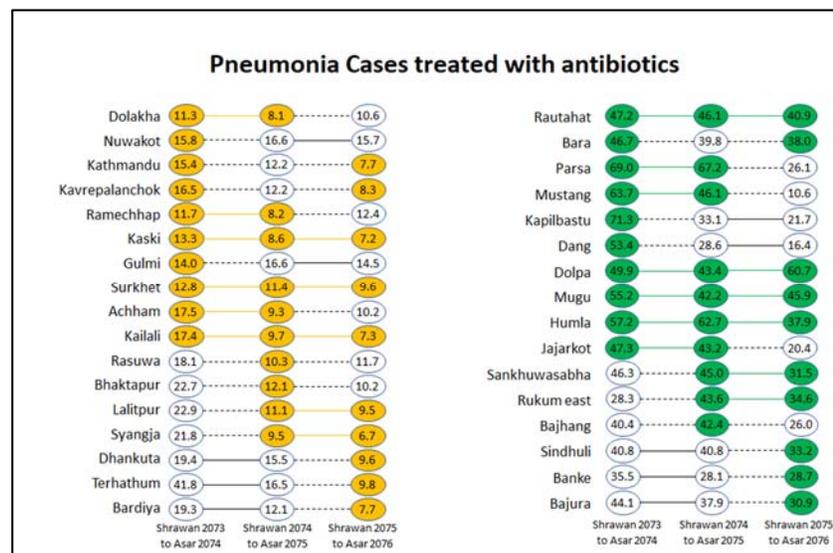
districts to the top 10 performing districts. Parsa, Lalitpur, Kaski, Palpa, Rupandehi, Banke and Surkheth have all remained in the top 10 performing districts over the 3 year period.



Pneumonia cases treated with antibiotics: Three of the bottom ten performing districts remained in the bottom 10 over the past 3 years (Surkheth, Kailali, Kaski). Out of the top ten performing districts in 2016/17, four districts were able to maintain this status until 2018/19 (Rautahat, Dolpa, Mugu, Humla). Even among the top performing districts there is a decline in the proportion of pneumonia cases treated with antibiotics over the past 3 years with some districts really falling.

Effect of Distance on the Use of Institutional Delivery

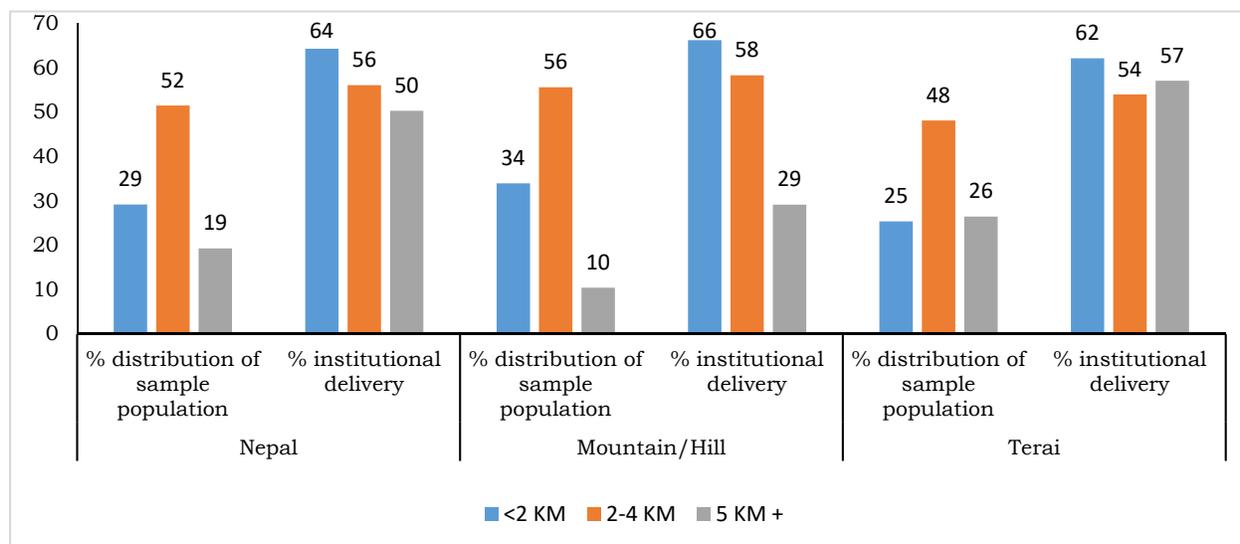
The hill and mountainous terrains of Nepal present an imposing geographical barrier to the use of health facilities and has a significant influence on women's uptake of institutional delivery care [2]. An analysis of the NDHS 2016 data and geolocation of the birthing facilities as recorded in the HMIS database reveals that about one fifth (19%) of the Nepal population live 5 Km or more from the nearest health facility with delivery services and more than half (52%) within 2-4 Km (Figure 2.5). Institutional delivery rate is 57.4% in Nepal and is 28% higher among who are living in less than 2 Km (64%) in comparison with living at 5 Km or more distance (50%)



that about one fifth (19%) of the Nepal population live 5 Km or more from the nearest health facility with delivery services and more than half (52%) within 2-4 Km (Figure 2.5). Institutional delivery rate is 57.4% in Nepal and is 28% higher among who are living in less than 2 Km (64%) in comparison with living at 5 Km or more distance (50%) distance. Ten percent of the population are living at 5 Km or more distance from a health facility with birthing services in the mountain and hills and

26% are living at 5 Km or more distance in the Terai. The institutional delivery rate is 128% higher among who are living in less than 2 Km in the mountain/hills but only 9% difference in the institutional delivery rate between less than 2 Km and 5 Km or more distance in Terai.

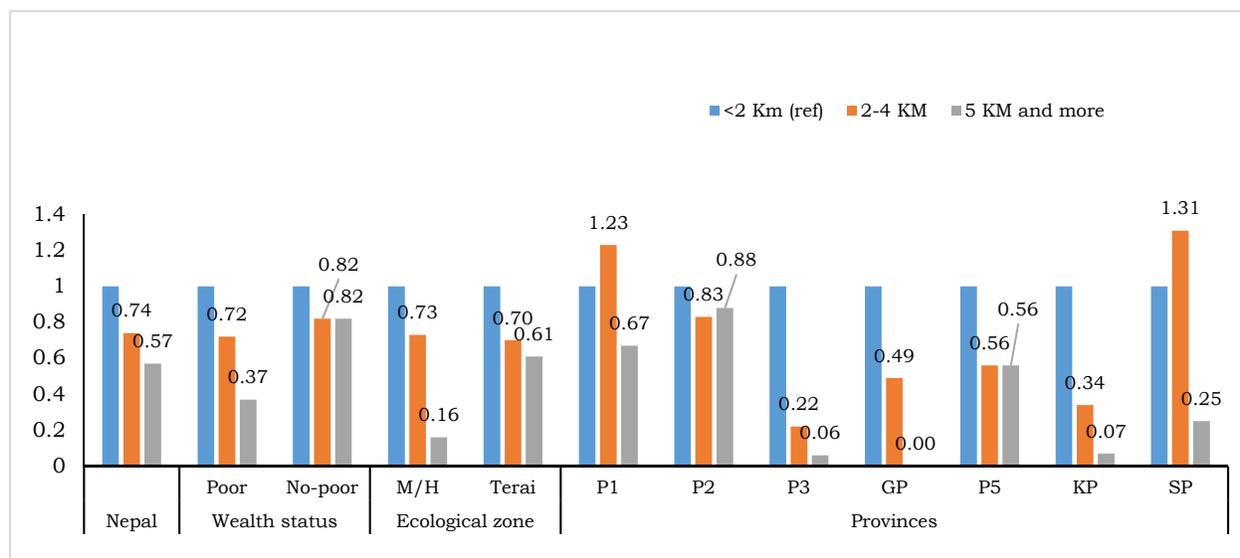
Figure 2.5: Geographical Distribution and Institutional Delivery



Source: Further analysis of HMIS and DHS data.

Figure 2.6 demonstrates that distance to the nearest birthing facilities is inversely associated with institutional delivery. The probability of institutional delivery is 26% less likely among women who are living within 2-4Km distance and 43% less likely among women who are living 5Km or more distance in comparison with those living less than 2Km distance.

Figure 2.6: Association between distance from a health facility and institutional delivery



Source: Further analysis of HMIS and DHS data.

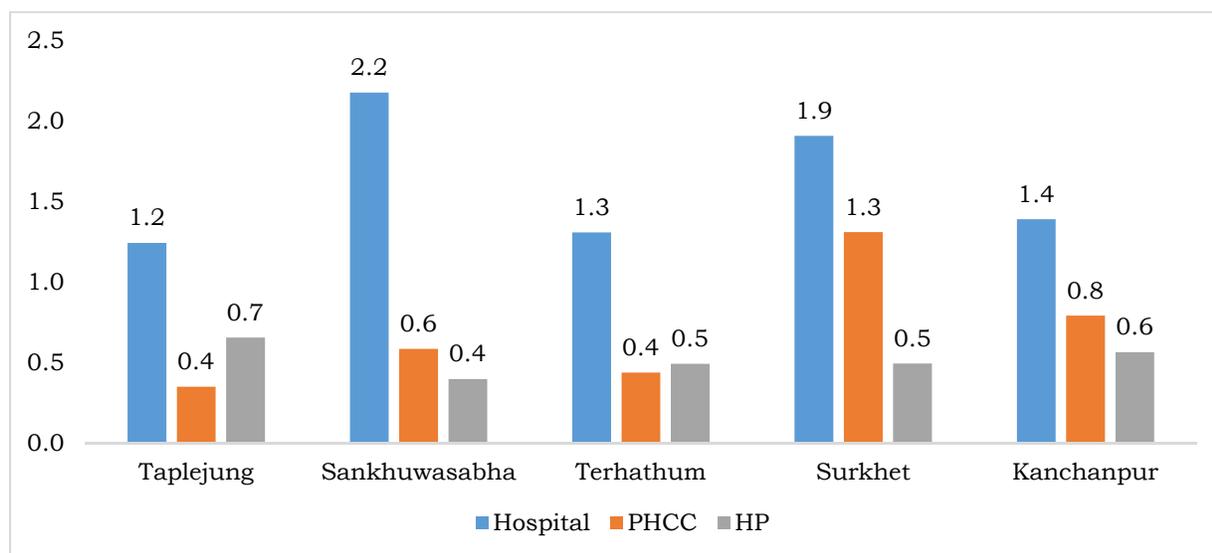
The poorest women who are living 5 Km or more distance from the health facility are 63% less likely to deliver at a health facility and yet there was no association between distance from the health facility and institutional delivery for non-poor women. Availability of health facility with delivery services close-by to women living in the hills and mountains is a strong factor in determining whether women will use the services. Women who are living at 5 Km or more distance are 84% less likely to deliver at health facility as compared with the women living at less than 2 Km distance to the birthing facility. Distance to a health facility is also inversely associated with institutional delivery in Terai however the magnitude of the probability is comparatively less than in the mountain/hills. Similar patterns are seen across the

Provinces; in province 3, Gandaki and Karnali Province the probability of institutional delivery decreases with an increase in the distance to the health facility and there is no association between distance and institutional delivery in Province 1 and 2.

Utilisation of ANC and Delivery services at different level of health facilities

HMIS recorded that 125 hospitals, 187 PHCCs, 2,174 HPs, 25 UHCs and 77 CHUs had reported at least one institutional delivery in 2018/19. We know that some health facilities are under-utilised and others are over-crowded. Using 2018/19 HMIS data, Figure 2.7 presents the ratio of first ANC visit to institutional deliveries at different levels of health facility. ANC is higher in lower level health facilities compared to delivery services whereas the opposite is true in higher level health facilities. This indicates that lower levels health facilities are bypassed by women for delivery services. In Sankhuwasabha, for example, 40% of women who had their first ANC at a health post used the health post for child birth. Whereas the hospital received 220% more women for delivery services than for first ANC.

Figure 2.7: Ratio of ANC to Delivery Services by Health Facility Type, 2018/19



Source: Further analysis of HMIS data.

3. NHSS Outcome-wise Progress Status

3.1 Outcome 1: Rebuild and Strengthen Health Systems: Infrastructure, Human Resources for Health, Procurement, and Supply Chain Management

Three key components as defined under outcome 1 of the NHSS for achieving efficient and effective service delivery include health infrastructure, human resources for health, and procurement and supply chain management. This section highlights progress made in these areas, and the progress in building back better after the destruction of the 2015 earthquake.

Outcome 1a Infrastructure

Background

The MoHP continues to improve the health facility network across the country, guided by the NHSS requirement to build earthquake resilient infrastructure, adopt upgraded standards, and improve practices in regular maintenance and inventory management. The MoHP has been working in coordination with provincial and local governments to promote good practices and to ensure a harmonized approach to health related infrastructure. It has continued to use information from the Health Infrastructure Information System (HIIS) to encourage a rational and efficient health infrastructure network at sub-national level while at the same time supporting the GoN's goal to Leave No One Behind (LNOB) by locating health facilities in areas that cover ethnically and geographically marginalised communities. As per the policy of GoN, Basic Health Care Centres are being established in all the wards where there is not health facility yet. Sub-national government have been orientated and encouraged to implement maintenance and management plans for health infrastructure, to continue their effectiveness and extend the life-span.

Major progress

Significant progress has been made in the fiscal year 2018/19 and to date. Major achievements are summarised below under different thematic areas.

Nepal Health Infrastructure Development Standards (NHIDS) 2074 (2017) and Integrated Health Infrastructure Development Programme (IHIDP)

- The MOHP has orientated provincial and local governments in Karnali, Gandaki, Province 3 and Province 2 on the NHIDS and IHIDP categorisation of health facilities. These are proving to be effective frameworks to guide implementation, supporting facilities development shown in Table 3.1.1 below.

Table 3.1.1: Sub-national Health Facility development guided by NHIDS and IHIDP

Province	Health Facility Development
Province 2	Design of Ramraja Prasad Singh Academy of Health Sciences in Saptari (previously Sagarmatha Zonal Hospital) Design of Provincial Medical Store
Province 3	Primary Hospital programme in Bagmati, Bharatpur, Bhimphedi, Chauri Deurali, Gajuri, Gauri Shankar, Indrawati, Jiri, Jugal, Kailash, Khanikhola, Lalitpur, Mandandeupur, Netrawati, Panchpokhari Thanpal, Phikkal, Rubyvalley, and Tarkeshwor municipalities. Primary Hospital at Budhanlikantha Kanti Children Hospital Operation Theatre and Surgical Ward
Gandaki	Design of Provincial Medical Store
Province 5	Design of Secondary Hospital at Bhim
Karnali	Primary Hospital at Dailekh, Dolpa, Dullu, Humla, Jajarkot, Kalikot, Mugu, Mehelkuna, Rukum and Salyan. Secondary Hospital at Surkhet

Health facility reconstruction post 2015 Earthquake

- At the end October 2019, 367 activities related to reconstruction have been completed (93% achievement against a target of 394 activities), while 27 are not yet complete or are in the planning stage. A summary of progress is presented in Table 3.1.2 below.

Table 3.1.2: Repair and Reconstruction activities with External Development Partners

Districts	Total number of Activities	Status			Type of Construction			Semi-Permanent & Shelter
		Complete	Ongoing	Planning	Permanent	Prefab	Repair/Retrofitting	
Bhaktapur	5	4	-	1	2	3	-	-
Dhading	55	52	1	2	4	38	13	-
Dolakha	45	43	1	1	2	36	5	2
Gorkha	57	56	1	-	2	37	3	15
Kathmandu	7	6	-	1	5	2	-	-
Kavre	40	36	3	1	9	30	1	-
Lalitpur	9	8	-	1	2	7	-	-
Makwanpur	12	9	3	-	4	8	-	-
Nuwakot	48	47	1	-	1	42	1	4
Okhaldhunga	9	7	-	2	2	7	-	-
Ramechhap	17	16	1	-	2	13	-	2
Rasuwa	18	17	1	-	1	13	3	1
Sindhuli	4	-	4	-	4	-	-	-
Sindhupalchowk	62	60	2	-	3	31	6	22
Solukhumbu	6	6	-	-	-	6	-	-
Total	394	367	18	9	43	273	32	46

Note: Solukhumbu belongs to the category of Earthquake Medium Affected District but many health facilities were damaged

Establishing health facility in all wards:

- As per the government policy of establishing health facility at ward level, budget was provided for 1200 wards in 2018/19 while budget is provisioned for 1390 wards in 2019/20; Establishment of such health facilities is being done on cost sharing basis.

The GoN also has in place a set of bilateral arrangements with external development partners for health facility reconstruction. Progress is set out in Table 3.1.3 below.

Table 3.1.3: Progress under Agreements with Bilateral Agencies

Agency	Works description	Progress
JICA	Bir Hospital, Kathmandu	Construction complete and handed over.
	Paropakar Maternity and Women's Hospital, Kathmandu	Construction complete and handed over.

KOICA	Nuwakot District Hospital	70 % of total works completed, including structural and finishing works. Medical gas supply, false ceiling and landscape-related works are being carried out.
	Prefab structures at 10 health posts	All 10 prefab health posts have been constructed and handed over.
KFW	Reconstruction of Rasuwa, Dolakha, Gorkha, and Ramechhap district hospitals	Reconstruction work in Dolakha, Gorkha and Ramechhap district hospitals is ongoing. Rasuwa hospital is in planning stage.
CHINA	Chautara and Manang hospitals	Chautara Hospital reconstruction work is ongoing. Reconstruction work at Manang Hospital is in planning stage.

Regular construction programme for health facilities

The MOHP collaborates with the DUDBC as its delivery agent in the construction, extension and refurbishment of health facilities. Since the year 2015/16, there has been a general improvement in the number of projects completed, while the number of 'sick' projects (projects that have been stalled or halted, for example due to technical or contractual problems) has decreased. As shown in Table 3.1.4 below, MOHP authorised DUDBC to implement 746 projects in 2018/19. Of these projects 228 have been completed and the contractors fully paid, while 107 projects are complete but there are payments outstanding. There are 386 live projects carried over from previous years, and new 29 projects commissioned in 2018 /19. A total of 23 projects were either dropped or terminated over the same period.

Table 3.1.4: Progress status of ongoing health infrastructure construction works as of end 2019

Description	Ongoing (Carried over from previous years) before 2018/19	Works planned in fiscal year 2018/19
Work Completed but full payment pending	107	-
Work Completed and full payment made to contractor	228	-
Work up to Finishing, Electrification, Sanitation	193	-
Work up to RCC in Fourth Floor/Roofing	-	-
Work up to RCC in Third Floor/Roofing	-	-
Work up to RCC in Second Floor/Roofing	47	-
Work up to RCC in First Floor/Roofing	40	-
Work up to Sill Level/Wall of Third Floor	2	-
Work up to Sill Level/Wall of Second Floor	34	-
Work up to Sill Level/Wall of First Floor	28	-
Work up to Foundation/DPC Level	23	1
Work Ordered	5	3
Tender Called	5	3
Design & Cost Estimate	9	22
Projects Dropped	14	-
Projects Terminated	9	-
Total	746	29
Total Ongoing and New Projects	545	

Note: Projects terminated: Projects which have been contracted then ended due to unresolvable issues. Projects dropped: Projects originally planned but had to be withdrawn as they were later found to be unfeasible.

Health Infrastructure Information System (HIIS)

- A detailed infrastructure and Minimum Service Standards assessment at 503 health facilities in the seven Learning Lab Districts (Bhaktapur, Dadeldhura, Humla, Kapilbastu, Kaski, Siraha and Sunsari).
- Support to the DUDBC to plan the health facility construction programme for the Annual Work Plan and Budget (AWPB), including the identification of Primary Health Care Centres (PHCCs) with potential for upgrading to Primary Hospital level.
- Assessment of over 2,400 wards and identification of priority wards for health facilities.

Development of health infrastructure policy and standards

Disaster Risk Reduction

- The MoHP's Health Emergency and Disaster Management Unit (HEDMU) developed comprehensive training guidelines on health sector disaster preparedness and response planning.
- The MoHP trialled a survey tool which assesses the level of disaster preparedness and response planning at health facilities

Capacity Enhancement

Over the period October 2018 to November 2019, the MOHP conducted nine capacity enhancement events on health infrastructure, involving a total of 413 participants. See Table 3.1.5 below for details.

Table 3.1.5: Health Infrastructure Capacity Enhancement Events October 2018 – November 2019

Capacity Enhancement Event	No of Participants
Information Session Retrofitting designs Bhaktapur	43
Karnali Province: Orientation on Health Infrastructure Development	38
Manthali Municipality: Orientation on Health Infrastructure Development	24
Province 3: Orientation on Health Infrastructure Development	45
Province 2: Orientations on Health Infrastructure Development	202
Skills for Retrofitting in Masonry Buildings	17
Health Infrastructure Policy Development Training	20
In-service Training for Health Infrastructure specialists	16
Orientation on Retrofitting for Contractors	8
Total Participants	413

Impact assessments on Policy Development and Technical Skills training were conducted in April and May 2019. A series of detailed training modules and manuals under the health infrastructure capacity enhancement programme is nearing completion.

Retrofitting of Bhaktapur Hospital and Western Regional Hospital Pokhara

The retrofitting of the Western Regional Hospital in Pokhara (WRH) and the Bhaktapur Hospital is a flagship activity in the MoHP health infrastructure programme. As well as strengthening and rehabilitating health infrastructure at two significant hospitals, this activity will provide replicable experience that can be applied to health facilities across the country. It implements a four-fold integrated approach, involving:

- Seismic retrofitting (structural and non-structural elements, as well as rehabilitation of relevant functional service areas)
- Construction of a temporary multi-purpose decanting facility
- Decanting transfer of hospital services and patients
- A 'Green' retrofitting package to maximise environmental benefits and improve sustainability (including implementation of a Zero Waste site policy, potential adaptive re-use of the decant facility, improved water management and energy efficiency).

This is a patient-centred construction process, involving close cooperation with the DUDBC Health Buildings Division and Federal Project Implementation Units in Pokhara and Bhaktapur. Progress is set out in Table 3.1.6 below.

Table 3.1.6: Retrofitting Bhaktapur Hospital and Western Regional Hospital Pokhara

Activity	Progress
WRH Decanting Block	Design complete, and tender awarded. Construction work underway. Anticipated completion date February 2020.
Bhaktapur Decanting Block	Design complete, and tender award due November 2019. Anticipated completion date March 2020.
WRH Main Retrofitting Works	Design complete, and tender to be awarded. Anticipated completion date November 2021.
Bhaktapur Main Retrofitting Works	Design complete, and tender to be awarded. Anticipated completion date November 2021.
WRH Decanting Services tender	Tender documents are being prepared
Bhaktapur Decanting Services tender	Tender documents are being prepared
WRH 'Green' Retrofitting Package	The work is completed by November 2021
Bhaktapur 'Green' Retrofitting Package	The work is completed by November 2021

International Monitoring & Verification

The structural designs at Bhaktapur and WRH Pokhara Hospitals were reviewed in November 2018 by an independent international team commissioned by DFID Nepal. The review found that seismic safety had been upheld, and that structural, functional and green retrofitting, and services systems factors, had been appropriately addressed in the designs. Independent monitoring will take place in November 2019 and at regular periods in 2020.

Gender Equality and Social Inclusion (GESI) in Health Infrastructure

Gender Equality and Social Inclusion (GESI) aspects are included in the hospital retrofitting tender documents and have also formed regular sessions in health infrastructure training and orientation events. Contractors and on-site workforce have been briefed on GESI requirements.

Challenges

The health infrastructure sector has seen major progress since October 2018 in terms of quantity, quality and geographical coverage of health facilities. However, there are significant challenges remaining:

- Although organisational restructuring under federalism is now largely complete, there are still large numbers of vacancies in sub-national professional positions needed for good quality health facility development.
- Provincial and local governments have received funds from the centre for operational and capital expenditure on health infrastructure. However, weak absorptive capacity is a real challenge, and comprises a shortage of ready-to-implement projects, procurement delays, weak institutional arrangements, and scarcity of skilled staff.
- Evidence-based decision making requires robust and comprehensive data and analysis. While there is detailed information on the type and condition of health infrastructure for selected districts, there are significant gaps in coverage elsewhere, which hampers planning and implementation.

Way Forward

Following activities are planned for the continued improvement of health infrastructure planning, development and maintenance:

- Continuing to work closely with DUDBC, provincial and local governments to improve planning and decision-making. This will support the development of a rational inter-connected hierarchy of health facilities across the country. There will be continued orientation and support for adoption of NHIDS,

IHIDP, DRR and other relevant infrastructure-related policies and standards at sub-national level, involving close engagement and information sessions with provincial and local governments

- Establishment of the health facilities has been planned and budgeted in the wards where there are no health facilities.
- Continuing investment in capacity enhancement for improving technical skills at federal and sub-national level, targeting managerial and technical staff.
- Carrying out infrastructure risk analysis, with the development and incorporation of a multi-hazard resilience perspective.
- Implementing the flagship Retrofitting Project at WRH Pokhara and Bhaktapur Hospital, ensuring that effective and efficient patient-centred construction takes place, and that lessons are disseminated as the project progresses.
- Strengthening evidence-based decision making through improved HHS data and analysis and wider geographical coverage.

Outcome 1.b Human Resources for Health

Background

The NHSS recognises that a key component of quality health services relies on strengthening the production, deployment, and retention of skilled human resources. This NHSS outcome will be delivered through the following outputs: improved availability of human resources at all levels with a focus on rural retention and enrolment and improved medical and public health education and competency. As a result of restructuring of health governance, the staff adjustment is progressing. Of the total 31,591 permanent employees in the MoHP, approximately 4,000 positions are vacant.

Major Progress

- Draft of the HRH strategy was further refined to comply with the federal context.
- Adjustment of about 27,500 MoHP staff as per the Staff Adjustment Act (2074) by October 2019
- Provincial Health Training Centres have been established in all seven provinces
- Nursing & Social Security Division (NSSD) is developing guidance to place the midwives
- NSSD developed a MoU to contract to the hospitals under a Federal system
- Specialist Doctors sent in a batch to provincial governments for appropriate placement.
- Workload Indicators and Staffing Norms (WISN) training was organised and MoHP has identified health facilities and cadres to work on workload indicators.
- Developed deployment procedures to deploy 189 specialists (MD/MS, MDGP and others) who will graduate this year from NAMS, Institute of Medicine (IoM) and B.P. Koirala Institute of Health (BPKIH)

Challenges

- Local Governments (LG) are responsible to recruit staff on a contractual basis, but there are no standard guidelines which are crucial to ensure the quality.
- The data about HRH from professional councils is yet to be completed.
- HRH projections, gaps and needs are not yet complete as per the new structure.
- There is a mismatch of HRH production and actual needs in particular for Pharmacists, Nurses, family planning service providers, ENT specialists etc.
- Lack of HRH in new areas such as Hospital Management.
- Very few public hospitals feel they should provide 24 hour services

- Partnerships with academic health institutions to support HRH needs have not yet yielded positive results due to the lack of clarity on roles and responsibilities.

Way Forward

- Strengthen partnerships with public and private academic health institutions to address the HRH needs.
- Strengthen the HRH unit in the MoHP.
- Implement appropriate deployment of specialists as per the need identified by the referral hospitals.
- Endorse the updated HRH Strategic Roadmap.
- Revise in-service training programmes focused at actual need of the health facilities under various levels of governments.

Outcome 1.c Procurement and Supply Chain Management

Background

Procurement and Supply chain are interdependent activities which affects the quality of health services. The MoHP realises the importance of strengthening the procurement and supply chain cycle through the development, endorsement, and implementation of the Procurement Improvement Plan (PIP, 2017-2022). However, MoHP is in the processing of developing Nepal Health Sector Public Procurement Strategic Framework (NHSPPSF) for the health sector. This framework will provide strategic policy guidelines for all spheres of health governance. Under this comprehensive plan, MoHP is implementing following five reforms:

- (i) Pre-bid information system strengthening such as, Market Analysis, TSB and LMIS improvements;
- (ii) Efficient procurement and logistics planning along with APP, MPP and CAPP consolidation;
- (iii) Standardization of procurement and logistics management process by executing e-GP system with health friendly SBDs and e-LMIS;
- (iv) Enhancing contract management and capacity building program at all spheres of health governance; and
- (v) Strengthening Post-bid evaluation system of procurement and supply chain, like Risk Analysis, Procurement Compliance System, Quality Assurance Plan, etc.

Procurement Management Reform

The procurement management in the health sector consists of preparing, executing and monitoring of the Procurement Improvement Plan (PIP), the Technical Specification Bank (TSB), Logistics Management Information System (LMIS), Inventory Management System (IMS), Annual Procurement Plan (APP), Master Procurement Plan (MPP), the Consolidated Annual Procurement Plan (CAPP) and their effective implementation to ensure their timely delivery and the distribution of medical goods and equipment. Since FY 2014/15, MoHP continues to monitor and evaluate the implementation of the compilation and consolidation of APPs through its departments.

Table 3.1c.1: CAPP Budget, Plan and Actuals (in NPR Million)

Fiscal Years	Total Budget	Procurement Budget	CAPP Plan	CAPP Actuals	% of CAPP plan value on Procurement Budget
2014/15	33517.1	1410.85	1405.37	513.22	99.61
2015/16	36729.5	2159.01	2102.33	1321.01	97.37
2016/17	39122.3	4125.19	2899.23	1723.91	70.28
2017/18	24420.2	2728.55	2156.34	1606.18	79.03
2018/19*	34082.2	6300.00	5944.83	5590.29	94.36
2019/20**	42670.8	5590.78	5433.48	0	97.19

* Figures since this FY are figures of federal PEs. **Planned figures.

Source: Various Years Fiscal Statements of DoHS, MoHP and CAPP Plans. Figures of FY 2019/20 are taken from the output of e-CAPP module of TABUCS retrieved from <http://tabucs.gov.np/new>.

The CAPP was introduced in 2017/18 and only covered 79% of the procurement in the health sector. In 2018/19, a Federal CAAP (F-CAAP) was introduced and in 2019/20 around 97% of procurement budget is planned to be processed through online F-CAPP procedures. CAPP execution has been improving in recent years (Table 3.1c.1). Table 3.1c.2 shows F-CAAP procurement management according to different MoHP departments.

Table 3.1c.2: Federal CAPP Budget, Plan and Actuals of FY 2018/19 (in NPR Million)

Description	Total Budget FY 2018/19	Procurement Budget	CAPP Plan	CAPP Value Actuals	% of CAPP Plan on PB	% of CAPP Value Actual on CAPP Plan
MoHP & Federal Hospitals	16704.7	1350.0	1231.57	1551.99	91.23	126.02
DoHS & Programs	8161.5	3000.0	2987.16	2738.06	99.57	91.66
DoDA & Programs	167.6	80.0	79.00	46.94	98.75	59.42
DoAA & Programs	165.8	12.0	11.59	18.49	96.58	159.53
Board & Academies	8882.7	1858.0	1635.51	1234.81	88.03	75.50
Total	34082.3	6300.0	5944.83	5590.29	94.36	94.04
% of Total Budget		18.48	17.44	16.40		

Source: Federal Budget and procurement Budget taken from Red Book, 2018/19; F-CAPP, 2018/19 and CAPP Status, 2018/19 taken from NPC Form No.2.

F-CAPP Execution

FY 2018/19 was the first year of federal level CAPP execution. Out of NPR 34.08 billion allocated, federal procurement budgets were NPR 6.3 billion (18% of total budget), under which NPR 5.94 billion (99% of federal procurement budget) was planned in the F-CAPP and executed over this year. The absorption capacity on procurement was about 16% in FY 2018/19. Out of 30 PEs, 28 PEs (93%) participated in F-CAPP planning process by using manual and offline method of F-CAPP preparation at that time.

Table 3.1c.3: Federal CAPP Actuals by Procurement Type FY 2018/19 (in NPR Million)

Description	CAPP Value Actuals	Civil Works	Medical Goods	Consulting Services	Other Services
MoHP & Central Hospitals	1551.99	539.46	1003.13	2.50	2.70
DoHS & Programmes	2738.06	75.85	2212.83	80.95	368.43
DoDA & Programmes	46.94	4.57	42.37	0	0
DoAA & Programmes	18.49	2.32	9.00	4.52	2.65
Board & Academies	1234.81	978.24	221.45	28.74	6.39
Total	5590.29	1600.44	3488.78	116.71	380.17
% of CAPP Value	94.04	28.63	62.41	2.09	6.80

Source: CAPP Status, 2018/19 taken from NPC Form No.2 of Physical Progress Report & CAPP Monitoring Report of MoHP

As against of the F-CAPP value of NPR 5.94 billion a sum of NPR 5.59 billion (94% of F-CAPP value) have been absorbed as of procurement expenditure in FY 2018/19. The expenditure includes the procurement categories of civil works (28.6%), medical goods (62.4%), consulting services (2%) and other services (6.8%). EDPs observation on the implementation of F-CAPP shows CAPP procedures as an updated management tool was effectively applied in procurement management of MoHP. (September 2019; A Report on Biannual Assessment of CAPP Implementation Process for FY 2018/19; DFID). This co-monitoring study also indicates a notable improvement in procurement management reform practices of MoHP in recent couple of years.

Functional Status of Equipment in Hospitals: As a regular monitoring of the functional status of the equipment, Management Division has maintained the functional status of the equipment that are under the scope of the DoHS. The functional status of sixteen different intermediate equipment in 94 hospitals (mostly provincial level), disaggregated by province, is presented in Table 3.1.c.4 below. In overall, 82.3 percent equipment were found to be functional (range: 51.8% - 92.2%). The lowest functional status was of the ventilator (51.8%) which is used in intensive care while the highest functional status of the dental X-ray (92.2%). Variation in the functional status across provinces is relatively low; the highest and the lowest functional status was respectively in Sudur Paschim Province (92.6) and Province 1 (76.9%).

Table 3.1c.4: Functional Status of Equipment in Hospitals: by Equipment Type and Province

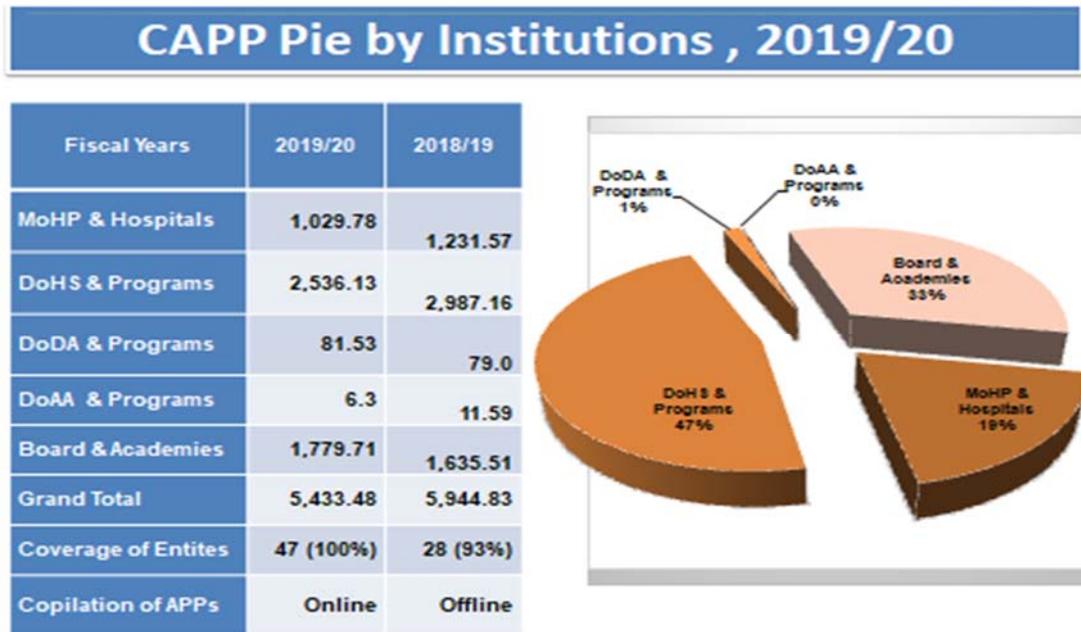
SN	Name of Equipment	Description	Number of Equipment by Provinces							Total	
			1	2	3	Gandaki	5	Karnali	Sudur Paschim	Total (No.)	Functional (%)
1	Vital Sign Monitor	Total	83	68	134	97	119	59	71	631	
		Functional	65	57	107	82	90	47	70	518	82.1
2	Oxygen concentrator	Total	95	47	51	54	69	70	51	437	
		Functional	78	41	46	42	61	58	51	377	86.3
3	Warmer, infant	Total	60	69	54	50	74	36	54	397	
		Functional	51	60	49	38	55	31	53	337	84.9
4	Microscope, binocular	Total	48	30	30	57	53	36	40	294	
		Functional	35	24	27	54	51	36	38	265	90.1
5	Electrocardiograph (ECG)	Total	57	25	42	43	46	35	29	277	
		Functional	37	19	34	36	39	29	25	219	79.1
6	Analyser, biochemistry	Total	38	16	29	27	49	26	28	213	
		Functional	25	13	26	16	43	23	26	172	80.8
7	USG Machine	Total	34	15	24	26	35	23	23	180	
		Functional	25	10	22	20	31	19	20	147	81.7
8	Phototherapy unit	Total	30	20	25	29	33	12	12	161	
		Functional	27	14	25	27	30	12	11	146	90.7
9	Electrosurgical unit	Total	34	13	18	20	30	21	21	157	
		Functional	29	11	17	20	28	18	20	143	91.1
10	Incubator, laboratory	Total	28	15	15	23	18	13	16	128	
		Functional	19	10	12	13	15	10	15	94	73.4
11	Anaesthesia apparatus	Total	11	9	13	9	16	5	11	74	
		Functional	6	7	11	6	13	4	9	56	75.7
12	Defibrillator	Total	3	2	6	9	8	5	4	37	
		Functional	2	1	5	8	6	5	3	30	81.1
13	Endoscopy	Total	5	7	5	8	8	5	1	39	
		Functional	3	6	4	6	8	3	1	31	79.5
14	Ventilator, intensive care	Total	5	6	14	17	25	9	9	85	
		Functional	5	5	5	8	8	7	6	44	51.8
15	X-Ray, dental	Total	12	5	9	7	8	5	5	51	
		Functional	11	5	9	5	8	4	5	47	92.2
16	X-Ray	Total	33	25	29	29	38	26	29	209	
		Functional	25	13	24	23	25	17	21	148	70.8
Total		Total	576	372	498	505	629	386	404	3,370	
		Functional (No.)	443	296	423	404	511	323	374	2,774	82.3
		Functional (%)	76.9	79.6	84.9	80.0	81.2	83.7	92.6	82.3	

Source: Management Division, Department of Health Services.

e-CAPP initiation: In FY 2018/19 monitoring of F-CAPP had some shortfalls, due to it being offline which led to limited participation. A new online e-CAPP module under TABUCS has been piloted and an orientation and initial training to MoHP officials was conducted in FY 2018/19. FY 2019/20 is the second year of federal level CAPP execution and first year of online data entry into the e-CAPP module of TABUCS at federal level.

The FY 2019/20 national budget allocated NPR 42.67 billion to the federal health budget and the federal procurement budget is NPR 5.59 billion (13% of the overall health budget), under which NPR 5.43 billion (97% of procurement budget) was planned as online F-CAPP and shall be executed over this year. DoHS and Programs have a lead role of 47% of CAPP Plan as against of procurement budget, Board and Academies have 33% and MoHP and central Hospitals have 19%. Full coverage of PEs under MoHP (47) has incorporated into the system in online basis.

Figure 3.1c.1: Federal e-CAPP Plan in FY 2019/20 (in NPR Million)



Major Progress

In the fiscal year FY 2017/18 to 2018/19, the MoHP has made impressive progress in improving the performance of procurement management. The following targets have been achieved:

- Procurement Improvement Plan:** Procurement Improvement Plan (PIP, 2017-21) has been prepared and endorsed by MoHP; the formation of a nine member CAPP monitoring committee (CAPP-MC) under the chairmanship of the Director General (DG) of the DoHS, and the endorsement of the terms of reference (ToR) of the CAPP-MC in FY 2017/18. Since then, trimester monitoring meetings have been held each year. Eight consecutive CAPP monitoring meetings up to FY 2018/19 have been held.
- Federal Procurement Planning and Consolidation:** The departmental CAPP up to FY 2017/18 has been made within the specified timeframe in DoHS along with its divisions. Whereas, Federal level CAPP was initiated and executed in FY 2018/19 for the first time. Online CAPP under TABUCS was designed and piloted in 2018/19 and an orientation training provided for MoHP and DoHS officials.
- Nepal Health Sector Public Procurement Strategic Framework (NHSPPSF):** The NHSPPSF has been prepared as a strategic document for both procurement and supply chain management which is expected to replace the PIP upon its endorsement.
- Technical Specification Bank:** The codification of 108 drugs and 1,089 equipment was uploaded in the TSB in FY 2017/18 and 121 drugs and 1,109 equipment in FY 2018/19. The TSB was restructured and uploaded in the DoHS website in FY 2017/18 and is available for all stakeholders. In 2017/18 more than 300 system users were registered and in FY 2018/19 this has increased to more than 700 users and more than 17,000 TS downloads.
- Procurement Process Standardizations:** In FY 2017/18 83% of bids were processed using the electronic government procurement (eGP-II) system and in FY 2018/19 this increased to 98%. In FY 2017/18 Standard Bidding Documents (SBDs) for health sector procurement (3 SBDs

including a Framework Agreement) were drafted and sent for approval to Public Procurement Monitoring Office (PPMO) and several follow up discussions meeting were held in FY 2018/19.

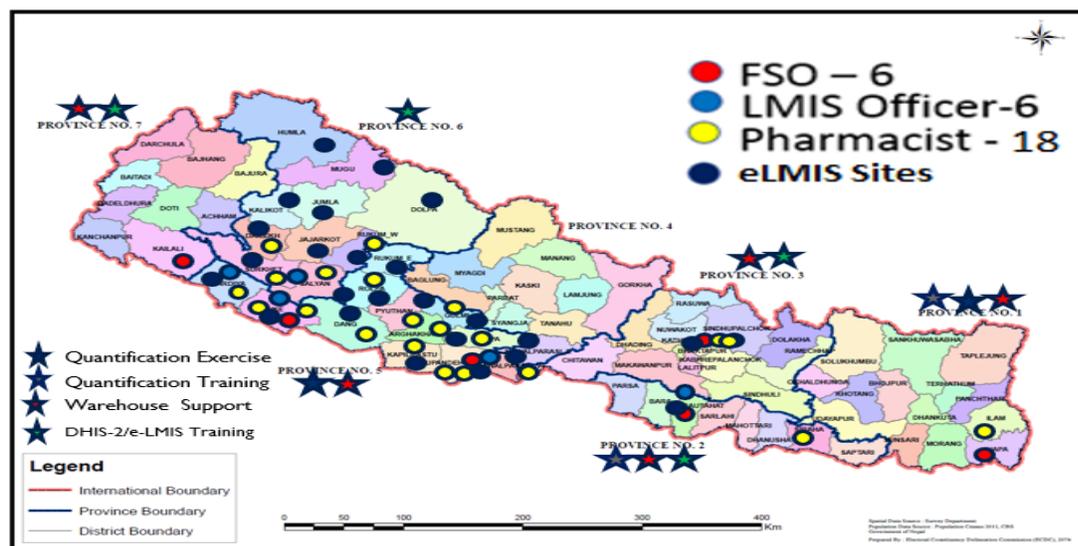
- Two SOPs on procurement management and eGP operation for SNGs levels were prepared, endorsed and were in use in FY 2017/18. 119 Procurement Clinics were held in FY 2017/18 and 205 in FY 2018/19 including 19 provincial level clinics along with other regular support activities of different division and centers.
- **Capacity Enhancement:** Two eGP trainings in procurement were conducted at the central level; four provincial/local level trainings in procurement were conducted in FY 2017/18; Training session plans were developed for SNGs in procurement management in 2017/18 and in FY 2018/19 SNGs training on Forecasting and Quantification (7), Procurement Planning (7), eGP operation (7) have taken place in 3 Provinces. The Logistic and Procurement Management Training Manual was reviewed in FY 2018/19.
- **Procurement Modality:** MoHP is using open, competitive, and transparent modality of bidding. The open bid method is most commonly used method in the PEs for the procurement of drugs, medical equipment, hospital devices, contraceptives, cold chain equipment, insecticides, and health infrastructure facilities. It indicates towards openness, transparency, and competition in procurement and increasing VfM.
- **Bid Evaluation and Approval:** The standard time taken for a bid evaluation and approval is 120 days as per PPA/PPR. All procurement of drugs and equipment were within this legal timeframe. In DoHS, all ICB bids are evaluated within the period of 90 days of time and all NCB bids are evaluated within the period of 35 days.
- **ICT Usage in Grievance Handling:** In FY 2017/18 a concept paper on ICT based Grievance handling and Redressal was endorsed by DoHS on behalf of the MoHP and system software was developed, approved and executed in FY 2018/19. The Grievance Handling Mechanism software which is installed in MD/DoHS reported more than 37 grievances handled by the system in FY 2018/19.
- **Committee Monitoring:** MoHP has formed a Public Financial Management (PFM) committee with the PPMD chief as chair and endorsed a TOR to monitor financial management in procurement and supply chain management. In 2017/18 MoHP formed a CAPP Monitoring Committee (CMC) under the leadership of Director General of the DoHS and endorsed its TOR to monitor overall matters of procurement and supply chain management. Under these two broad central level committees, DoHS has formed and expanded their various technical committees since FY 2017/18. In FY 2018/19 PFM committee started to monitor the function of CAPP-MC on behalf of MoHP.

B. Supply Chain Management Reform

Supply chain management (SCM) in the health sector consists of preparing, operating and monitoring logistics needs in the Procurement Improvement Plan (PIP) using the Logistics Management Information System (LMIS), electronic Logistics Management Information System (eLMIS) and the Inventory Management System (IMS). It involves warehouse development and management and transportation to ensure the timely distribution of medical goods and equipment. Under this comprehensive system the DoHS/MoHP is implementing the following reform packages on logistics and supply chain management:

- (i) Enhancing Strategy and Planning with effective M&E functions;
- (ii) Improving Forecasting and Quantifications techniques;
- (iii) Standardization of warehousing and inventory management;
- (iv) Enhancing Management Information System practices through e-LMIS; and
- (v) Promoting Capacity Development Programs in all forms of governments.

LMIS collects data from 77 districts and data was entered into the LMIS system on a quarterly basis. To date, 71 out of 77 districts were reporting information in this way. In 2016/17 eLMIS was introduced and in 2017/18, 22 district (5 districts off-line and 17 districts on-line) are piloting the system.



In FY 2018/19, eLMIS was implemented at 6 central stores, 2 PMS, 22 HO stores (Province 5 & 6), 4 LGs and 23 HF of Bardiya and Surkhet. As a result, >90% LMIS reporting rate in province 5, > 80% in Karnali Pradesh (eLMIS implemented provinces) has been achieved. Data from all health facilities is reported quarterly and made available nationally in the form of dashboard and reports through use of eLMIS software. Work is in progress to make LMIS data entry at the SNGs level and capacity is being built starting from the health directorate, and logistics management centres at the province, and health offices at the district, municipality health section at the local level (LGs). So far, 371 LGs has been trained on eLMIS data entry. Likewise, eLMIS implementation in remaining PHLMCs, hospitals, health offices, and LGs is also in planning.

Major Progress

In the FY 2017/18 and 2018/19, the MoHP and DoHS has made good progress in improving the performance of logistics management. The following targets have been achieved:

- **Roll out of the eLMIS:** In the FY 2018/19, the MD/DoHS carried out some of the training activities in an integrated manner. IHMIS section of MD/DoHS conducted one-day eLMIS training for LGs health coordinators, sub-coordinators as well as storekeepers in all provinces in succession with training on DHIS2. 371 LGs were trained on how to enter data into eLMIS but username/passwords are not yet available to these trained LGs and until the last fiscal year, LMIS reports were collected and entered at the central level. eLMIS has been implemented in 57 sites including:
 - 2 central stores
 - 4 central sub-stores
 - 2 Provincial Health Logistics Management Center (Butwal and Nepalgunj)
 - 22 districts in Province 5 and 6
 - 4 Local Governments and 23 health facilities in Bardiya and Surkhet districts.

- **eLMIS rollout assessments:** Management Division assessed eLMIS operational sites in December 2018 using a formal assessment tool. In FY 2018/19, assessments were conducted at eLMIS operational sites, including all levels of the supply chain (i.e. CMS, PMS, district, LGs and SDPs) and covering all types of eLMIS modules (i.e. online, offline and mobile modules of eLMIS).
- **eLMIS Phase II preparation and configuration:** For eLMIS Phase II implementation, a formal request was sent to USAID in November 2018 by MD/DoHS to scale-up eLMIS throughout the country including all 753 LGs. USAID/GHSC-PSM developed an eLMIS scale-up plan to rollout eLMIS transactional module to 5 PMS and 55 districts stores and reporting module to 753 LGs. As per this plan, required username and password has been made ready for distribution. To support the eLMIS scale-up, a local vendor has been selected in FY 2018/19 to rollout eLMIS. Additionally, all requirements for scale-up including site readiness assessment are already in place.
- **Ensure master data management and interoperability within NHSS:** The Management Division has developed a shared dashboard which includes key indicators such as HFs reporting percentage and growth patterns, expiring/expired commodity situations country-wide, and stock availability status. They are regularly reviewed by concerned authorities for appropriate decisions based on the data. The analysis reports were regularly circulated to the districts and relevant stakeholders to resolve any identified issues.
- **Forecasting and Quantification:** DoHS uses LMIS data for forecasting and quantification of drugs. Historical consumption data, alongside data on morbidity, demographics and program considerations are used to predict the annual procurement need. Basically, LMIS software provides national, province and local level requirements of drugs as the basis for health commodity procurement planning and delivery schedules practices commonly used.
- **Review of LMIS reporting system:** With new Federal structures in place, it was unclear how information across the supply chain levels will be handled and as a result it created a gap in the LMIS reporting rate. The GHSC-PSM has focused its TA on these areas which resulted in an improvement in LMIS reporting rate. The reporting rate for FY18 quarter 4 was only 30% whereas the reporting rate for FY19 quarter 4 has increased more than two-fold to 68%. The quarterly average reporting rate of FY18 was 65% whereas in FY19, it increased to 78%.
- **National supply chain policies at all levels:** The Management Division organized a consultative meeting with high level province MoSD officials to discuss health commodities specification, FASP, procurement, LMIS and human resources. This activity was followed through interaction with PHD and PHLMC Directors, LG officials.
- **Capacity Building and Technical Support to LGs:** A critical mass of people at LG has been developed. Comprehensive training on procurement and supply chain management was conducted, participants certified and viber groups created for exchanging know-how and success stories.
- **Ensure commodity security through Pipeline Reporting and Monitoring:** Drug status pipeline report of FY 2017/18 and 2018/19 is produced through LMIS software and monitored with EDPs representatives and MD/DoHS. Stock status of 37 drugs is monitored on a quarterly basis, out of 121 FEDs included in TSB. The requirement for medical equipment and the status of available equipment is not monitored through the system yet.
- **Enhancing warehouse and inventory management:** In FY 2018/19, 500 posters promoting basic warehouse good storage practices were distributed and a catalogue of health commodities developed to support better practices in stores. The Epidemiology and Disease Control Division (EDCD) store physical stock count is complete and the EDCCD store now part of eLMIS alongside five Divisions and Centres, two province stores, 22 district stores, four LGs and 23 HFs. A draft warehouse management guidelines has been developed and is under review. MD has sent racks, material handling and safety equipment to five PMSs.

- **Data governance & online IMS support:** USAID/GHSC-PSM will be reconciling eLMIS master data against the health facility code issued by the new Health Registry. Online IMS support is performing optimally through Intellisoft. As per the new regulatory requirements on *Ma.La.Pa* forms, Intellisoft team has developed and incorporated those changes on the Online IMS and made available for the users for their daily operations.
- **Monitoring and Evaluation:** The country M&E plan was updated in FY 2018/19 to reflect organizational changes arising from the new federal structure. Minor changes were made to indicators based on the learning from the project. In FY 2018/19 two new KPIs related to eLMIS: order fill rate and lead time were reported in the quarterly report. Regular follow up with the supply chain pharmacists recruited by MoHP took place throughout the year. They were provided coaching and mentoring through visit, phone calls and email communication.

Challenges

- Weak system linkages between TABUCS, eAWPB, eTSB, eLMIS and eCAPP in preparing procurement proceedings and pre-bid information.
- The existing LMIS/e-LMIS is not comprehensive enough to inform the quantification and forecasting of drugs to cover all SNGs and federal requirements.
- Absence of health specific SBDs in eGP system is hampering the procurement of medicine in all levels of government.
- Delays in the evaluation of procurement systems due to the lack of post-bid information activities such as Procurement Compliance Audit System [PCAS], Quality Assurance Plan [QAP], Risk Mitigation Plan [RMP] and Contract Management System [CMS]
- Warehousing facilities in the medical stores do not have enough staff and or space for the adoption of good warehousing practices.
- There is a lack of skilled staff across all levels of Government who can carry out eGP, eCAPP, eTSB, eLMIS and Information Management System (IMS) and institutional memory has weakened due to the rapid transfers of staff involved in procurement and supply chain systems. Similarly, Capacity Building of Bidders and Suppliers is another issue to resolve immediately in the SNGs level.
- Weak contract management capacity and practices have caused issues relating to liquidated damages charges, variations, extension of time, and non-timely delivery of drugs.
- Ensuring the continuous availability of the free drugs at respective levels remains to be a challenge. A recently conducted survey has recently been carried out which reveals low level of availability of drugs at health facilities (Annex 9).

Way Forward

- Specific provisions for the procurement of drugs are required in the PPA/PPR. This will lead health friendly procurement practices in the health sector. The amendments on PPA/PPR shall also focus on Framework Agreements, Commodity Contracts and G-2-G Arrangements for health sector use.
- Focus on PFM and CAPP-MC to strengthen its monitoring functions to reduce audit observations in procurement. ICT based monitoring functions should be initiated.
- PPMO needs to develop and endorse standard operating procedures (SOP) for the quantification, forecasting, procurement and the disposal of expired drugs at SNGs level.
- Pre-bid information and planning systems should be strengthened including market analysis, cost analysis, sourcing analysis and risk analysis in procurement and supply chain management.

- Enhance the use eGP, eLMIS, eCAPP; and incorporate health sector friendly SBDs into the eGP system. Institutionalization of Procurement Clinic function for troubleshooting and technical support in SNGs levels procurement. The Learning Lab (LL) approach which is currently being implemented could be strengthened as a focal hub for SNGs level technical support.
- Ensure Quality Assurance Plan (QAP) including Pre-Shipment Inspection (PSI) of drugs in federal level and Post-delivery Inspection (PDI) of drugs at SNGs level.
- Strengthen strategic planning skills, data driven planning and decision making at various Supply Chain management levels; Capacity building, Quantification & Supply Planning, forecast accuracy, stock status analysis, Provincial Task Force developed and capacitated.
- Design competency-based in-service training, supportive supervision, and mentorship program, to improve SCM performance at provinces, District and local level.

3.2 Outcome 2: Improved Quality of Care at Point-of-delivery

Background

Improving the quality of care at the point-of-delivery is a priority for NHSS and is delivered under three outputs:

- Quality health services delivered as per standards and protocols
- Quality assurance system strengthened
- Improved infection prevention and health care waste management

Progress has been made in the first output by establishing minimum service standards for health posts and primary, secondary, and tertiary level hospitals. Both the NHSS and the 2019 National Health Policy prioritise quality of care and strongly advocate that regulations to accredit health institutions and quality assurance mechanisms should be endorsed and implemented for allopathic and ayurvedic medicines, supplies, lab services and medical equipment.

Major Progress in FY 2018/19

- Various divisions of DoHS/MoHP are revising and developing new protocols and guidelines, to align with the new Federal organogram.
- The Public Health Service Act 2018 was enacted.
- The Public Health Service Act 2018 outlines the institutional arrangements for accreditation. A Health Institution Quality Assurance Authority Act was drafted to establish an autonomous body for accreditation of private (including NGO) health institutions and Quality Assurance Guidelines have been prepared.
- A draft of the standards for accreditation of Provincial Laboratories is prepared.
- Public Health Service Regulations have been drafted and are in the process of approval.
- The guidelines to establish and upgrade hospitals have been developed by QSRD.
- MoHP has started to develop a National Health Care Quality Improvement Strategy.
- The Basic Health Care Services (BHCS) package has been defined and costed and in the process of consultation before proceeding for endorsement.
- Draft standard treatment protocols and draft operational guidelines for the BHCS package have been prepared by CSD/DoHS.
- MoHP/QSRD has developed Minimum Service Standard (MSS) for all levels of health facilities from health post to tertiary hospitals and have drafted MSS implementation guidelines. Provincial officials were provided training on the MSS (and training of trainers) to implement the MSS at federal and provincial hospitals. Details of the MSS approach is presented in Annex 5.
- Other standards and guidelines that have been prepared include: draft of the hospital risk management standard; draft of referral guidelines; standards for reproductive health and protocols for various level of health workers.
- The National Action Plan for Anti-Microbial Resistance (AMR) is being finalised. Tools for implementing AMR stewardship at hospitals was piloted in four hospitals.
- On-going support from NHTC to services providers included: follow-up enhancement (FEP) to SBA (40), MLP (74), and OTTM (6). Since 2016/17, 150 SBA nurses were trained as clinical mentors and in 2018/19 they provided on-site clinical mentoring to 1088 service providers. 45 service providers who received more than one mentoring sessions over a two year period demonstrate an increase in three decision making skills (from 58% to 73%) and four practical skills (from 51% to 70%).

- Assessments conducted on the availability and quality of services (including waste management); of the Provincial Hospital in Surkhet, 10 district-level hospitals in Karnali Province and 3 referral level hospitals in Province 5.
- Tuberculosis prevalence study has been completed

Challenges

- Improving access to health services remains a major challenge in mountain and hill areas, due to geographical barriers.
- Unclear governance and regulation structure for Quality Assurance at provincial and local level health institutions. Overlapping roles of various MoHP/DoHS divisions on quality of care leads to confusion.
- Weak quality assurance framework at health institutions for quality health service delivery.
- Less focus on data driven quality assurance mechanisms to improve the service delivery
- Developing key indicators in order to monitor the implementation of standards is challenging.
- Linking performance of health institutions with annual planning and budgeting.
- Large number of undetected cases of the Tuberculosis as revealed by the recent studies

Way Forward

- Finalise regulations to implement commitments in quality in the PHA.
- Finalise and endorse BHCS package and regulations/guidelines/protocols and implement
- Finalise and endorse AMR action plan and implement.
- Finalise national quality of care strategy and implementation guidelines, ensuring that planning is based on performance of health facilities and needs. Develop and define the quality assurance structures at all three levels of government.
- Implementation of MSS and develop a reporting and monitoring mechanism to link with annual planning.
- Cabinet approval of the GESI Strategy and develop an implementation plan to roll out the GESI strategy at Federal, Province and local levels.
- Develop a geriatric health care strategy and guidelines for elderly friendly services in hospitals.
- Expand the establishment of rehabilitation units and disability centres.
- Develop new and innovative rehabilitation related training courses i.e. physical and rehabilitation medicine, occupational therapy, and mid-level health workers.
- Finalise and approve the guidelines for the establishment and upgrade of health institutions. Bring the private hospitals under the licensing framework and develop e-licensing submission for private health institutions.
- Strengthen legal framework for the regulation of drugs and laboratory services across each level of government.

3.3 Outcome 3: Equitable Distribution and Utilisation of Health Services

Background

NHSS states that the MoHP will sustain and improve the progress made towards reducing inequalities in health outcomes through the expansion of health services focusing on the under-served, the poor, and urban communities. The NHSS has equity as one of its four strategic approaches as part of the approach to achieve universal health coverage. The major implications of financial, socio-cultural, geographical, and institutional barriers are reduced access to services. Equitable access to health services means that activities need to be developed that give priority to populations and areas who lack or have limited access to health services. There are two outputs under this outcome which include:

- Improved access to health services, especially for unreached populations
- Strengthened health service networks including the referral system

Major Progress

- The social health insurance (SHI) programme is being implemented in 49 districts with approximately 2.3 million members enrolled.
- 450 Community Health Units are in operation across 77 districts.
- Visiting providers have been providing long acting reversible FP methods in 60 municipalities of 20 remote districts.
- Roving auxiliary nurse midwife (ANM) are providing reproductive, maternal, new-born and child health services to un-reached groups for past two years.
- Birthing centres have been expanded in rural and remote areas by local government.
- Specialist doctors (MDGP, MD, DGO) who studied under the GoN scholarship programme have been deployed to provinces.
- 84 CEONC sites have been providing caesarean section service
- 12 hospitals¹⁴ have been providing geriatric health services and in 2019/20 MoHP plans to establish 4¹⁵geriatric wards in referral hospitals.
- Social service units (SSUs) are functional in 35 hospitals and MoHP has planned for an additional 3¹⁶in FY2019/20. Trainings on communication, psychosocial support, coordination and volunteerism have been provided in 3 SSUs in hospitals.
- 53,330 people received the Deprived Citizen Treatment Fund in FY 2018/19 (beneficiaries by diseases category: Cancer-37,121, Kidney- 5,866, Heart – 6,828, Sickle cell Anaemia- 1,026, Spinal Injury – 1547, Head Injury- 761, Parkinson -377, Alzheimer- 121.
- Disability Inclusive Health Services Guidelines and Disability Management guidelines have been developed to support implementation of the National Policy and Plan of Action for Disability.

Challenges

- Geographical barriers need to be addressed to improve access to health facilities
- Anaesthetic assistants continue to be placed in health facilities that do not have CEONC services and/or surgery.
- Limited population coverage under the health insurance programme.

¹⁴Patan Hospital, Kirtipur Ayurvedic Hospital, Bharatpur Hospital, Western Regional Hospital, BPKIHS, Bheri Zonal Hospital, Seti Zonal Hospital and Lumbini Zonal Hospital, Bir hospital, Koshi hospital, Rapti Academy of Health Sciences, Narayani hospital

¹⁵Mechi hospital, Janakpur hospital, Hetauda hospital and Surkhet hospital

¹⁶Dadeldhura hospital, Gaur hospital and Tulsipur hospital

- The procedures to access the Deprived Citizens' Treatment Fund remain to be complicated for the needy people to timely access the services.
- Limited availability of geriatric services and disability friendly health services and capacity of service providers to adapt service accordingly
- Mismatch between the budget allocated for SSUs and the client load.
- Increasing Leprosy prevalence rate yet an inadequate budget for the Leprosy Control and Disability Management Programme.
- Incorporating the disability information into the HMIS, including birth defects. Referral to higher level facilities for reconstructive surgery is not common.
- Insufficient numbers of skilled rehabilitation professionals and of rehabilitation facilities and equipment.

Way Forward

- Endorsement of PHS Regulations which contains BHCS package as an annex.
- Improve governance and accountability at the respective level by clear division of responsibilities for ensuring the delivery of basic health care services.
- Ensure equitable availability and provision of basic health care services especially in rural and remote areas through the continued expansion of services at strategic locations.
- Expand health insurance to all remaining districts and prioritise the enrolment of the poor in the health insurance scheme.
- Harmonise the services and benefits available in the BHCS package, health insurance and other free health care programmes (SSUs, Deprived Citizens Fund, Aama programme etc).
- Implementation of GESI Strategy, establishment of a GESI institutional mechanism and support to province and local levels for the roll out of the GESI strategy. Support to local government in health planning focusing on reaching un-reached and marginalized/vulnerable groups. Advocate for health services at local council and provincial levels to display data service coverage that is disaggregated.
- Develop new rehabilitation related training courses i.e. physical and rehabilitation medicine, occupational therapy, and mid-level health workers. Build the capacity of health workers for early case detection, management and community based rehabilitation. Intensify IEC activities to raise community awareness on early diagnosis and treatment, the prevention of disability, rehabilitation and social benefits
- Develop a geriatric health care strategy and guidelines for elderly friendly services in hospitals
- Coordination with provincial and local government and partners for the effective implementation of the "Policy, Strategy and 10 Years Action Plan on Disability Management". Revise the current HMIS as per the internationally comparable data standards to include disability data
- Review the budgetary allocations for expansion of SSU, OCMC, Geriatric, Disability and Leprosy Control Program.
- Manage and regulate home based care by developing guidelines related to home based care.

3.4 Outcome 4: Strengthened Decentralised Planning and Budgeting

Background

The NHSS highlighted the need to focus on a decentralised approach to health sector planning and budgeting with an aim to make the health system more accountable to the public and more responsive to their needs. It identifies that the centre will define national priorities, establish the necessary regulatory framework, monitor progress, and provide necessary technical and financial resources. Outcome 4 of NHSS has one single output: “strategic planning and institutional capacity strengthened at all levels”.

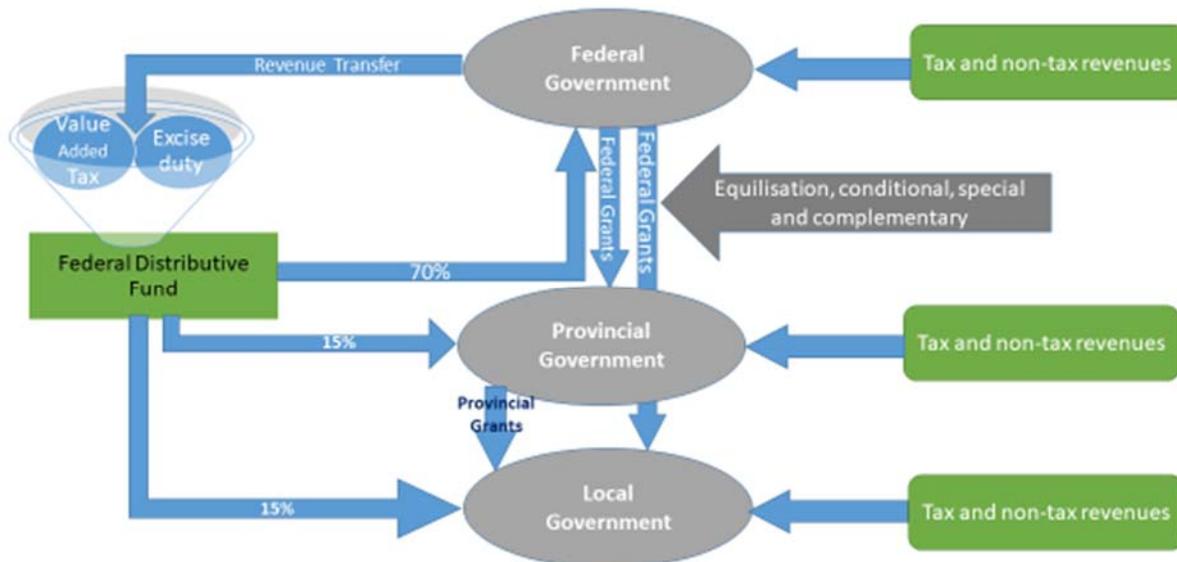
NHSS had envisioned that districts will become more responsible for participatory planning, budgeting, and implementing their respective health plans. However, with the promulgation of Constitution, Federalism has instead provided a major impetus to decentralised planning and budgeting. Each of three levels of governments have mandates to operationalize their policies and strategies and to develop Annual Work Plan and Budgets (AWPB). The MoHP organisational structure and health service delivery system has been revised for the federal, provincial and local levels and staff adjustments have taken place. At the province level, the Ministry of Social Development, Health Directorate, Logistics Management Office (PLMO) and Health Training Centres have been established. Health Offices have been established in each of 77 districts under the Health Directorate and previously existing District (Public) Health Offices have been dissolved.

As the planning and budgeting now happens in each of three levels of government, it is critical to ensure harmonisation of the annual work planning and budgeting process across levels of government so that a consistent and coherent plan can be developed for the overall effectiveness in the health sector. The delivery of basic health services will be a primary responsibility of the LGs while the federal and provincial governments have major roles in relation to setting the policy and regulatory framework, quality assurance, financing and management of hospital services.

Major Progress

- In the fiscal year 2018/19, annual planning and budgeting function happened in each of three levels of government from the start of the fiscal year, unlike in the FY 2017/18 when only a limited number of local governments were operational. As per the constitution, in FY 2018/19 in addition to the equalisation grant and conditional grant from the federal level to the provincial and local level; special and complementary grants were also provided.
- Overall, sources of revenue for the local level included: revenue transfer and grants from the federal and the province level as well as tax and non-tax revenue of the local governments (just like federal and provincial governments). Similarly, sources of revenue for the provinces include revenue transfer and grants from the federal level as well as tax and non-tax revenue of the respective provincial governments. An overview of the various source of the revenues for three levels of governments and fund flow mechanism are shown in Figure 8.
- Tax and non-tax raising rights of federal, provincial and local level are defined in Inter-governmental Fiscal Management Act. As shown in Figure 3.4.1, revenues collected in the form of value added tax and excise duty on domestic production will be accumulated in the Federal Distributive Fund which will be distributed across federal, province and local level at the proportion of 70:15:15. Allocation across provinces and local level are to be done as per the basis provided by the National Natural Resources and Fiscal Commission.

Figure 3.4.1: Fiscal Transfer across Different Levels of Government



- The equalisation grant is unconditional by nature and can be used for administrative and developmental activities including for the health sector. The conditional grant is earmarked to specific sectors and should be spent as per the conditions provided. In terms of volume of the grant, conditional grant is mainly for education, health, and agriculture sectors.
- MoHP developed a consolidated implementation guideline for province and local levels to facilitate the implementation of health programmes as provisioned through the conditional grants.
- Of the total health budget (NPR 56.4 billion), 33% was allocated for the local level, 7% allocated for the provinces and remaining 60% was allocated for the federal entities. However, it is important to note that additional budget was channelled to provinces and local levels to meet the budgetary shortfall and for the establishment of the health facilities as per the National Health Policy.
- An overview of the health sector budget by the NHSS outcome is presented in in Table 3.4.1 which depicts that Outcome 2 “Improved quality of care at point of delivery” accounts for the largest share of the budget (43%) followed by “Equitable utilisation of healthcare services” (29%) and “rebuilt and strengthened health systems” (22%) in terms of the budgetary weight in 2018/19.

Table 3.4.1: Budget Allocation for NHSS Outcome Indicators by Federal, Provincial, and Local Government, FY 2018/19

Amount in million NPR

NHSS Outcome Indicators	Allocated Budget			Total	
	Federal	Provincial	Local	Amount	%
Rebuilt and strengthened health systems: infrastructure, HRH management, procurement and supply chain management	11,114	463	760	12,337	21.9
Improved quality of care at point-of-delivery	11,364	1,447	11,499	24,310	43.1
Equitable utilisation of healthcare services	9,634	1,625	5,082	16,341	29.0
Improved sector management and governance	7	8	75	90	0.2
Improved sustainability of health sector financing	530	47	78	656	1.2
Improved healthy lifestyles and environment	875	521	409	1,805	3.2
Strengthened management of public health emergencies	335	29	70	434	0.8
Improved availability and use of evidence in decision-making processes at all levels	222	45	179	446	0.8
Total	34,082	4,185	18,153	56,420	100

Source: FMOHP and NHSSP (2018). Budget Analysis of Ministry of Health and Population FY 2018/19. Ministry of Health and Population and Nepal Health Sector Support Programme.

- The provision of grants and own-source revenue of the provinces and local levels has provided an opportunity for integrated planning at the sub-national level. The volume of the equalisation and conditional grants allocated in FY 2018/19 is depicted in Table 3.4.2. On average, local government received 200 million NPR in budget in the form of an equalisation grant while the volume of the conditional grant per local level was 102.7 million NPR including 20 million NPR conditioned for the health sector.

Table 3.4.2: Summary of the Financial Equalisation and Conditional Grant Provisioned by Federal Government, 2018/19

Description	Financial equalisation	Conditional	Total Grant	
			Total	Average (per government unit)
			<i>Amount in million NPR</i>	
Provinces Total	50,298.6	63,135.5	113,434.1	16,204.9
Local Level				
Metropolitan	2,663.0	4,054.2	6,717.2	1,119.5
Sub-metropolitan	3,559.8	4,479.2	8,039.0	730.8
Municipality	38,165.4	50,175.9	88,341.3	320.1
Rural municipality	40,819.3	51,136.3	91,955.6	199.9
Local Level Total	85,207.5	109,845.6	195,053.1	259.0

Source: Compiled from MoF (Red Book) and AWPB for local level.

- Two separate guideline documents were developed for the local level and provincial level to facilitate the implementation of the health program planned under the conditional health budget provisioned from federal to provincial and local levels.
- For the establishment of the health facilities as per the national policy, and standards for the establishment of the health facilities including cost sharing criteria have been prepared and approved by MoHP.
- After completing the mapping of existing health facilities, grant amount was transferred to respective local levels for the construction of health facilities as per approved standards in 1200 wards having no health facilities.

- Allocation of the health sector conditional grant to local level (18,152.7 million NPR) increased by 20% in FY 2018/19 as compared to the grant allocated in FY 2017/18.
- The revenue transfer mechanism as provisioned in the constitution has come into effect from the FY 2018/19. As per this mechanism, funds accumulated in the federal distribution fund will be divided to federal (70%), provinces (15%) and local levels (15%).
- Provincial governments have also allocated equalisation and conditional grants to local level in the FY 2018/19.
- On top of the conditional and equalisation grants, NPR 20 billion was provisioned by the federal government under complementary and special grants for FY 2018/19 to meet additional needs at provincial and local level.
- With the support of external development partners, MoHP has channelled technical support to the provincial and local levels. MoHP continues to implement the learning lab approach in seven local government areas (one from each province) to closely monitor and document challenges and successes.
- Organisational capacity assessment tool (OCAT) has been implemented in the learning sites which has contributed to a better understanding of the status of the organisational capacity at the local level and to be able to identifying training needs. Details about the implementation approach of OCAT is provided in an Annex 3.

Highlights of FY 2019/20

- The volume of the equalisation and conditional grants allocated in 2019/20 is depicted in Table 3.4.3. For 2019/20, on average, NPR 284.0 million has been provisioned per local level in the form of equalisation (NPR 119.5 million) grant and conditional grant (NPR 164.5 million).
- Similarly, per province equalisation grant and conditional grant from the federal level for 2019/20 is NPR 7899.8 million and NPR 6363.7 million respectively. The summary of the equalisation and conditional grants for the provinces and local levels is presented in Table 3.4.3.

Table 3.4.3: Summary of the Financial Equalisation and Conditional Grant Provisioned by Federal Government, 2019/20

Description	Financial equalisation	Conditional	Total Grant	
			Total	Average (per government unit)
Provinces Total	55,298.6	44,545.8	99,844.4	14,263.5
Metropolitan	3,131.2	4,620.2	7,751.4	1,291.9
Sub-metropolitan	3,484.1	4,511.1	7,995.2	726.8
Municipality	39,779.6	55,510.3	95,289.9	345.3
Rural municipality	43,552.1	59,232.5	102,784.6	223.4
Local Level Total	89,947.0	123,874.1	213,821.1	284.0

Note: Amount in million NPR.

Source: Compiled from MoF (Red Book) and AWPB for local level.

- The amount of conditional grant provisioned from federal to provincial and local level for health has been respectively NPR 4,878.5 million NPR and NPR 21,229.7 million which comes to be per province NPR 696.9 million and per local level NPR 28.2 million, on an average.
- On top of the conditional and equalisation grants, NPR 20 billion has been provisioned by the federal government under the complementary and special grants for FY 2019/20 to be provided to provinces and local levels to address additional needs at provincial and local level.

- A comparative scenario of federal grants (equalisation and conditional grants) to select local levels (learning lab sites) for 2018/19 and 2019/20 is presented in Table 3.4.4 which depicts that the flow of grants is not uniform across the local levels. Pokhara Metropolitan City is the exceptional among the selected sites to receive reduced grant under each of the equalisation and the conditional grant in 2019/20 as compared to 2018/19. Among the selected sites, the highest percentage increase (45.9%) in the federal grant is observed for Kharpunath Rural Municipality which is dominated by the substantial increase in conditional grant component. This indicates that basis for the resource allocation is being adjusted to their needs and the revenue generating capacity which are the two major components to define the equalisation and conditional grants to local governments.

Table 3.4.4: Overall Pattern of the Federal Grant to Selected Local Levels

Amount in million NPR

S. N	Municipality	Equalisation Grant			Conditional Grant			Total		
		2018/19	2019/20	Change in %	2018/19	2019/20	Change in %	2018/19	2019/20	% change
1	Itahari Sub-Metropolitan City	283.1	316.6	11.8	303.6	341.0	12.3	586.7	657.6	12.1
2	Dhangadhimai Municipality	136.7	141.9	3.8	129.1	155.4	20.4	265.8	297.3	11.9
3	Madhyapur Thimi Municipality	213.3	217.9	2.2	150.5	161.7	7.4	363.8	379.6	4.3
4	Pokhara Metropolitan City	614.4	600.2	(2.3)	1,204.2	1,172.7	(2.6)	1,818.6	1,772.9	(2.5)
5	Yasodhara Rural Municipality	120.8	123.2	2.0	101.4	136.2	34.3	222.2	259.4	16.7
6	Kharpunath Rural Municipality	60.0	68.1	13.5	110.8	181.1	63.4	170.8	249.2	45.9
7	Ajaymeru Rural Municipality	68.2	78.5	15.1	167.5	190.8	13.9	235.7	269.3	14.3

Source: Compiled and analysed based on data from *Inter-governmental Fiscal Transfer*, 2018 and 2019, Ministry of Finance.

Challenges

- Although the package of basic health services has been prepared, it is yet to be endorsed.
- Delay in the staff adjustment and grievance redressal process affected the management of health functions and services delivery at respective level.
- Local Governments are often not allocated sufficient conditional budget to cover staff salaries and demand side financing programmes as Local level information is not always up-to-date. The MoHP is coordinating with the Ministry of Finance (MoF) to address this problems.
- Challenge lies in ensuring horizontal and vertical harmonisation in the planning and implementation of health sector programmes across three levels of government.
- Ensuring timely implementation of the planned activities and utilisation of the allocated budget in the current federal structure continues to be a challenge as the institutional structures are newly formed and organisational capacity remains limited.

Way Forward

- Accelerate the process for the endorsement of the basic health care services package which is the critical for the planning and budgeting process.
- Create a platform to enable interaction across three levels for ensuring harmonised and coordinated planning and addressing the issues as they emerge.

- Develop a planning framework to effectively link different budget management information systems across three levels such as line ministry budgetary information system (LMBIS) and sub-national treasury regulation system (SUTRA)
- Closely engage with provinces and local levels to monitor progress, performance and challenges in planning and implementation.
- Continue to develop case studies, document success stories and promote cross and peer learning approach to strengthen delivery of the health services at the local level.
- Coordinate with the National Resource and Fiscal Commission and MoF to develop a transparent mechanism for the rational allocation of resources for the health sector for provinces and local levels.
- Consider developing a framework for the enhancement of organisational capacity to effectively manage the health sector functions at the respective levels.

3.5 Outcome 5: Improved Sector Management and Governance

Background

The NHSS states that the restructuring process of the health sector will be aligned with the broader state restructuring agenda vis-a-vis federalism. Furthermore, it recognises aid effectiveness as an important facet of health governance through embracing the principles and priorities of the Development Cooperation Policy, 2014, for further strengthening sector wide approach (SWAp) arrangements. There are five outputs under this outcome as follows:

- The MoHP structure is responsive to health sector needs
- Improved governance and accountability
- Improved development cooperation and aid effectiveness
- Strengthened multi-sectoral coordination mechanisms
- Improved public financial management

Major Progress

Transition to Federalism

Along with the implementation of political and governance structure, the health sector has continued the transition to full federalisation. Managing transition with ministerial stewardship and adequate and timely technical and managerial guidance to the sub-national governments remained vital to the MoHP. The sixteen bills necessary to guarantee the fundamental rights enshrined in the constitution were passed by both Houses of the Federal Parliament. Of these two Acts, Safe Motherhood and Reproductive Health Rights; and Public Health Service Bill, set historic landmark towards securing health as the fundamental rights of the citizen.

With the gradual deployment of officials in line with the new structure, the MOHP has provided timely guidance on an annual plan and budget process; rationalised the health budget under the conditional grant; progressively institutionalised sector coordination functions; initiated the policy dialogue platform and formed and/or revitalised technical working groups in a number of areas. Structurally, sub-national governments require a range of competencies and skills to deliver their responsibility in health sector, which is being addressed by the MoHP but it is a long-term investment.

Increased number of visits, including high-level officials, from federal to sub-national level and ongoing dialogue on technical and governance matters between the federal ministry and sub-national government has improved coordination. As part of the decentralisation process, MoHP has set up a committee to review the federal-level organisational structure to consider downsizing. Confusion in mandates between various levels of government, weak coordination, technical and managerial capacity constraints still limit the ability of provincial and local governments to fulfil their new responsibilities. Systems and processes for financial management and procurement are not yet fully established at sub-national level. Human resource constraints (both skills set and staffing numbers) are a key challenge to quality service provision. The MoHP is in a much weaker position to influence health financing and performance. Given the scale, nature and complexity of the transition, the risk of discontinuities and disruption to health service delivery is high and fiduciary risks are likely to increase, at least in the short-term.

Policies, Acts, Guidelines and Structure

- The 2019 National Health Policy has been endorsed by the GoN.

- The approach paper of 15th periodic plan (with chapters on health and nutrition and on population and migration including) has been endorsed by the GoN.
- The following Acts have been passed: Staff Adjustment Act, Public Health Service Act (PHS Act) and the Safe Motherhood and Reproductive Health Act have been enacted.
- The PHS Act has broadly defined the scope of basic health services, it has provision of health system and health service management, organ transplant, social, environmental and cultural determinants of health and management of emergency health services among others
- The overall structure of the MoHP has been reorganised as per the federal structure under federalism. As per the new provision, there are 3 departments, 7 centres, 22 hospitals including academia, 8 councils and health insurance board and development committees.
- Provincial Health Directorate, Provincial Health Logistics Management Centres, Provincial Health Training Centres and Provincial Health Offices at district level have been established.
- The revised Gender Equality and Social Inclusion Strategy (GESI) has been submitted for the approval.
- The Gender Responsive Budget Guidelines for health sector were developed.
- The Guidelines on Leaving No One Behind Budget Markers developed and submitted for approval
- The National Guidelines on Disability Management developed and approved alongside the National Guidelines on Disability Inclusive Health Service Guidelines.
- Under the leadership of OPMCM a five-year National Strategy and Action Plan for GBV and Gender Empowerment is prepared.
- Health sector social accountability guidelines developed process has been initiated based on the strategic review of Social Audit given the changed federal context.

DLI Achievements

- The target "60% of audited spending unites responding to OAG's primary audit queries within 35 days" was met with 60.99% achievement
- The target "85% of MoHP's annual spending captured by TABUCS" was met with 86% achievement.
- The target "decrease the audit queries against audited amount" has been met: In FY 2016/17 audit, there was 7.01% audit queries and in FY 2017/18 audit queries reduced to 4.77%.

Public Financial Management

- Internal Control Guidelines: In February 2019, the FCGO developed the "Internal Control System Directives" and in October 2019 the Parliament passed the Financial Procedural and Accountability Act. MOHP revised and endorsed Internal Control Guidelines on 4th July 2018.
- Public Financial Management Strategic Framework: The Financial Management Improvement Plan (FMIP) has been updated as the Nepal Health Sector Financial Management Strategic Framework (NHSFMSF) which is yet to be approved.
- Procurement Strategic Framework: The Procurement Improvement Plan (FMIP) has been updated as the Nepal Health Sector Public Procurement Strategic Framework (NHSPSF) which is yet to be approved.
- Changes in OAG's Forms and Formats: GoN changed the financial recording and reporting forms and formats in FY 2018/19 and MoHP is updating these forms and formats in TABUCS.
- New Chart of Accounts: GoN has applied a new chart of accounts from FY 2019/20. MoHP has incorporated these new chart of accounts in TABUCS
- Chart of Activities: The revised chart of accounts and OAG forms have been linked with chart of activities in TABUCS. Through these changes TABUCS can capture health sector budget and

expenditure from all spheres of government. These technical inputs can be used by other systems including SUTRA. The updated chart of activities now implemented in DUDBC.

- Linkage between TABUCS and LMBIS: All planned activities of LMBIS can be uploaded directly in TABUCS and auto transfer will start.
- FMR: All FMR (3 trimesters) were submitted to EDPs on time as per the revised FMR templates. The last and final third Financial Monitoring Report (FMR-3) for FY 2018/19, has been prepared and submitted to EDPs on 26th September 2019.
- Audit Financial Statements: The Audit Financial Statements of FY2017/18 has been submitted to the Office of the Auditor General (OAG) and its audit report certified by OAG on 4th June, 2019. The certified report forwarded to EDPs on 10th June, 2019. This is an improvement on last year, when the report was submitted on 27th June 2018
- Internal audit: MoHP prepared the internal audit FY 2017/18) status report on May 2019 and shared in PFM committee meeting with EDPs. Internal audit data are recoded on TABUCS.
- Capacity enhancement: Financial management workshops were held in five regions (covering 7 provinces) to enhance capacity of the programme managers and finance officers in financial management. 40 people were trained in TABUCS including 18 account staff of DUDBC, PIU and cost centres.

Other activities

- With the view of gaining an in-depth understanding on health service delivery at the local level (i.e. leadership, governance and accountability, service quality, planning and budgeting, and monitoring of health interventions, reaching the unreached) the MoHP is implementing the 'learning lab' approach in seven rural/urban municipalities, one in each province.
- For measuring and improving data quality, the RDQA tool, (an online tool) is developed and is available for health workers and managers at various levels to monitor the quality of data produced by health facilities.
- A Health Facility Registry which captures brief information on each health facility belonging to both the public and private (non-government sector including) sectors across the country is prepared and uploaded on the MoHP web site. The registry features an interface that allows various information systems to connect to it and keep their individual lists of health facilities up-to-date and synchronized with that of MoHP. The list of facilities in the registry can be viewed from <http://nhfr.mohp.gov.np>.
- The report of Nepal national micronutrient status survey is finalised and published.
- The guidelines for Health Facility Operation and Management Committee has been endorsed and is being implemented.
- Joint Consultative Meetings (JCM) are held as planned.

Challenges

- Ensuring the delivery of BHCS across all local levels with limited capacity of local governments for managing devolved health functions.
- The health sector at the local level will have to compete with other sectoral priorities such as roads and infrastructure, among others. In the absence of a clear mechanism in health for the prioritisation and resource allocation with use of evidence at the local level, the health sector may suffer from a lack of resources and compromise service delivery.
- Ensuring a good balance between strengthening hospitals/facility based curative services and sustaining public health interventions at local levels. Indications at the local level show an increased focus on curative care which can be at the cost of public health interventions.

- Unclear engagement modality for development partners and other stakeholders such as private sector, NGOs/CBOs, and cooperatives for the provincial and local level.
- Developing a coordination and collaboration mechanism between ministries and different tiers of government (Federal, Provincial and Local levels) to address the complex issues that impact on access to and use of health services by women, the poor and other excluded groups. Insufficient training program and budget to implement TABUCS in Province level. There is not a single activities and budget for annual maintenance cost (AMC) support to update and upgrade the TABUCS System.
- Maintain gains made in GESI in the health sector at provincial and local levels

Way Forward

- Approval of the BHCS package and support the LGs to implement BHCS.
- Clarity on the health governance structures of all levels with clear roles and responsibilities.
- Provide technical and managerial support to government leadership and respective health departments/units at province and local level for uninterrupted health service delivery.
- Work with Natural Resources and Fiscal Commission, MoF, and respective ministries to ensure financial accountability and reporting of health expenditure.
- Update TABUCS in the federal context and support for its effective implementation by concerned entities.
- Updated the Internal control guidelines in light of "Internal Control System Directives, 2019" (FCGO) and new Financial Procedural and Accountability Act, 2019
- Finalization of Public Financial Management Strategic Framework (PFMSF) for the overall improvement of financial management.
- Contract Management System (CMS) and Store Management System (SMS) has to be develop as additional model of TABUCS System.
- Development of Gender Responsive Budget Guidelines and its implementation at all levels (Federal, Provincial and Local Levels).
- Promote the use of disaggregated data (from GESI and social inclusion perspective) and evidence during planning, programming and monitoring at provincial and local level.
- Integration of GESI concerns into all to be formulated and revised policies, strategies and action plans.
- Implementation of GESI strategy including development of Implementation Plan and establishment of GESI institutional mechanism at all levels after the approval.
- Implementation of Gender Responsive Budget Guidelines and its implementation at all levels (Federal, Provincial and Local Levels).

3.6 Outcome 6: Improved Sustainability of Healthcare Financing

Background

The National Health Policy 2019 ensures the provision of free BHCS as a fundamental right of every citizen. The policy envisions providing access to quality health services (beyond BHCS) in an affordable manner by ensuring financial protection in health. The policy aims to do this by gradually increasing the state’s investment in the health sector, increasing per capita expenditure and reducing out of pocket expenditure (OOPE) through social health protection arrangements, including targeted subsidies. Increasing investments in the health sector and in social health protection mechanisms are the focus of NHSS and are delivered through two outputs:

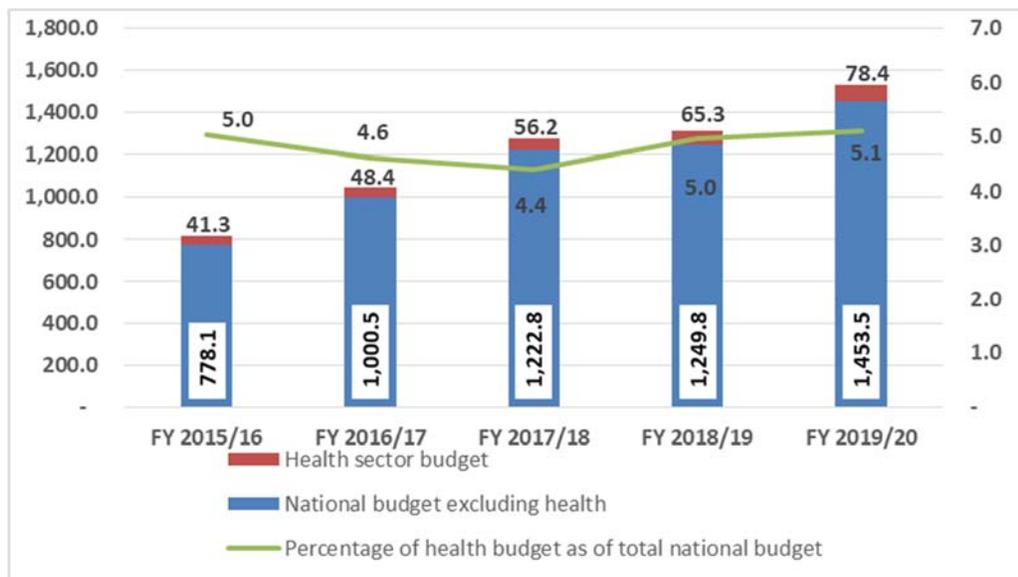
- Strengthened health financing system
- Strengthened social health protection mechanisms

Major interventions proposed under this outcome include developing and introducing a resource allocation formula, enhancing the MoHP’s capacity on performance based resource allocation, enhancing capacity for the institutionalisation of the National Health Accounts and the harmonisation of existing social health protection schemes, and the implementation of health insurance.

Major Progress

- The NHSS sets a target of allocating 9% of the national budget to the health sector. Figure 9 shows that the proportion of the total government budget allocated to health has remained at 5%. Compared to FY 2018/19, there is 0.1% increase in the health sector budget for FY2019/20. PGs and LGs appear to have used different revenue sources to increase the allocations to the health budget and so the actual health budget as a percentage of national budget is anticipated to rise.

Figure 3.6.1: Health budget as a percentage of the national budget



Source: Budget Analysis 2019/20

- The GoN had expanded the coverage of the health insurance programme to 49 districts and approximately 2.3 million people have been enrolled which is around 5% of the catchment

population in the implemented districts. The Health Insurance Act makes enrolment in health insurance mandatory which is important to increase the enrolment levels.

- The National Health Account (NHA) reports that OOPE as percent of CHE was 63.53% in FY 2012/13 and 55.44% in FY 2015/16. This implies that OOPE as percent of CHE has gradually been decreasing.

Challenges

- Still low level of government health spending in relation to government's commitment to achieving UHC and leaving no one behind.
- Out of pocket expenditure is still a dominant share of health care financing.
- Capturing health spending at all level of governments beyond the conditional grant.
- Institutionalisation of the National Health Accounts to routinely monitor health expenditure including spending by PGs and LGs.
- A fragmented approach to the management of various social health protection schemes such as the free health care programme, free delivery, health insurance, and so on.
- Delays in the identification of the poor hampering for the inclusion of the poor and other targeted groups in health insurance.

Way forward

- Initiate a discussion to improve the 'conditionality' in conditional grants to make the conditional grants more effective and easy to manage.
- Assess the root causes of low budget absorption and take action accordingly
- Support to PGs and LGs for increased spending in health
- Establish a mechanism to track and consolidate budget allocation and spending for health at each level of government
- Design and develop a health financing strategy that is applicable to all levels of government
- Prioritise the enrolment of the poor segment of the population in health insurance through government subsidy as provisioned in Health Insurance Act

3.7 Outcome 7: Improved Healthy Lifestyles and Environment

Background

MoHP believes that creating a healthy environment and healthy lifestyle is central to the improvement of overall health status. For this purpose, NHSS suggests innovative approaches for behavioural change for specific behaviours like smoking, alcohol consumption, health seeking behaviour, and obesity. The single output for this outcome is promotion of healthy behaviours and practices.

Major Progress

- Mental Health Section has been set up at EDCC as per the new organogram of MoHP. Mental health strategy and action plan has been drafted under the leadership of EDCC
- Developed training based on the Standard Treatment Protocol for Prescribers and conducted TOT at central level and training in 6 different provinces. Training modules for child and adolescent mental health has started.
- An International Conference on Child and Adolescent Mental Health was organized in November 2018.
- MoHP secured funding from the Global Environment Facility to implement project entitled Building Resilience of Health Systems in Asian Least Developed Countries to Climate Change with the support from WHO
- MTOT on climate change and health impact conducted for officials from federal, provincial and selected local levels (two batches)
- Nagrik Aarogya Program conducted in all provinces and local level promoting active lifestyle through Yoga and Meditation sessions, health diet
- Implementation of the Package of essential NCDs (PEN) expanded in 30 districts
- Development of training module on mental health for adolescents has been completed
- Expansion of school health/nurse program by province 1 and 3
- Teaching module developed on Ayurveda and Yoga Education at School
- Orientation on Ayurveda and Yoga Education at School in five public schools (Kathmandu, Bhaktapur, Rupandehi; Dhanusha)
- Guideline for the rehabilitation of helpless, persons with disability and those unclaimed by the family developed and implemented through NGOs
- Different IEC materials disseminated on various themes such as for the prevention against dengue, general awareness and sanitation, mental health.
- National mental health survey is ongoing. A pilot study in three districts has been completed and preparation for the national prevalence survey has been initiated.
- Healthcare waste management guideline is being developed
- Package of essential NCDs (PEN) expanded in additional districts to cover 51 districts
- Effect of climate change in medicinal plant is planned
- Psychosocial counselling training package is in development process
- Expansion of school health/nurse program is planned for 30 additional schools
- Physiotherapy training package developed and piloting is ongoing in three districts (Dhanding, Dolakha and Dhanusha)
- Development of training package for the occupational health safety is ongoing
- Development of training package on road traffic accident is ongoing
- Ayurveda and Yoga Education at School is being piloted in five public schools (Kathmandu, Bhaktapur, Rupandehi; Dhanusha)

- Mental health strategy has been drafted is in the process of consultation
- NCD related promotional health services are expected to initiate from the FY 2019/20 from National Ayurveda and Panchakarma and Yoga Center, Budhanilkantha
- The MoHP developed a Standard Treatment Protocol for medical officers and primary health care workers based on the revised essential drug list and Mental Health Gap Action Programme (mhGAP) intervention guidelines.
- The National Health Training Centre developed training modules and facilitators guides for both psychosocial interventions and detection and management of priority mental disorders using mhGAP intervention guides.
- OCMC operation guidelines SSU Operation guidelines were revised as per the federal context in 2018/19.
- Fifty five OCMCs have been established and functional in fifty-four districts by the end of 2018/19. 6243 GBV survivors received services from OCMCs in year 2018/19. Among them, 32% of girls were 18 years and below. Out of the total number of cases, physical and mental abuse accounted for 57%, rape and attempted rape account for 39% and 4% of the cases were related to witchcraft, child marriage and trafficking.
- Medico-legal Service Guidelines were approved by the Cabinet. 150 doctors in all 77 districts and 26 forensic specialists were trained to improve skills critical to GBV cases especially for rape survivors.
- Basic GBV and psychosocial counselling training was provided to 46 staff nurses and OCMC focal persons from 43 hospitals with OCMCs.
- GBV clinical protocol rolled out in 16 hospitals of 16 districts. Completed a training of trainers' session entitled Health Response to GBV at 6 hospitals.
- Case study booklet developed containing the 45 GBV cases and are being distributed in the different districts.
- Process initiated for the revision of GBV Clinical Protocol under the leadership of Nursing and Social security Division.
- A much awaited senior citizen survey commissioned in 2014 has finally come out.
- GBV Referral Directory developed for the GBV survivors.

Challenges

- Monitoring of air quality, food quality and hygiene and water quality remains poor
- Preparedness to combat with repercussions of the climate change remains weak
- Increasing prevalence of vector borne diseases such as dengue and chikungunya
- There isn't a "one-door" service for GBV survivors and the long-term rehabilitation of the GBV survivors.
- Low level of awareness on GBV, mental health, and psychosocial issues at community level
- There is not yet nationally representative data on prevalence of mental health problems.

Way Forward

- Provision of public places to promote active life and fitness centers for physical activity
- Expansion of urban health promotion centers to promote healthy life styles and preventions of lifestyle related diseases
- Development of Guideline for yoga package (Basic and Medium) and NCD-wise therapeutic yoga package
- Institutionalise Yoga in public offices and organizations (corporate yoga)
- Strengthening and scaling-up of 12 new OCMCs in 2019/20.

- Finalise TOT on GBV Clinical Protocol and roll out in OCMC based hospitals and periphery
- Develop online reporting system for OCMCs.
- Conduct psychosocial counselling training to staff nurses in OCMC based hospitals.
- Conduct of GBV Medico-Legal training in seven provinces covering 77 districts.
- Development and standardize psychosocial counselling training curricula.
- Incorporate NCD data management into the current HMIS training package.
- Strengthen integrated surveillance of communicable diseases and NCDs.
- Implement surveillance of road traffic accidents in coordination with concerned stakeholders.

3.8 Outcome 8: Strengthened Management of Public Health Emergencies

Background

NHSS provides a roadmap for improved preparedness and strengthened response to public health emergencies during humanitarian and public health emergencies. It prioritises revising protocols and guidelines for improved health sector emergency at the central and decentralized levels along with enhancement of institutional and human capacity for effective and timely response. The outputs of this outcome are:

- Public health emergencies and disaster preparedness improved, and
- Strengthened response to public health emergencies

Nepal experienced a humanitarian crisis due to the devastating earthquake and its subsequent tremors in April 2015. The health sector response to earthquake was well recognized and applauded at national and internal level. However, the post-earthquake response nevertheless stretched the capacity of the health sector to its limit and also exposed some limitations of the health systems and capacity especially on emergency preparedness and disaster response. Isolated tremors not related to the 2015 earthquake have been reported from Karnali and Sudur Paschim provinces indicating preparedness is very essential.

Besides earthquakes, disease outbreaks have been being reported. Table 3.8.1 summarizes the situation of major diseases reported to EDCD, including an unprecedented number of dengue cases in the first four months of the FY 2019/20. Kala-azar has been reported for the first time in the mountainous districts (Dolpa, Humla and Mugu) of Karnali Province.

Table 3.8.1 Reported Cases of Disease

Diseases	Districts affected	Number of reported cases	Period
Scrub Typhus	63	1271	July 2018 – October 2019
Kala-azar	54	218	July 2018 – October 2019
Dengue	67	14662	July 2018 – October 2019
Malaria	48	1065	July 2018 – October 2019

Source: EDCD, EWARS Bulletin

Major progress in FY 2018/19

- Effective support was provided to the outbreak of dengue in Sunsari (Dharan), Kathmandu, Chitwan and Kaski (Pokhara) and other districts of the country through search and destroy activities and raising household awareness through the media and the mobilization of youth.
- An additional 4 hub hospitals (2 in Province 5 and 2 in Sudur Paschim Province) were established which included setting up medical logistics warehouses and finalising contingency plans.
- Emergency Medical Deployment Teams were formed in the existing six designated hub hospitals in the Kathmandu valley.
- A kala-azar tracking system at treatment sites is planned for the current fiscal year and has started in province 1.
- The EWARS system is now operational in all 77 districts and is based on the DHIS 2 platform.

The following documents were produced

- National Malaria Treatment Protocol 2019

- National Malaria Surveillance Guidelines 2019
- National Guidelines of Prevention, Control & Management of Dengue in Nepal 2019
- A Guide to Early Warning And Reporting System (EWARS) 2019
- LLINs Distribution Report-2019
- National Guideline on Kala-azar Elimination Program 2019
- National Guidelines for Rabies Prophylaxis and Management in Nepal
- Implementation Guideline for Case Based Investigation 2019 (Revised)
- Procedure for Rehabilitation of people with Psycho-social Problems, 2019

Challenges

- Lack of clarity in the roles and responsibilities of different authorities for the management of Public Health Emergencies.
- Funding gap to address emergency status.
- Inadequate supply of essential medicines and prepositioning of supplies at strategic locations
- Regular reviews of 'hospital emergency response and contingency plans' do not happen
- Gaps in coordination and communication between public and private hospitals.

Way Forward

- Continue to develop the capacity and deployment procedures of Rapid Response Teams at Local level and in hub hospitals in order to ensure an effective first response.
- Strengthen EDCD information management and its role in coordinating support between relevant line ministries and other stakeholders at all levels of government.
- Establish an emergency response fund at all levels of government and ensure the prepositioning of essential lifesaving drugs/medicines and supplies in strategic locations.
- Establish HEOCs in the remaining provinces.
- Develop a comprehensive integrated multi-year national capacity building plan for the management of emergencies and disasters.

3.9 Outcome 9: Improved Availability and Use of Evidence in Decision Making Processes at All Levels

Background

The NHSS focuses on increased access to and use of information through the use of ICT. It also emphasises improved and interoperable routine information systems and prioritises surveys and research. Similarly, it strives for improved and integrated health sector reviews at various levels that feed into the planning process. Towards achieving universal health coverage and leaving no one behind, the NHSS and the SDGs emphasise monitoring and reducing the equity gap in the health outcomes of different population sub-groups. The outputs linked to the stated outcome 9 are as follows:

- Integrated information management approach practiced,
- Survey, research and studies conducted in priority areas
- Improved health sector reviews with functional linkage to planning process

Major Progress

Development of Guideline

- In line with the 2017 National eHealth Strategy, the MoHP has drafted the National eHealth Guideline to provide a framework for standardization of eHealth systems in Nepal. The guideline defines the necessary steps and standards to be followed during the design, implementation, monitoring and review of eHealth systems.

Integrated information management

- With regards to the information management in the health sector, the Cabinet has decided to establish an institutional mechanism for ensuring monthly reporting of the health facilities in the national HMIS database by the concerned Local, Provincial and Federal Governments. Further, the mechanism is also for ensuring regular, timely and complete reporting of other information from health facilities to the Local Government, from Local Government to Health Offices, from Health Offices to Health Directorates and from the Directorates to the Department of Health Services.
- 'Health Sector M&E in Federal Context' is the Monitoring and Evaluation (M&E) guideline for the three levels of government and was developed last year. It has been a guiding document for provincial and local governments to generate, use, share and report health sector data.
- The MoHP continued to prioritise developing the eHealth system so that various health information systems are interoperable. The Health Facility Registry, a tool that keeps track of all health facilities within the country, public and private, as well provides information on which services are offered has been updated. The registry has an interface that allows other information systems to connect to it in order to keep their individual lists of health facilities up-to-date and synchronized with the MoHP. The registry can be accessed from the MoHP website.
- The MoHP continues to expand the electronic reporting of service data from health facilities. This year 1400 public health facilities submitted HMIS monthly reports electronically. As health posts and primary health care centres are now being managed by the local government, the MoHP is focusing on enhancing their capacities on health information management, including the use of the DHIS2 platform and all 753 local governments reported the health facility based service statistics electronically to the national database (HMIS). This has been a milestone for the continuous flow of data from local governments to the national HMIS system. The HMIS e-learning modules for the orientation of health workers, statisticians, computer operators and programme managers have been developed and are available on the DoHS website (dohs.gov.np).

- The web-based Routine Data Quality Assessment (RDQA) tool and the e-learning package have been updated incorporating feedback from the users and is made available on the MoHP website (www.rdqa.mohp.gov.np). A summary of the key findings from applying this tool is in Annex 6.
- Web-based digital dashboards have been developed to monitor major health indicators including the NHSS Results Framework and health-related SDG indicators.

Electronic Health Records

- MoHP has drafted a guidelines for implementation of electronic health records (EHR) at health facilities. The MoHP alongside the MoSD at the provincial level, have prioritized EHR at hospitals. To date the following hospitals have started EHR including:
 - Province 1: Mechi, Illam, Pachthar, Dhankuta, Bhojpur, Taplejung Hospitals
 - Province 2: Gajendra Narayan Singh Hospital
 - Province 3: Nuwakot Hospital, Dolakha Charikot Hospital
 - Gandaki Province: Dhaulagiri Hospital, Pokhara Academy of Health Sciences
 - Province 5: Gulmi, Rapti Academy of Health Sciences
 - Karnali Province: Salyan and Dailekh Hospitals
 - Sudurpaschim Province: Doti and Bayalpata Hospitals

Surveillance systems

Maternal and Perinatal Death Surveillance and Response (MPDSR)

Facility-based MPDSR has been expanded from 77 hospitals in FY 2018/19 to an additional 16 hospitals in FY 2019/20. Community-based MDSR has been expanded from 11 districts to an additional seven districts (Taplejung, Rautahat, Nuwakot, Myagdi, Palpa, Dailekh and Bajhang) in FY 2019/20. FWD is updating the web-based MPDSR recording and reporting tools and planning to use a mobile application to report deaths from the community. MoHP's 2020 target is to have Community-based MPDSR in 20 Districts and Facility-based MPDSR in all public (110) hospitals.

Early Warning and Reporting System (EWARS)

EWARS is a hospital-based sentinel surveillance system where the sentinel sites (hospitals) send weekly reports (including zero reports) on six epidemic prone, vector-borne, water and food borne diseases in order to detect outbreaks. EWARS started in 1997 with 8 sentinel sites and expanded to 24 sites in 1998, 26 sites in 2002, 28 sites in 2003, 40 sites in 2008, 82 sites in 2016 and 118 sites in 2019. A total of 36 (private hospitals and medical colleges) were included as sentinel sites across Nepal in 2019. EWARS sentinel sites are gradually reporting in the DHIS2 platform, which will contribute to building better linkages with the HMIS.

Survey, research and studies

- MOHP is planning to conduct the second Nepal Health Facility Survey (NHFS) in FY 2019/20. The initial consultation with supporting partners has been initiated and the sub-national level consultation was held in Gandaki Province in May 2019. Data collection is planned for February-May 2020 and the report is expected to be finalized in November 2020.
- Nepal Health Research Council (NHRC) has conducted a number of researches/studies in 2018/19, the key findings are summarised below:

Non-communicable diseases risk factors STEPS survey 2019
<u>Key findings</u>
Tobacco users: 29% of adults 15-69 years of age

Alcohol users: 21%

Consumption of Fruits and vegetables: Only 3% met WHO recommendation

Salt intake: 9.1 grams per day - almost twice the WHO recommendation

Physical activity: 7.1% of adults did not meet WHO recommendation

Cervical Cancer screening: 6% of women of age 30-49 had the test in the last five years

Oral Health: 90% cleaned their teeth once or more than once a day. 14% reported issues with teeth, gum or mouth; while only 2.8% visited dentist in last 12 months

Violence and injury: 4% were involved in a road traffic incident in past 12 months

Mental Health: 66% had some or high level of work stress, 62% had general stress at home

Joint Pain: 17% (not related to injury and lasting for more than month)

Back Pain: 19% reported to have back pain in last 30 days

Headache: 15% reported to have severe headache in last 30 days

Mean BMI: 22.7 (22.6 for men and 22.8 for women), Overweight: 24% and Obese: 4%.

Raised BP: 25% (Males-30%, females-20%)

Raised fasting blood glucose or currently on medication: 6%

Raised cholesterol levels or currently on medication: 11.0%

Cardiovascular disease (CVD) risk $\geq 30\%$, or with existing CVD among 40-69 years: 3%

Health System:

- 61% of 40-69 years aged had got their BP measured from a health worker at least once
- 10% measured to have raised BP and/ or on treatment /medication
- 21% of people measured to have raised blood glucose and/ or on medications
- Among the surveyed population only 7% are member of health insurance scheme
- 40% usually go to a government facility/ provider for raised blood pressure while 35% for oral health issues

Policy recommendations

- As the prevalence of NCD risk factors is found high, there should be effective enforcement of NCDs risk factor prevention and control programmes

Population based study on selected Chronic disease in Nepal

Key findings

- High prevalence of non-communicable diseases (COPD: 11.7%, Diabetes: 8.5%, CKD: 6.0% and CAD: 2.9%).
- Most of the behavioral and biological risk factors were more prevalent among men than women. Other factors such as high LDL cholesterol, low HDL cholesterol, overweight, obesity, waist-hip ratio and abdominal obesity were noted high especially among females.

Policy Recommendations

- Effective health promotion and chronic disease prevention program
- Effective rehabilitation programs to lessen the effect for those who are already alcohol dependent and effective awareness and prevention programs should be started and strengthened to advocate the risks associated
- BP screening programs should be deployed in larger numbers catering to a greater coverage.
- Special interventions need to be designed for women to help counter issues related to body mass which have long term health implications.

Sickle Cell disorder in Bardiya Municipality of Bardiya district

Key findings

The prevalence of Sickle Cell disorder is found 11.3% among 1 to 29 years Tharu population (Sickle cell trait 10.7% and Sickle cell diseases 0.7%)

Policy Recommendations

There is need of counselling to unmarried people for their marriage to avoid Sickle cell in their future generation

Mapping the availability of Ayurveda and other Complementary Medicine Services Centers in Nepal

Key findings

- Most of the Government institutions practicing T&CM in Nepal were the Ayurvedic Centers. Acupuncture was commonly practiced in combination with Ayurveda or Naturopathy as an adjuvant

therapy in most centers. T&CM were commonly practiced by qualified and registered doctors in their respective system. There were also practices done by the registered assistants with diploma or certificate degrees.

Policy Recommendations

- Create national level information of different types of T&CM practices that can be available to the public would be useful in bringing all traditional system under single umbrella where they could be recognized, regulated and connected with each other to deliver better impact on population health in Nepal.
- There is a need to develop conceptual models or frameworks for each system, create definite regulations policies, planning, and building network infrastructure required for the overall developments of all the existing T&CM in Nepal.
- Further, there is a growing demand for complementary medicine with the burgeoning morbidity and mortality of Non-communicable Diseases. Many patients seek complementary medicine along with the conventional medicine for the treatment of Non-communicable Diseases. In this scenario research on identifying the main scientific, policy, and practice issues related to CAM research and explores and translates of validated therapies into conventional medical practice to reduce burden of Disease due to Chronic Non-Communicable disease is very crucial.

Population based cancer registry

Key findings

- From January to May, 2018 a total of 702 cancer cases from Kathmandu Valley, 256 cancer new cases from Siraha, Saptari, Dhanusha and Mahottari and 23 new cases from East and West Rukum were identified
- In 702 cases from Kathmandu Valley, cancer incidence is higher among females comparing to the males (379 Vs 323). The higher incidence is found among the age group of 70-74 years.
- In male the top leading cancer site is lungs followed by lip and oral cavity
- In females, breast followed by lungs, cervix uteri

Quality of essential medicines in public health care facilities of Nepal.

Key findings

- Out of 244 batches of 20 generic medicines collected, 37 batches were found substandard.
- Out of identified substandard medicines, 23 (62.16%) batches of medicines were supplied by Government of Nepal and 14 (37.83%) batches of medicine samples were purchased from local resources
- Among 62 health facilities, only 13% were found to follow the medicine storage guidelines
- Temperature and humidity records exceeded the recommended range in both health facilities and Regional Medical Stores.

Policy Recommendations

- There should be provision to assess the quality of essential medicines supplied in health facilities.
- Stringent rules and regulations should be made along with their effective implementation to prevent substandard/counterfeit medicines from entering into pharmaceutical supply chain.
- All the infrastructures required for storage of medicines should be established and maintained in all Regional medical stores and health facilities.
- DDA should strengthen its resources to ensure quality of medicines that are widely being used in pharmaceutical market of Nepal

NHRC has plan to conduct the following studies in the coming months of FY 2019/20:

- Community based Intervention for Prevention and Control of Non-Communicable Disease Risk Factors (CIPCoN): Baseline Survey in province 2
- Community based Intervention for Prevention and Control of Non-Communicable Disease Risk Factors (CIPCoN): End line Survey in Dhankuta and Illam Districts
- Assessing the status of Menstrual Health and Hygiene Management among adolescent girls in Nepal
- Population Based Cancer Registry in Nepal
- National Mental Health Survey, Nepal
- Nepal Clinical Trial Registry (NPCTR)

- Burden of Diseases (BoD) study in Nepal
- Assessment of Residual Pesticide levels in commonly consumed fruits and vegetables and their Health Risks in Kathmandu Valley
- Assessment of impacts of air pollution on human health in selected urban areas of Nepal
- Assessing effects of climate change on spatio-temporal distribution of vector-borne diseases in Nepal

NHRC has provided ethical approval for the following major studies in FY 2018/19

- Transmission Assessment Survey (TAS-II) in 12 districts of Nepal
- Factors associated with willingness to pay for Social Health Security Scheme among the residents of Baglung Municipality
- Identifying barriers to accessibility and availability of Safe Abortion Services among young women in Makawanpur
- Cost analysis of diagnosis and treatment of tobacco related cancer in selected hospitals of Nepal

Policy / Technical Briefs

With the objective of translating the evidence into action, policy briefs have been developing using secondary data. The following briefs have been developed:

- Hand in hand in health care: partnership management
- Visiting service providers in family planning
- Organisational capacity assessment and its utilisation in Nepal
- Minimum Service Standards for Health Facilities
- Effect of distance to health facility on use of institutional delivery services in Nepal
- Equity gap between the 10 high performing districts and the 10 low performing districts
- Utilisation of ANC and Delivery services at different level of health facilities

MoHP is also preparing technical briefs on the following:

- Improving quality of HMIS data through web-based RDQA,
- Use of HMIS data in reviews and planning.
- Stock take of health information management and M&E in the Constitution, Acts, Regulations, Policies, Strategies and Cabinet Decisions

Health sector reviews

- Based on the last year's feedback the MoHP prepared a guideline and tools for the health sector review at all three levels of government. The objective was to standardise the review process at the local and provincial level and link the review at the sub-national level with the federal level review and planning. The guidelines and tools have been distributed and shared through the MoHP website.

Challenges

- Limited availability of quality data to meet the health sector data needs at local, province, and federal levels
- Limited use of evidence based decision making at all levels
- Limited use of integrated information management leveraging the ICT at all levels to sustain the good practices and achievements of the health sector
- Slow progress in the institutionalisation and regularisation of national health accounting.

Way Forward

- Ensure compliance of timely reporting from health facilities on monthly basis.

- Digitize HMIS recording registers to facilitate on time reporting, improving data quality and use of data at the point of data generation.
- Standardize the M&E orientation package for induction training to different health cadres and roll out.
- Finalize and share eHealth Guideline and EHR guideline with stakeholders to facilitate standardization and interoperability with the national database.
- Digitize and integrate Aayurveda Information Management System with the national database.
- Ensure functional and reliable data sources for all the NHSS and SDG indicators.
- Effective implementation of the guideline 'Health Sector M&E in Federal Context, 2075.
- Implementation of 'Health Facility Registry' at all levels.
- Develop and operationalise the central standard data repository.
- Standardise, develop, strengthen, and institutionalise e-health initiatives at all levels.
- Institutionalize and regularize of producing national health accounts.

Annexes

Annex 1: Progress on the Health Sector Policy and Programmes as stated in Policy and Programme of FY 2075/76

S.N.	Policy and Programme statement	Progress
1.	Implement the behavioural ethics of health workers and clinicians towards patients/service users	<ul style="list-style-type: none"> Behavioural ethics of health workers and clinicians towards patients/service users were compiled from respective councils and uploaded in website of MoHP Monitoring of health workers behaviour has been done to check whether behavioural ethics has been followed
2.	Provide emergency surgery and trauma management services in health facilities	<ul style="list-style-type: none"> Guideline has been prepared and the process of construction of trauma unit via Department of Urban Development and Building Construction in health facilities in all seven provinces nearby highway (Attariya, Rakam Karnali, Lamahi, Kurintar, Waling, Pathalaya, Itahari) and modern trauma center in Dhalkewar and Dadelhura has begun Total number of trauma service centres will be 7 Construction of 2 modern trauma centre has been initiated;
3.	Provision of punishment for hospital administrators/managers not adopting safe disposal of hospital waste	<ul style="list-style-type: none"> Guideline has been prepared by the hospitals and implementation has been done as per the hospital waste management guidelines Under clause 41 of Public Health Act 2075, there are 5 sub-clauses that are linked with sanitation and waste management
4.	Increase the use of modern communication technology in health care, make available high-speed internet service in hospitals and health facilities and manage virtual learning and treatment through digitalization	<ul style="list-style-type: none"> Health facilities registration system has been established, registration of all health facilities has been completed and updated in MOHP website Telemedicine service is running in 30 different hospitals of the country, Health Management Information (HMIS) Online reporting is being done by all 753 local levels 205 resource materials have been updated in the MOHP website Internet facilities is available in all level hospitals
5.	Health insurance Program will be expanded nationwide to make accessible to all citizens	<ul style="list-style-type: none"> Health insurance program has been implemented in 456 local levels according to the target of this year Health Insurance Regulation has made provision to gradually incorporate other health services not listed in the basic health services into the insurance package Health Insurance Guideline has been approved and endorsed by the cabinet on 4 Chaitra, 2075
6.	Maternity care services will be provided beginning from the pregnancy period to ensure better nutritional status of mother and child. Under this, the transportation allowance provided for those who visit health facilities for ANC and delivery has been doubled	<ul style="list-style-type: none"> Besides the implementation in governmental facilities, Aama Programme is being implemented in partnership with 64 health facilities as per the target of this year. Free new-born care program has been implemented in 31 (SNCU-20, NICU-11) health facilities. Guideline has been revised to provide the transportation allowance; transportation allowance has been doubled from current FY Multi-sectoral Nutrition Program is being conducted regularly in 562 local levels as per the target for this year
7.	A minimum of one health facility will be established in each ward within two years with a cost sharing approach with the local levels	<ul style="list-style-type: none"> Cost sharing criteria and health facilities establishment standard have been prepared and approved by MOHP. Mapping of existing health facilities has been completed and communication has been done with the Ministry of Finance for the fiscal transfer of the required grant amount to respective local levels for the construction of

		health facilities as per approved standards in 1200 wards having no health facilities
8.	Manage and ensure the availability of essential drugs provided free of cost by the government in all health facilities	<ul style="list-style-type: none"> Listed essential free drugs has been provided from 84 district hospitals, 204 Primary Health Centres and 3809 Health Posts The list and standards of essential free drugs has been prepared and circular was sent to federal, provincial and local levels All district hospitals have been operating their own pharmacy
9.	Begin the construction of Bir Hospital according to the Master Plan, establishment of modernized health laboratory as a high technology diagnostic centre and establishment of kidney treatment centre in Kathmandu, and service expansion for the treatment of sickle cell anaemia with the help of identification and research of sickle cell anaemia prevalent in Terai region especially in the Tharu community	<ul style="list-style-type: none"> DPR has been prepared and feasibility study is being done for the construction of Bir Hospital's wing at Duwakot Koshi, Narayani, Bharatpur, Bheri and Dadeldhura hospitals have been strengthened to specialized hospitals by the cabinet decision on Falgun 3, 2075. The work for site selection of modernized health laboratory and kidney treatment centre has been commenced by the committee. The treatment for sickle cell anaemia has been started in 11 hospitals (Mahakali, Seti, Tikapur, Bheri, Rapti, Tulsipur, Lamahi, Bardiya, Kapilvastu, Lumbini and Parasi) Three researches on sickle cell anaemia have been conducted by Nepal Health Research Council (NHRC) and the reports have been prepared
10.	To encourage for the expansion of pharmaceutical production in order to be self-reliant in basic medicines	<ul style="list-style-type: none"> To be self-dependent in basic medicines by expanding the pharmaceutical production capacity, a coordination meeting was held participated by Association of Pharmaceutical Producers, investors, importers, exporters, DDA, MOHP and other relevant stakeholders More than 50% of the medicines purchased are of national production
11.	Geriatric ward will be established in 100 bedded hospitals and above hospitals. Extended health services in these hospitals will be made compulsory	<ul style="list-style-type: none"> Geriatric ward establishment and operation implementation guideline has been approved by the Government of Nepal (Ministerial level) on Kartik 4, 2075. There were 8 hospitals operating geriatric ward in last fiscal year. As per the target set for this year, the service has been started in 4 additional hospitals making a total of 12 hospitals where geriatric ward is available. A draft of Extended Health Service operation guideline has been prepared
12.	Mobile hospital service including specialized services will be organized in coordination with private medical colleges	<ul style="list-style-type: none"> Specialized health camp with surgical services was conducted in G.N.S. Sagarmatha Zonal Hospital in co-ordination with Nepal Army Hospital and in Syangja in co-ordination with Civil Servants Wives Association.
13.	Process will be accelerated to establish Government run medical academy in all seven provinces and additional institutes	<ul style="list-style-type: none"> As per the Government of Nepal cabinet decision, G.N.S. Sagarmatha Zonal Hospital in Province 2 has been upgraded to Ramraja Prasad Singh Academy of Health Sciences The draft bill of Ramraja Prasad Singh Academy of Health Sciences has been prepared A proposal for in-principle approval of Integrated Act for all Health Science Academy has been submitted to the cabinet
14.	Ten Crore has been allocated for the establishment of Bidusi Yogmaya Ayurved University for research and development of	<ul style="list-style-type: none"> A bill on Bidusi Yogmaya Ayurved has been prepared by the bill drafting committee and been forwarded to

	Ayurvedic medicines and to provide Ayurvedic education	Ministry of Law, Justice and Parliamentary Affairs by the Ministry of Education, Science & Technology
15.	Citizen <i>Arogya</i> Program will be launched to develop healthy body, positive thinking and personality through meditation and yoga. Arrangement for the delivery of health service by integrating alternative treatment methods such as Ayurvedic, Homeopathic, Unani, Acupuncture, Amchi and Natural medicine with allopathic treatment.	<ul style="list-style-type: none"> Working procedure for Citizen <i>Arogya</i> Program has been prepared Citizen <i>Arogya</i> Program has been organized in different places of the country The tender for the procurement of necessary equipment for the operation of Panchakarma and Yoga has been approved Provincial level Ayurveda research centre and hospital has been established at Sunsari, Laukahi, Bardibas, Gorkha and Nuwakot. A procedure/guideline for integrating allopathic treatment with Ayurvedic, Homeopathic, Unani, Acupuncture, Amchi and natural medicine treatment methods has been prepared. One door service delivery is being done continuously by health facilities at local level
16.	Smoking and drinking will be banned in all public places and vehicles. Arrangement would be made to streamline the production, import, sale and distribution of alcohol and tobacco products	<ul style="list-style-type: none"> Guideline has been prepared and implemented for the effective implementation of Tobacco Control Act and Regulations In clause no. 39 of Public Health Act, under quality of consumable goods, for the quality improvement during production, storage and distribution of consumable goods including meat and water, it is mentioned that the Government of Nepal can set minimum quality standard as per the federal law
17.	Rapid Response Team including specialist will be deployed for the control and elimination of epidemic prone diseases	<ul style="list-style-type: none"> For the deployment of Rapid Response Team in province and local levels, working procedure/ draft has been prepared and approved on 31 Baisakh, 2076 by the committee meeting Rapid Response Team has been formed in 25 hub hospitals
18.	Provision of Air Ambulance in rural areas for the emergency relief of pregnant and post-partum women at risk	<ul style="list-style-type: none"> As per the working procedure prepared by the Ministry of Women and Children for the operation of Air Ambulance, request was made to MOHP to facilitate in this regard and was done accordingly
19.	Quality improvement of basic and specialized health services	<ul style="list-style-type: none"> Basic Health Care package has been revised Cost estimate of basic health care package has been completed for implementation process A draft of treatment protocol of all diseases mentioned in basic health care package has been prepared Minimum Service Standards has been prepared for the quality improvement of health care in health facilities at all levels Implementation guideline has been prepared to implement Minimum Service Standards for the quality improvement of health care in health facilities at all levels A draft of working procedure for Hospital risk/hazard management has been prepared A preliminary draft document has been prepared for improving the referral mechanism List of specialized services has been prepared in Minimum Service Standard and there is provision to provide those services from selected hospitals Selected specialized services are available in all central level hospitals

20.	Ensure there is minimum of one medical officer in each local level	<ul style="list-style-type: none"> • A committee coordinated by PPMD chief has been formed to draft a guideline for mobilization of doctors in local level • The list of 251 health facilities (Primary Health Centre and Health Posts) to be upgraded to Primary Hospital and the working procedure has been prepared and as per the procedure the work has been initiated by Department of Urban Development and Building Construction • Feasibility study of health facilities selected by Department of Urban Development and Building Construction is being done
21.	Treatment and rehabilitation of disable and helpless psychiatric patients	<ul style="list-style-type: none"> • A working procedure for the treatment and rehabilitation of disable and helpless psychiatric patients has been prepared • The working procedure has been sent to all health facilities and being implemented

Annex 2: Progress on the Disbursement Linked Indicators

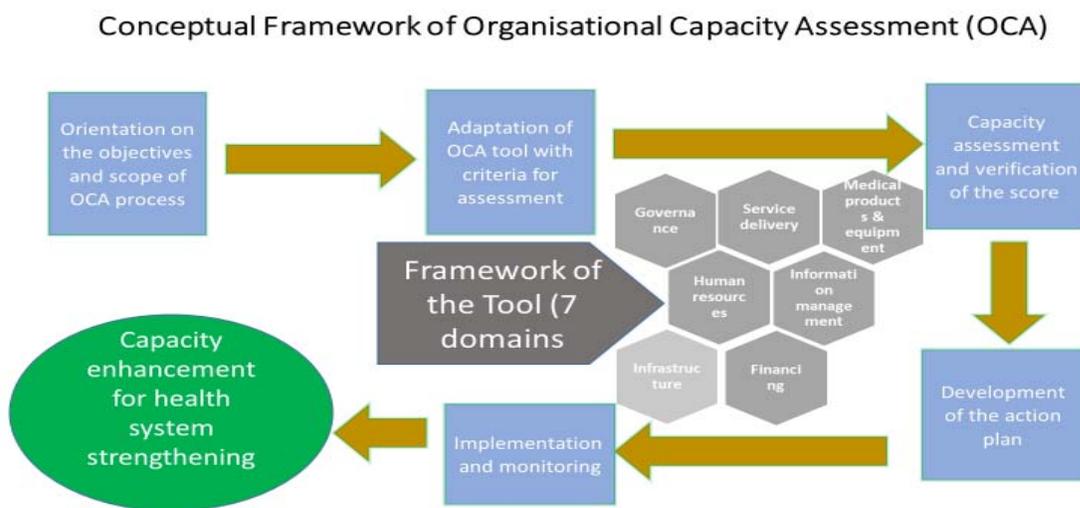
DLI	DLI target for year 3	Progress of 2018/19
DLR 1.2:	Training on procurement or e-procurement and standard bidding documents to provinces completed	Achieved
DLR 1.4	70% of value of total contracts managed by MD done through online e-procurement of Year 3	Achieved
DLR 2.3	Annual Report on grievances received and addressed	Achieved
DLR 3.3	MoHP endorses standard specifications for essential equipment to be procured by MD	Achieved
DLR 3.4	For Year 3 procurement, 80% procurement of health commodities, as specified in the list of health commodities with standard specifications and procured by MD, is based on the use of standard specifications	Achieved
DLR 4.2	Training on, and installation and operation of, eLMIS completed for all central and provincial (including sub-provincial) medical stores of at least two provinces; and baseline data generated for minimum stocks of tracer health commodities	Achieved
DLR 10.3	HMIS/DHIS 2 training provided to all seven provinces and HMIS/DHIS 2 dashboard includes indicator measuring timely reporting from health facilities	Achieved
DLR 7.3	eAWPB used in Year 3 for planning and budget submission by MoHP and all departments, divisions, centers, and 25% of remaining spending units under the MoHP.	Achieved
DLR 8.3	85% of MoHP spending in Year 3 captured by TABUCS	Achieved
DLR 9.3	60% of spending units reporting to the MoHP respond to primary audit queries within mandated 35 days	Achieved
DLR 11.3:	MoHP provides orientation training to all seven provincial and a limited number of municipal-level governments on social audit mechanism	Achieved
DLI 12	Equity in essential health service utilization improved. Three tracer indicators will be: (1) family planning (2) safe motherhood and (3) sick child care - Average 10% point improvement from the baseline in the equity gap in each tracer indicator	Partially Achieved (1 & 2 achieved; 2 not achieved)
DLI 13	60% of low performing districts have fully immunized VDCs	Achieved
DLI 14	Infrastructure: health infrastructure better able to withstand to earthquakes - hospital retrofitting (not needed to be verified by NHRC)	Achieved

Annex 3: Enhancing Capacity through the Implementation of Organizational Capacity Assessment Framework

Background: As part of Nepal’s shift towards a federal system, the management of basic health care services has been devolved to local governments. In this regard, the DFID-funded Nepal Health Sector Support Programme (NHSSP) has been providing necessary support to the MoHP in enhancing the capacity of these local-level entities. The first step in the process, however, was the assessment of the organizational capacity for the management of the health sector at the municipal level using Organizational Capacity Assessment (OCA) tool. This tool has been introduced in seven municipalities-identified as ‘learning sites’.

OCA as a tool for self-assessment: OCAs have been implemented in other countries, including in spheres other than health. The OCA tool is a self-assessment tool that facilitates to identify the gaps and helps in strengthening of the health system through building and boosting organizational capacity. In line with the World Health Organization’s health system building blocks framework, the OCA is tailored for the local governments, which comprise of seven domains branching into three to seven sub-domains each. Each sub-domain, then, consists of multiple benchmarks or criteria for capacity assessment. Scores range from zero to four, where, zero represents the weakest while four represents the optimum capacity for that particular sub-domain. Performance is subsequently measured by comparing the overall score for all the domains against the optimum score in percentage. Based on this, capacity is categorized as follows: if performance falls below 40%, capacity is “limited” or in “need of significant support”; if between 40% to 70% as “some” or in “need of additional support”; and above 70% as “good” or “need to sustain”.

A capacity development plan were also developed as part of the process, so as to address capacity gaps over time. Furthermore, periodic capacity appraisals should be conducted in accordance with the MoHP’s evaluation cycle.



Adaptation of the tool and its institutionalization: The National Health Training Centre (NHTC) of the MoHP was identified as the institutional home for rolling out the OCA across the learning sites and to other local government levels. A seminar was organised with NHTC officials for the adaptation of the OCA concept and its implementation process and to train the facilitators for its roll out in local health system, based on the WHO’s framework for health system building blocks.

The seven OCA workshops were conducted at six local government levels from January to July 2019. The key participants of the workshop from the local governments were elected bodies (mayor, deputy

mayor and ward chairs), municipality staff (administrative, IT, planning, finance and women development officers) and health team (municipal officials and health facility in-charges). A slightly different approach was followed in Kharpunath Rural Municipality of Humla district, Karnali, Strengthening System for Better Health, a project supported by the United States Agency for International Development facilitated the capacity assessment process.

Summary of findings: At the OCA workshops, participants rated their own capacity on a scale of zero to four, based on the benchmarking criteria defined under each of 32 sub-domains under seven building blocks of the health systems —Governance, Service Delivery, Human Resources for Health, Health Infrastructure, Health Products, Health Information and Health Financing. The benchmarking criteria for the assessment were defined by the participants themselves tailoring to the local context. The assessments found different capacity score on health system components which was not dependent on the type, size, or location of the local governments.

Based on the assessment in seven learning sites, the score ranged from 17% to 65% on Governance; from 5% to 45% on Service Delivery; from 20% to 60% on Human Resource for Health; from 5% to 55% on Health Infrastructure; from 25% to 85% on Health Products; from 25% to 44% on Health Information; and from 33% to 92% on Health Financing.

The OCA revealed that the overall capacity of the local governments in managing delivery of basic healthcare services was found to be “weak”. This was similar to the situation in Health Infrastructure as each of seven municipalities were found to have struggled to set up infrastructure according to the national standard. In fact, of the 58 health facilities (including health posts and primary hospitals) across seven learning sites, a majority either did not possess their own land or had not well-constructed structures. The findings also revealed that although local governments were equipped with reasonable level of financial resources, management structure, and health products, weaknesses in ensuring effective evidence-based planning and their implementation were major reasons for their weak organisational capacity. Correspondingly, it was also observed that service delivery functions and support services did not meet the minimum service standards.

The capacity development plans were developed based on the gaps identified via the OCA tool. They were then discussed with the municipal team so that priorities could be set for the allocation of budgets for the upcoming fiscal quarter/year. From the perspective of Gender Equality and Social Inclusion, focus was on developing strategies to expand coverage and ensure access to services for the unreached population.

Lessons learned: To enable the roll-out of the OCA beyond the learning sites and sphere of government, the following key lessons were identified:

- The OCA was found to be an effective tool to improve the organisational capacity in the health sector by systematic assessment of the existing capacity, enhancing accountability within the organisation and addressing the capacity gaps.
- OCA process should be standardized by developing the User's Guide and Participants' Manual to ensure harmonized approach and to aid facilitators and participants to facilitate its expansion beyond learning sites.
- The mixed composition of participants was ideal for OCA workshop because the benchmarking tools were related to decision-making, resources-mapping, planning, legal frameworks, and regulation, the participation of elected representatives (mayor, deputy mayor, and ward chairs from local government) was highly effective.

- Local governments were found have commitment for the health sector as reflected in their capacity development plan to increase resources for the health sector for ensuring delivery of quality health services.
- A majority of the local governments prioritized the strengthening of the health facilities, establishing information systems at the health facility level, and arranging logistics for improving service delivery in accordance with MoHP standards.

Conclusion: The Organizational Capacity Assessment is a self-assessment tool that aids executives and health planners to identify their capacity levels and the key gaps, development of action plan to address the gaps and implementation of those plans for improving the overall capacity and decision-making to allocate resources effectively through the local-government planning and budgeting process. When implemented in several learning sites, the tool was found to be effective in enhancing the overall capacity of local governments and demonstrated considerable potential for implementation during scale up. The development of standard manual and guidelines by NHTC will provide further opportunities to implement OCA beyond the local level.

Annex 4: Developing Provincial Health Policy in Karnali - Balancing Aspirations and Feasibility

Nepal is transitioning from a unitary to a federal system of government. During the transition, provincial and municipal levels of government are developing their own policies to address local contextual issues and challenges in alignment with the federal level. In this context, the Ministry of Social Development (MoSD) of Karnali Province initiated the formulation of the Provincial Health Policy and Health Act to strengthen the health system and improve health outcomes within the province. Karnali Province represents one of the hardest to reach and disadvantaged areas Nepal.

In early 2019, the MoSD prepared a draft policy in consultation with key stakeholders to ensure alignment with federal policies and inclusion of evidence-based priorities and actions to improve health outcomes in Karnali Province. USAID's Strengthening Systems for Better Health Activity, along with other partners, has been supporting the provincial government to develop their policies and systems, and has facilitated the review and provided technical support to the MoSD during the policy finalization process.

The support of the development partners included facilitating public engagement, reviewing the draft policy against the mandate of federal, provincial and local governments, and providing technical review based on the policy's appropriateness, feasibility and sustainability. Key stakeholders engaged in the series of consultations, review and refinement of the policy draft included Dr. Senendra Raj Upreti, former Secretary of Health and Population, Dr. Bhagawan Koirala, Chair of the Advisory Committee, other Committee members, and senior staff from the Activity. Stakeholders who participated in consultative workshops to draft, refine and finalize the policy included Mr. Dala Rawal, Honorable Minister for Social Development in Karnali Province, Dr. Man Bahadur BK, Secretary of the Ministry of Social Development, Mr. Brish Shahi, Chief of Health Service Division, Ms. Rita Bhandari Joshi, Director of the Provincial Health Directorate and other senior staff members. The draft policy was shared and discussed with the Chief Secretary, officials from the Ministry of Internal Affairs and Law, members from the Ministry of Finance and Planning, and level local leaders. Together, this team reviewed the evidence, discussed options, considered issues surrounding feasibility and appropriateness, identified the best approaches for Karnali Province, and reflected them in the policy. Along the way, stakeholders gathered and reviewed inputs from development partners and reference from other provinces.

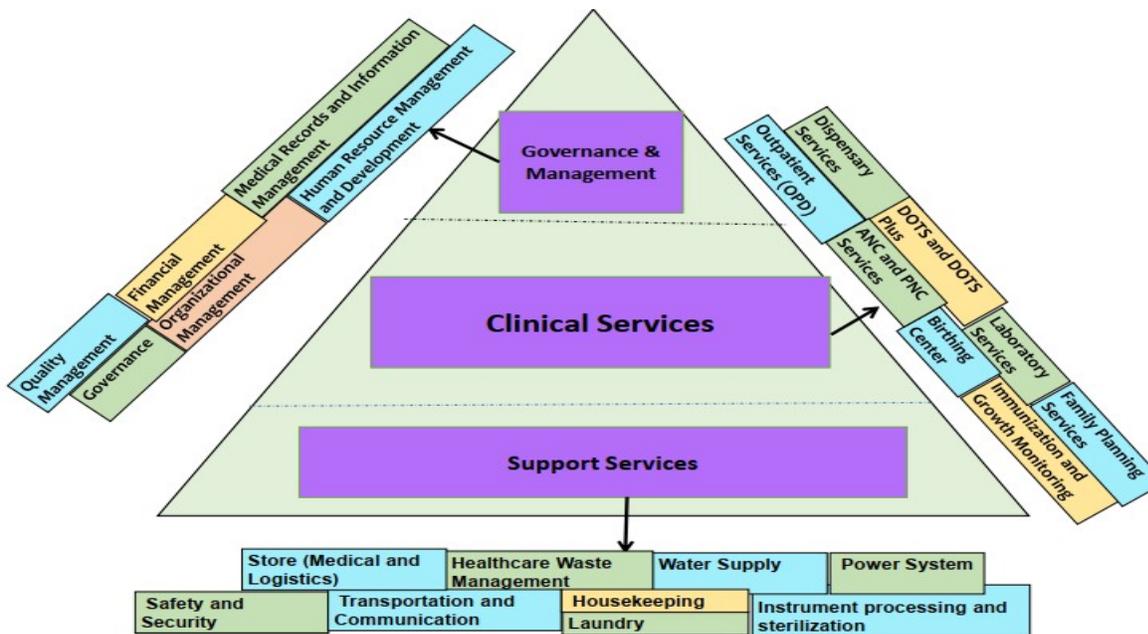
Engaging a diverse group of expert stakeholders, creating an open environment to explore new ideas, and considering the unique contextual needs of Karnali Province resulted in the development of a tailored provincial policy, which is endorsed by the Cabinet in November 2019. Effective implementation and periodic review can convert the policy aspirations into the practice resulting into better and sustained health outcomes in the Province.

Annex 5: Minimum Service Standards for Health Facilities: A tool for need-based planning to improve the quality of health services

Background: The Government of Nepal, Ministry of Health and Population developed the Minimum Service Standards (MSS) for all level of health facilities ranging from health post to tertiary level hospitals. The MSS aspires to ensure the readiness of each health facilities to deliver quality health services. In the federal context, primary hospitals and health posts have been handed over to the local government, secondary A and B to provincial government and the tertiary and specialized hospital to federal government. Thus, to ensure health services delivered to a high standard is the responsibilities of respective government. The MSS helps to quantify the evidence through its scores and determines the status of the health institutions in terms of its readiness and service availability. This provides a basis for evidence- based planning and budgeting to ensure value for money. Previously MoHP has implemented MSS for district level hospitals, now referred to as Secondary A and B hospitals and felt there was a need to develop MSS for all levels of health facilities. DFID-funded NHSSP and Nick Simon Institute along with other partners supported MoHP in developing MSS for all levels of health facilities, from health posts to tertiary hospitals.

MSS as tool for need based planning for quality improvement: The MSS focuses on strengthening the overall management of health facilities to improve service availability and readiness by addressing the needs. In order to assess these, the MSS looks at governance and management, clinical service management and support service management as the key domains. Under each domain, there are areas which specifies the particular service which are referred to as subdomains. Each subdomain have many criteria or standards and checklists for scoring. Those each criteria or standard has the optimum score of 1 and if the criteria fully meets as per the standard, it is scored as 1, otherwise scored as 0. The overall MSS score is computed by summing up with 20% weightage of Governance and Management, 60% weightage of Clinical Service Management and remaining 20% weightage of Support Service Management and is presented in percentage. The overall MSS score with below 50% means “very poor and needs immediate actions” (colour coded as white), while the MSS score of 50% to less than 70% are taken as "improving status and need specific targeted area support" (colour coded as Yellow), score of 70% to less than 85% indicates "acceptance level and needs careful specific intervention" (colour coded as Blue) and score 85% and above indicates "optimal level of readiness and requires sustained efforts to maintain and move towards 100%" (colour coded as Green). As an example of MSS tool for health post, the major key subdomains have been presented in Figure 1.

Figure 1: Domains and subdomains of Minimum Service Standards for Health Posts

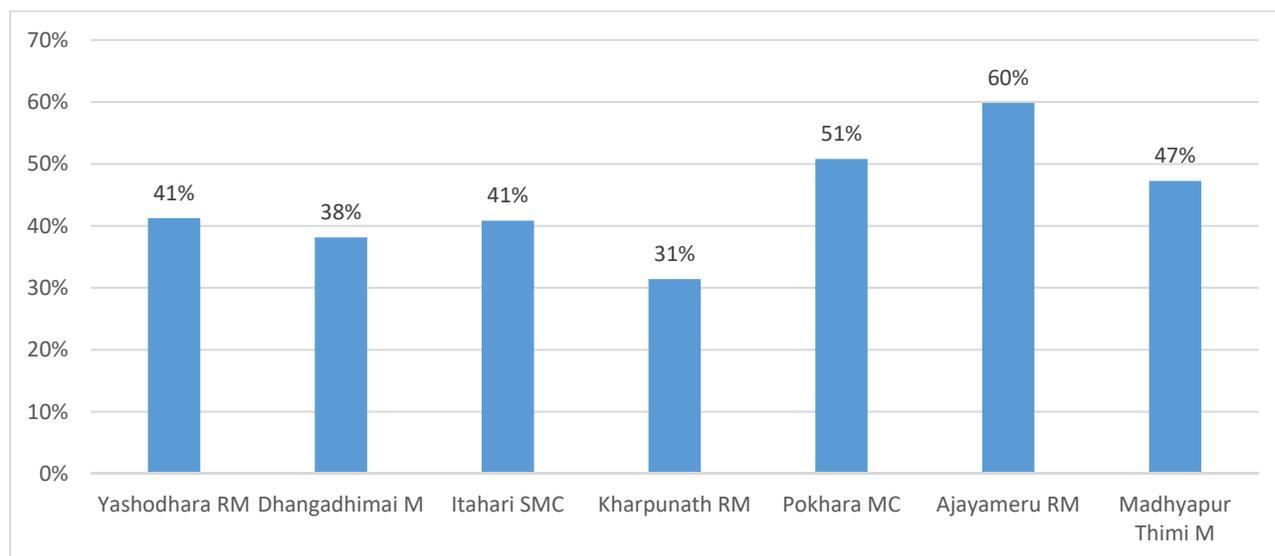


Source: MSS for Health Post, Curative Service Division, DoHS, MoHP

The NHSSP supported the MoHP to conduct the baseline MSS assessment in 51 health posts and three primary health care centres across seven local government (learning sites) during November 2018 to July 2019. The MSS, as the self-assessment tool, was used by the health facility team to assess the service readiness and service availability in health facility. Based on the identified gaps, action plan were developed to improve the readiness for the improvement in quality of care and those actions points were considered in the ward and municipal level Annual Workplan and Budget (AWPB) process.

Findings of the Assessment: The overall MSS score of health facilities of learning sites ranges from 23% to 76% with average score of 45.9%. This indicates that majority of the health facilities have poor service availability and readiness indicating the need of immediate actions to improve the service quality. While comparing the score by domains across the health facilities, the Governance and Management domain was found comparatively better with 51% average score ranging from 19.5% to 77.8% across the health facilities followed by Clinical Service Management with 48% average score that ranged from 20.3% to 77%. The Support Service Management was found to be the poorest among the three subdomains with overall average score of 34.1% that ranged from as low as 3.8% to 65.8% across the health facilities. The aggregate MSS score of the health facilities in seven local level is presented in Figure 2.

Figure 2: MSS Baseline Assessment Scores in Selected Local Levels



The self-assessment showed gaps, primarily on the availability and readiness of the laboratory services and support services in the health posts. These gaps are mainly due to either non-availability of basic equipment and human resources or the weak managerial skills. The action plan developed to address the gaps at each health facility provided a case for investment by the local government to further improve the service availability and readiness. The assessment scores of the MSS and the action plan were discussed with the concerned senior officials of local government and the NHSSP support continues to monitor the action plan and their implementation. Findings of the assessment has been instrumental to rationalize the need of the budget and other resources and hence address the gaps through AWPB. The implementation of the MSS at the health post level has contributed to replenish the required equipment and supplies, improvement in the governance and management functions and gradual impact on the quality of the health services delivered.

Conclusion and way forward: MSS, bring the standard tool, can facilitate the respective governments to monitor the status of the health facilities and use the evidence generated through the MSS to strengthen the quality of care. The action plans developed based on the MSS assessment also provide evidence for the local government to advocate to the Provincial and Federal Government for additional resources, like human resources, equipment, and overall infrastructure of the health facilities. The MSS scores could potentially be the basis for Federal and Provincial Government to provision performance-based grants to the respective level. MSS can gradually lead to the improved quality of care at all level of health facilities by enhancing the readiness and availability of the services at the health facility level.

Annex 6: Routine Data Quality Assessment

The Routine Data Quality Assessment (RDQA) is a web-based application developed for health facilities, programmes and administrations to self-assess the quality of HMIS data and strengthen the data management system. The tool comprises of two domains viz., 'data verification' and 'system assessment'. Using data from the HMIS, the tool is able to calculate quality metrics by verifying the data under the 'data verification' domain; and the five functional areas of Monitoring & Evaluation (M&E) system are assessed under the 'system assessment' domain.

The data verification domain of the RDQA tool helps to assess if service delivery sites (health facilities) at different levels and the national M&E are collecting, consolidating, and reporting data to measure the selected indicator(s) accurately and on time, and to cross-check the reported results with other data sources. For cross-checking, the data reported for selected indicators are verified against the recording registers/forms; Register vs Tally sheet; Register vs Monthly Monitoring Sheet; Tally vs Monthly monitoring sheet; and the Register Vs Client tracking (optional).

The system assessment component of the RDQA Tool identifies strengths and potential threats to data quality posed by the design and implementation of the data management and reporting system at the M&E, and Service Delivery sites at different levels. Data verifications let the users know whether there is a problem with data quality. The system assessment component is designed to address the 'why' and 'how' so that users can take corrective actions that should then be seen by improved data verifications during future RDQAs. System assessment has five functional areas: M&E structure, functions, and capabilities; indicator definitions and reporting guidelines; data collection and reporting forms and tools; data management processes; and use of data for decision making.

The RDQA tool was originally developed by United States Agency for International Development/Measure Evaluation in Microsoft Excel© format as part of global efforts to combat AIDS, malaria, and tuberculosis¹⁷. The MoHP customized the tool to suit the local context. The web-based RDQA implementation guidelines, manual and tutorials have also been developed and published on the MoHP website¹⁸. The MoHP is implementing Learning Labs approach in seven selected local level municipalities – one in each province – to strengthen the local health systems so that they are more resilient and can deliver quality health services which leaves no one behind; learn from them and disseminate the learning to wider stakeholders; and support scale up of the good practices in the remaining local governments. The web based RDQA system has been implemented in all public health facilities in the seven learning lab sites. The section below presents the issues/challenges and lessons learned from this process which will help to guide the scale up of RDQA.

Challenges

1. Registers were not uniformly maintained between the health facilities.

Case 1: definition of defaulter of family planning method was not consistently practiced. Some health facilities categorized a client as a defaulter if the client did not visit the facility on the given (follow up) date. While others waited for four weeks before classifying the client as a defaulter.

Case 2: definition of 'new case' for growth monitoring was not consistently practiced. In some instances, the health facilities categorized the client as 'new' if it was the first visit; regardless of whether growth monitoring was done at other health facilities or not. While in other cases, the client was considered 'new' only if the growth monitoring was done for the first time.

¹⁷ MEASURE Evaluation, October 2015, User Manual - Routine Data Quality Assessment Tool, MEASURE Evaluation

¹⁸ www.moHP.gov.np or www.rdqa.org

2. Supervision and mentoring visits to the health facilities from higher level authorities are very limited. Regular supportive supervision would provide an opportunity for the staff to clarify their confusions regarding recording, reporting and other issues.
3. Although health facility staff have received training on e-reporting, they are unable to practice this skill due to lack of internet connection in the health facility and their limited skills on computer operation. Both, internet connection as well as computer skills will be necessary for them to make use of web-based RDQA tool.

Lesson learned

1. Ensuring availability of computers, power back up and internet connectivity at the health facility level and basic computer literacy among the health workers are pre-requisites for implementation of e-reporting and RDQA.
2. The facilities without/inconsistent internet connection can use the MS-Excel© based RDQA tool as this will not require internet connection to operate. The MS-Excel© based RDQA tool is available at www.rdqa.mohp.gov.np.
3. The use of RDQA should be officially mandated in all health facilities.
4. Frequent supportive supervision visits from higher level authority is needed for routine use and follow up of RDQA process in health facilities.

Annex 7: Findings of the Rapid Assessment of Aama Programme

The maternity incentive scheme (MIS) was introduced in 2005 with a payment being made directly to all women who delivered in a Government Health Facility which varied according to geography and was meant to contribute to the transport costs of reaching a health facility. In 2006, the scheme was renamed the Safe Delivery Incentive Programme (SDIP) and in addition to the transport incentive free delivery care was introduced in Government health facilities in 25 districts with lowest human development index. In 2009, the scheme was re-named the Aama Programme and the transport incentive and free delivery care made available to all women who delivered in a certified health facility across the country.

The review of the Aama Programme indicated a rapid and statistically significant increase in births attended by a skilled health worker after the introduction of the MIS and SDIP schemes. This trend continued after the introduction of the Aama Programme in 2009 but not at an obviously higher rate. Variations were seen across the geographical areas of Nepal over time but in general in the Terai and Hills the rates of skilled birth attendance are at similar levels. Inequality in institutional delivery has fallen across all wealth quintiles and between caste/ethnic groups. However, there is still low institutional delivery in Mountain areas, in Province 2 and 6 and among Madhesi, Dalit, Muslim and Hill Janajati groups. The relationship with the Aama Programme and 4 ANC is less clear as there was an upward trend in 4ANC before the introduction of MIS/SDIP and there is now almost zero inequality in 4ANC visits.

Aama is a free Government Programme but in 2019, 50% of women paid for delivery care and only 53% of women received the full transport incentive. The payments for delivery care are higher in private health facilities across all types of deliveries. Private health facilities are also more likely to perform caesarean section surgery. The number of health facilities with birthing centres (BC), basic emergency obstetric care (BEONC) and comprehensive emergency obstetric care (CEONC) services has increased over time. A rapid increase in BC/BEONC services was seen after the introduction of the Aama Programme in 2009. However, there is still an unequal distribution of CEONC services which tend to be in accessible areas. There are no private CEONC services in mountain areas.

Lower level health facilities are used for ANC but not for delivery care – women prefer to give birth in higher level health facilities. However, if a health facility is more than 5km away poor women are less likely to the health facility whereas distance does not have an effect on whether women in the top two quintiles use a health facility for childbirth. The costs of accessing care in the mountain areas is still excessive and prohibitive to women planning for birth and in accessing care. Barriers to access for excluded groups in accessible areas can be overcome with better relationships with health facilities and the availability of ambulances.

Annex 8: Changing Burden of Diseases

A major achievement of the year (2019) was the publication of the Nepal Burden of Disease (NBoD) 2017 Report: the first time comprehensive, credible disease burden data for Nepal has been compiled and published in one place. The Report tracks disease burden and risk factors since 1990.

The NBoD reveals a substantial increase in life expectancy in Nepal: females are expected to live longer (73.3 years) than male (68.7 years) which is an increase by more than 10 years between 1990 and 2017. However, not all these additional years gained will be healthier ones. Females are expected to live only 62 years of healthy life, with men living only 60 years of healthy life. As people live longer, however, they tend to suffer more from the disability, ill-health and distress of older age. The NBoD reports on all these through Disability Adjusted Life Years (DALYs), Years of Life Lost (YLLs), Years Lived with Disabilities (YLDs), and risk factors attributing death and disability etc.

While not all these are at present included in the current Nepal Health Sector Strategy (NHSS) 2015-2020, the NHSS does track DALYs. These are divided into three broad categories of disease conditions: communicable, maternal, neonatal and nutritional (CMNN) diseases; non-communicable diseases (NCDs) and Injuries. Approximately, 59% of disease burden (DALYs) in 2017 is due to NCDs, 31% due to CMNN diseases and 10% due to Injuries. This represents a major shift in disease burden and cause of deaths in Nepal. Out of the total of 182,751 deaths estimated in Nepal for the year 2017, NCDs are the leading cause of death with two third (66%) of deaths due to NCDs, with an additional 9% due to Injuries. The remaining 25% are due to CMNN diseases. In 1990 these proportions were: CMNN diseases – 63%, NCDs – 31%, Injuries – 6%.

The Report also tracks Risk Factors for illness, disability and death. Child and Maternal Malnutrition, Dietary Risks, Tobacco, High Systolic Blood Pressure and Air Pollution are the top five risk factors driving death and disability in Nepal.

The growing pattern of a double burden of NCDs and CMNN diseases is becoming more and more apparent, posing a need for the health system to accelerate its actions towards rightfully addressing the rapidly growing burden due to NCDs and Injuries without deprioritizing interventions to maintain the gain the country has made on reducing the burden due to CMNN diseases.

Reference: Nepal Health Research Council (NHRC), Ministry of Health and Population (MoHP) and Monitoring Evaluation and Operational Research (MEOR). *Nepal Burden of Disease 2017: A Country Report based on the Global Burden of Disease 2017 Study*. Kathmandu, Nepal: NHRC, MoHP, and MEOR; 2019.

Annex 9: Factors Contributing to the Stock out of Essential Drugs/Commodity in Government Health Facilities: Preliminary Findings

Background

Ministry of Health and Population, Department of Health Service, Management Division in collaboration with the United States Agency for International Development (USAID) and HERD International (research partner) successfully completed the study with an aim to identify factors contributing to stock-out of essential tracer drugs in government health facilities of Nepal. The specific objectives of the study were to:

- identify top five factors contributing to stock-out of tracer drugs/commodity,
- examine medicine prescription practices of health service providers,
- examine medicine dispensing practices at the health facilities,
- assess client's demand for medicines and user factors that may potentially contribute to stock-out of drugs/commodity
- explore procurement and supply chain management mechanisms of drugs and commodity in the new federal system

The study assessed 18 tracer drugs/commodity in selected health facilities in seven provinces.

Methodology

The study used mixed-method (quantitative survey and qualitative techniques) approach. A sample of three districts from each of the seven provinces were selected, thus a total of 21 districts across the country were reached out. 275 public government health facilities were sampled that included all public hospitals (district and higher-level hospitals and all 15 bedded hospitals, n=28) and all PHCCs (n=54) in the 21 selected districts and sample of health posts (n=193) from the 21 districts. The study employed five different tools for data collection: i) Health facility assessment tool (n=275), ii) Observation of client-health worker interaction (n=145), iii) Exit client interviews (n=431), iv) Observation of prescription/prescription audit (n=333), and v) Semi-structured interviews (n=53). Data collection was done from April to June 2019.

As part of this study, an Oversight Committee was formed under the leadership of Management Division with participation from respective divisions and external development partners as members of the committee. The committee played crucial role in designing the study, finalizing tools, training, field implementation and monitoring and review of study report at different stages. Ethical clearance was obtained from the Nepal Health Research Council [Ref # 887].

Key findings

The key findings of the study are presented under the following major headings.

GENERAL SERVICE READINESS OF HEALTH FACILITIES

Among the 275 sampled health facilities, 93.8% of them had access to electricity, however, 50.4% of them had electricity capacity to run 24/7. Twenty percent health facilities had functional landline telephone, 42.9% health facilities had functional computer, 37.8% had internet connectivity and 44.4% health facilities had functional refrigerators.

Store conditions of these health facilities were assessed following the WHO "Standard guideline for the storage of essential medicines and other health commodities".¹ Out of 275 health facilities, only two health facilities (one PHCC and one health post) followed eleven standard storage conditions (3 conditions were not applicable for all health facilities).

The study assessed availability of 18 tracer drugs/commodity through Logistic Management Information System (LMIS) report and physical count of drugs/commodity on the day of visit. LMIS reports of first and second quarter of fiscal year 2075/76 were used. Among 275 health facilities, 76.7% (211) of health facilities had first quarter LMIS report and 69.4% (191) of health facilities had second quarter LMIS report available. However, among health facilities that had LMIS report, complete information of all 18 tracer drugs/commodity was in 60.2% of health facilities for first quarter and 58.1% in second quarter. Therefore, total n for each drug varies (table 1 and 2).

STOCK STATUS OF TRACER DRUGS/COMMODITY

Among the health facilities that had record of all tracer drugs/commodity, all 18 tracer drugs/commodity (except Oxytocin, as it was assessed in birthing centres only) were available in only 2.4%, 0.9% and 1.5% of health facilities for first quarter, second quarter and on the day of data collection respectively. Out of 70.5% health facilities having birthing services, Oxytocin was available in 69.8%, 78% and 71.6% of health facilities in the first quarter, second quarter and on the day of data collection respectively (Table 1 and 2).

REASONS FOR STOCK-OUT OF ESSENTIAL TRACER DRUGS/COMMODITY

Table 1: Availability of the tracer drugs on the first quarter, second quarter and on the day of visit

Tracer drugs/commodity	1st quarter	2nd quarter	Day of visit
	n (%)	n (%)	n (%)
Albendazole 400mg	187 (89.0)	164 (89.6)	234 (85.1)
Amoxicillin 125mg DT	139 (69.8)	116 (68.2)	158 (57.5)
Amoxicillin 500mg	118 (58.1)	138 (77.1)	227 (82.5)
Clotrimazole skin cream 25g 1% w/w	54 (29.2)	77 (47.5)	176 (64.0)
Ciprofloxacin eye/ear drop	123 (61.5)	105 (61)	143 (52.2)
Iron 60mg + Folic acid 400mcg tablet	194 (92.8)	175 (96.7)	255 (92.7)
Chlorhexidine gel 4%	112 (61.2)	88 (55.3)	172 (62.5)
Gentamycin injection 80mg/2ml	83 (47.2)	86 (55.1)	135 (49.1)
Metronidazole 400mg	193 (92.3)	164 (92.1)	251 (91.3)
Oral Rehydration Solution	168 (81.2)	149 (81.9)	236 (85.8)
Oxytocin injection*	90 (69.8)	85 (78)	139 (71.6)
Paracetamol 500mg	202 (96.2)	173 (96.1)	257 (93.5)
Paracetamol suspension 125mg/5ml	175 (85.4)	155 (86.6)	241 (87.6)
Povidone Iodine Solution	193	167 (92.3)	255 (92.7)

Table 2. Percentage of health facilities with availability of tracer drugs/commodity on the day of visit disaggregated level of health facility

racer drugs/commodity	Level of health facility			Total n (%)
	Hospital	PHC	Health post	
	%	%	%	
Albendazole 400mg	75.0	83.3	87.0	234 (85.1)
Amoxicillin 125mg DT	28.6	70.4	58.0	158 (57.5)
Amoxicillin 500mg	75.0	90.7	81.3	227 (82.5)
Clotrimazole skin cream 25g 1% w/w	75.0	79.6	58.0	176 (64.0)
Ciprofloxacin eye/ear drop	42.9	53.7	52.8	143 (52.2)
Iron 60mg + Folic acid 400mcg tablet	82.1	96.3	93.3	255 (92.7)

Table 3 presents top five reasons for stock-out of tracer drugs/commodity on the day of visit disaggregated by province and type of health facilities, and hence the data might not represent as top reasons for each province and for each facility type. Delay in supply of drugs/commodity by higher level was the most cited reason for stock out at all levels of health facilities in all seven provinces in the first quarter, second quarter as well as on the day of visit. Other major reasons reported were inadequate supply of drugs and commodity against the demand placed by health facilities, no demand for certain drugs/commodity placed by health facilities as there was less or no consumption of certain drugs, high consumption of drugs/commodity at the health facilities than anticipated, near to expiry drugs received by health facilities and PUSH system of drug supply where health facilities did not receive drugs/commodity they requested and rather received other drugs leading to both overstock and stock out.

Chlorhexidine gel 4%	42.9	74.1	62.2	172 (62.5)
Gentamycin injection 80mg/2ml	50.0	68.5	43.5	135 (49.1)
Metronidazole 400mg	82.1	96.3	91.2	251 (91.3)
Oral Rehydration Solution	75.0	88.9	86.5	236 (85.8)
Oxytocin injection*	57.1	70.4	44.0	139 (71.6)
Paracetamol 500mg	82.1	94.4	94.8	257 (93.5)
Paracetamol suspension 125mg/5ml	71.4	92.6	88.6	241 (87.6)
Povidone Iodine Solution	82.1	100.0	92.2	255 (92.7)
Salbutamol 4mg	71.4	96.3	83.4	233 (84.7)
Zinc Sulphate 20mg DT	57.1	77.8	74.1	201 (73.1)
Isoniazide+Rifampicin+ Pyrazinamide+Ethambutol (RHZE)	39.3	57.4	41.5	122 (44.4)
Vitamin A capsule	32.1	27.8	31.1	84 (30.5)
Condom	50.0	90.7	82.9	223 (81.1)
All 18 tracer drugs/commodity*	7.1	1.9	0.5	4 (1.5)
Total (n)	28	54	193	275
* All 18 includes tracer drugs/commodity except Oxytocin injection, as it was assessed only in facilities that offer normal delivery				

Table 3: Top 5 reasons for stock out of tracer drugs/commodity on the day of visit disaggregated by province and type of health facilities

	Higher level did not send on time		Inadequate supply against the demand		Didn't demand drugs		High consumption than anticipated		Received near to expired drugs		Total (n)
	n	%	n	%	n	%	n	%	n	%	
Province											
Province 1	26	66.7	14	35.9	18	46.2	2	5.1	4	10.3	39
Province 2	30	81.1	22	59.5	12	32.4	4	10.8	5	13.5	37
Province 3	25	69.4	21	58.3	16	44.4	4	11.1	4	11.1	36
Province 4	19	63.3	21	70.0	21	70.0	6	20.0	5	16.7	30
Province 5	49	98.0	35	70.0	16	32.0	13	26.0	6	12.0	50
Province 6	41	87.2	28	59.6	28	59.6	8	17.0	6	12.8	47
Province 7	30	93.8	3	9.4	6	18.8	1	3.1	5	15.6	32
Level of health facility											
Hospital	14	53.8	9	34.6	8	30.8	4	15.4	3	11.5	26
PHCC	39	73.6	28	52.8	13	24.5	8	15.1	12	22.6	53
Health post	167	87.0	107	55.7	96	50.0	26	13.5	20	10.4	192
Total (n, %)	220	81.2	144	53.1	117	43.2	38	14.0	35	12.9	271

DRUGS PRESCRIPTION AND DISPENSING PRACTICES, AND CLIENTS DEMAND FOR DRUGS

We interviewed 431 exit clients or their care taker, observed 145 interactions between client and health worker and examined 333 prescription slips to understand drug prescription and dispensing practices of health workers and drug demand by clients or their caretakers.

Among 431 exit clients, 77.3% received a formal prescription slip from health worker, 21.6% did not receive prescription, and five clients received prescriptions in a piece of paper (all in health posts). The practice of providing prescription slips to patients was lesser in health posts (56.5%) as compared to hospitals (98.1%) and PHCCs (98.2%). Out of those clients who were prescribed drugs (n=333), 57.7% received all the prescribed drugs, majority served by health post (78.7%).

Table 4. Percentage of clients who received prescribed drugs

Received prescribed drugs	Level of health facility			Total n (%)
	Hospital %	PHCC %	Health Post %	
Yes, all received	47.1	43.9	78.7	192 (57.7)
Yes, partially received	32.7	44.9	19.7	106 (31.8)
No, not received at all	20.2	11.2	1.6	35 (10.5)
Total (n)	104	107	122	333

Client/caretaker demand for medicine: Information on client or caretaker demand for medicine was obtained from exit client interviews. 10% of the 431 respondents said that they requested for additional medicines during OPD consultations. Analgesics (37.2%), anti-helminthic (27.9%), and anti-gastritis (20.9%) were mostly demanded medicines by 43 respondents (10%) of which 33 (76.7%) of them received medicines they demanded. This practice of fulfilling patients demand for medicines by health workers was found higher in health posts (82.8%) as compared to PHCCs (66.7%) and hospitals (60%).

Prescribing Standards

From prescription audit of 324 slips, only 13.9% of prescriptions for antibiotics and 8.3% prescriptions for other drugs met WHO prescription standard² with correct information on all five prescribing indicators of dose, dosage form, mode of administration, length of treatment and time of administration.

- Average number of drugs prescribed per encounter was 2.85
- Percentage of encounters with at least one antibiotic prescribed was 50.9%

Majority of drugs prescribed by Brand Name

In 324 prescription slips used for prescription audit, altogether 925 drugs were prescribed. Only 25.6% of these drugs were prescribed using generic name and the trend of using generic name was similar in PHCC and health post (31.4% and 30.6% respectively) and was much lower in hospital (14.7%).

Expired or damaged drugs/ commodity

28.9% of health facilities in the first quarter and 22.5% of health facilities in second quarter had at least one of the 18 tracer drugs/commodity expired (except oxytocin).

Drugs/commodity above ASL (overstock)

38.5% of health facilities had at least one of the 18 tracer drugs/ commodity above ASL on the day of visit.

Drugs/commodity below EOP

31.6% of health facilities had at least one of the 18 tracer drugs/ commodity below EOP, and the percentage is higher in PHCCs and health posts.

¹ John Snow, W.H.O., Guidelines for the Storage of Essential Medicines and Other Health Commodities. 2003. Arlington, Va.: John Snow, Inc./DELIVER, for the U.S. Agency for International Development. 2003.

² WHO, How to investigate drug use in health facilities: selected drug indicators, action program on essential drugs (DAP). 1993

Annex 10: Registration Status of Health Professionals in National Health Workforce Registry, as of March 2019

Council	Category	Degree	Number
Nepal Medical Council	Medical Doctors	MBBS	16,551
		BDS	2,095
		MD	1,440
		Sub-total	20,086
Nepal Nursing Council	Nursing Professionals	Registered Nurse	55,009
		ANM	32,324
		Foreign Nurse	842
		Sub-total	88,175
Nepal Health Professional Council	Allied health disciplines/Paramedics		
	General Medicine	GM/HA	12,647
	General Medicine	CMA/AHW	63,935
	Dental Paramedics	Dental Hygienist/Assistant	1,490
	Laboratory Professionals	LA/CMLT/BMLT/MScMLT, etc	25,564
	Public Health	MPH & BPH	3,637
	Health Education	MHE/DHE	36
	Laboratory	CMLT/BMLT/MSc/MLT, etc	25,564
	Ophthalmology	Assistant/Optomety	1,032
	Radiology	Assistant/Technician	1,102
	Physio & Rehab science	Assistant/BPT/MPT etc	784
	Ayurveda & alternative medicine (in the past)	Homeopathy/Yoga etc	695
Sub-total			136,486
Nepal Pharmacy Council	Pharmacists	Diploma/Bachelor/Masters	11,017
Nepal Ayurvedic Medical Council	Ayurvedic doctors & paramedics	Diploma/Bachelor/Masters	4,022
Grand Total			259,786

Source: Ministry of Health and Population

Annex 11: Mapping between Nepali Calendar Years and the Gregorian Years

Nepali Fiscal Year	Gregorian Fiscal Year
2060/61	2003/04
2061/63	2004/05
2062/63	2005/06
2063/64	2006/07
2064/65	2007/08
2065/66	2008/09
2066/67	2009/10
2067/68	2010/11
2068/69	2011/12
2069/70	2012/13
2070/71	2013/14
2071/72	2014/15
2072/73	2015/16
2073/74	2016/17
2074/75	2017/18
2075/76	2018/19
2076/77	2019/20
2077/78	2020/21
2078/79	2021/22

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