

Unofficial Translation

NEPAL HEALTH SECTOR STRATEGY

2015 - 2020



GOVERNMENT OF NEPAL
MINISTRY OF HEALTH AND POPULATION
2015



नेपाल सरकार

स्वास्थ्य तथा जनसंख्या मन्त्रालय

(..... शाखा)

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विषय :- FOREWORD

Nepal has made notable achievements in the health sector over the past two decades. There have been marked reductions in the maternal mortality rate (MMR) and under-5 mortality rate (IMR) along with remarkable increase life-expectancy at birth. We have achieved expected results in control of communicable diseases. In this period, we have been successful in eliminating maternal and newborn tetanus as well as achieving 'polio-free' status. We have been making our dedicated efforts towards prevention, control and elimination of communicable diseases such as tuberculosis, HIV/AIDS, measles, kala-azar, lymphatic filariasis and malaria, which have existed as major public health problems in Nepal. The success and achievements in the health sector has been possible through greater engagement and contribution from various agencies and stakeholders, non-government organisations, development partners, civil society as well as media.

The policies, strategies and various programmes formulated by the Government of Nepal have been instrumental in improving the health status of Nepalese people. The implementation of comprehensive health sector programmes: Nepal Health Sector Programme – I and II were based on the policy frameworks guided by National Health Policy 1991 and National Health Sector Strategy 2003/04. These wider national programmes led to systematic and routine implementation of planned health sector activities. The National Health Policy 1991 is replaced by National Health Policy 2014. In this context, this National Health Sector Strategy 2015-20 provides strategic directions to the health sector programmes.

Nepal Health Sector Strategy 2015-20, along with addressing the current health challenges, provides a roadmap towards universal coverage of basic health services as enshrined in the Constitution of Nepal 2015. In this regard, it ensures access to free basic health care services with quality, while encouraging meaningful contribution from the private sector and making the health service delivery more transparent and accountable to the public. This strategy positions health at the centre to the country's overall socio-economic development. In order to implement this strategy, Ministry of Health and Population will develop and execute a five-year implementation plan.

With regards to developing this strategy, support has been gained from law makers, policy makers, external development partners, non-government organisations, academicians, private sector and various other health sector stakeholders and agencies. Their contribution was ensured through their active participation during the strategy development workshops, seminars, focus group discussions, and consultations with national and international sectoral experts. In this regard, I would like to extend my heartfelt gratitude to the members of Steering Committee for their contributions especially: Constituent Assembly members, officials of National Planning Commission Secretariat, officials of Ministry of Finance, Ministry of Federal Affairs and Local Development and officials of Ministry of Health and Population and other relevant bodies. Likewise, on behalf of the ministry, my sincere thanks also go to members of Programme Development Team and thematic groups who have been dedicatedly involved from the very inception phase in this strategy development.

Finally, I have firm belief as well as high hopes and expectations that the successful implementation of this strategy with the support from all concerned stakeholders will contribute towards improving the mental, physical, social and emotional state of health of all Nepali citizens enabling them to lead a productive and improved livelihood.

Shanta Bahadur Shrestha
Secretary

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Executive Summary

Under the auspices of National Health Policy 2014, Nepal Health Sector Strategy 2015-2020 (NHSS) is the primary instrument to guide the health sector for the next five years. It adopts the vision and mission set forth by the National Health Policy and carries the ethos of Constitutional provision to guarantee access to basic health services as a fundamental right of every citizen. It articulates nation's commitment towards achieving Universal Health Coverage (UHC) and provides the basis for garnering required resources and investments.

NHSS places health at the centre of overall socio-economic development. It guides the health sector's response in realizing government's vision to graduate Nepal from 'Least Developed Country' to 'Middle Income Developing Country' by 2022.

NHSS is developed within the context of Sector Wide Approach (SWAp) and it sees partnership as a cornerstone for health development in Nepal. NHSS was developed jointly by the government and its development partners. Both the government and development partners commit to align their efforts to NHSS priorities and are jointly accountable to achieve the results. NHSS also harnesses multi sectoral approach to address social determinants of health.

In the past two decade, Nepal has made notable progress on improving the overall health outcomes of the citizens. Between the period of 1990 and 2014, Nepal impressively reduced under-five mortality by 73% and infant mortality by 67%. Similarly, Nepal was able to reduce maternal mortality by 76% between the period of 1996 and 2013. During this period, polio is towards eradication phase while leprosy is at elimination stage. Considerable efforts have been made to halt and reverse the trends of tuberculosis, HIV and malaria. However, comparably less progress was made in reducing neo-natal mortality and malnutrition.

Despite this progress, the country faces many health challenges including inequity. Many citizens continue to face financial, socio-cultural, geographical, and institutional barriers in accessing health services. Despite efforts to reduce gender inequality, the women of Nepal are still marginalized in society which affects their health and wellbeing. Therefore, the government has introduced special programmes and incentives, such as free health care programme and safe delivery incentive scheme, to reduce inequity in health. For the last few decades, the government has emphasized on improving access to health care services by expanding health facilities and strengthening community based interventions. Extension of access to health care services and improving the quality of health care remain a major challenge. The expansion of urban health services, owing to rapid urbanization is a burning challenge. Shifting burden of diseases and natural disaster induced health problems is yet another challenge. While communicable diseases continue to pose problems, there is now a growing prevalence of non-communicable diseases. There are also increasing threats of natural disasters due to climate change. Likewise, there are increasing number of deaths and injuries due to road accidents.

The devastating earthquake of April 2015 and subsequent aftershocks resulted in 1200 health facilities being affected. Reconstruction and maintenance of these health facilities is another challenge. This calls for a strong effort for emergency preparedness and response management. The current structure of MoHP, which is more than 25 years old, may not be prepared enough to address the contemporary and emerging health challenges. There is a need of restructuring of

MoHP in line with the federalist structure as provisioned by the constitution and ensure equitable distribution of health facilities with reference to geography and population. Apart from that, certain components of health systems need further strengthening to improve the health outcome of the citizens.

To sustain the achievements made in the health sector and address the aforementioned challenges, NHSS stands on four strategic principles:

1. Equitable access to health services
2. Quality health services
3. Health systems reform
4. Multi-sectoral approach

Under these strategic principles, NHSS envisions for equitable service utilization, strengthening service delivery and demand generation to underserved populations, including the urban poor. NHSS calls for greater partnerships with local level institutions and community groups to empower women, promote supportive cultural practices and curb gender-based violence in the society. NHSS focuses on improving the quality of care at points of service delivery. As warranted by National Health Policy 2014, an autonomous accreditation body will be established during NHSS period for quality assurance of health services in public and private sectors. NHSS emphasises on strengthening research and promoting the use of evidence. It also aspires to leverage modern technologies for better health information management, increased access to health services, better management of procurement and supply chain, and more effective and efficient construction of health facilities.

To strengthen decentralization planning and budgeting, NHSS prioritises the implementation of the Collaborative Framework for Strengthening Local Health Governance in Nepal. NHSS also expands state and non-state partnership by building mutually beneficial partnerships between the public and private sectors. At the same time, NHSS aims to strengthen institutional capacity of MoHP to better regulate public and private health systems.

NHSS recognises the importance of multi-sector approach to address social determinants of health. While the culture of inter-sectoral workings in health has been going on for a long time, NHSS emphasises on more institutionalized way of setting-up multi-sectoral approaches. For the next five years, NHSS focuses on promoting healthy lifestyles and healthy environment through multi-sectoral action. This includes: recognizing young people as a starting point to promote healthy lifestyle; leveraging health facilities as a learning environment for healthy lifestyle and behaviour; tackling malnutrition and promoting the consumption of healthy foods; reducing the ever-rising deaths and injuries through road traffic accidents; and promoting healthy environment including better response to climate change related health risks.

NHSS strives towards the goal to 'improve health status of all people through accountable and equitable health service delivery system.' NHSS stipulates the following nine outcomes to achieve this goal:

1. Rebuilt and strengthened health systems: Infrastructure, HRH management, Procurement and supply chain management.
2. Improved quality of care at point-of-delivery
3. Equitable utilization of health care services
4. Strengthened decentralised planning and budgeting
5. Improved sector management and governance
6. Improved sustainability of health sector financing
7. Improved healthy lifestyles and environment
8. Strengthened management of public health emergencies
9. Improved availability and use of evidence in decision-making processes at all levels

In order to move towards UHC, NHSS lays out the necessary service delivery arrangements. It calls for Basic Health Services, which is delivered free of charge to the citizens, and defines the Basic Health Package. Services that are beyond the scope of basic health package are delivered through different social health protection arrangements, including health insurance.

The government will assess the financial needs and identify the resource gap to implement this strategy. The Government of Nepal will progressively seek to fund the implementation of this strategy from its own internal resources. Specifically, over the next five years, the government will aspire to fund the provision of Basic Health Services entirely from government revenues. Likewise, as guided by the Development Cooperation Policy (2014), external resources will also be mobilized to narrow the resource gap.

The NHSS Implementation Plan (IP) and subsequent Annual Work Plan and Budget (AWPB) will translate the NHSS into action. The MoHP will lead the implementation, monitoring and evaluation of this strategy with participation of line ministries, development partners, non-governmental agencies, civil society, private sector, cooperatives and local communities. The NHSS Results Framework will be the basis to monitor the sector performance through annual reviews and a Mid Term Review (MTR).

1. Background

1.1. Introduction

The origins of the five-year strategic health planning process in Nepal, within the context of Sector Wide Approach (SWAp), can be traced back to 2004 when the Council of Ministers endorsed the Health Sector Strategy: An Agenda for Reform. This strategy formulation was conducted against the backdrop of Nepal's commitments on delivering the Poverty Reduction Strategy (PRS) and the Millennium Development Goals (MDGs). Guided by both the National Health Policy of 1991 and the Second Long Term Health Plan 1997-2017 (SLTHP), the strategy put in place the first Nepal Health Sector Programme (NHSP-I) as its implementation plan for the period 2004-2009. The second sector programme for the period 2010-2015 (NHSP-II) was largely seen as an extension of the previous one, albeit with greater emphasis on partnerships, mitigating access barriers and promoting equity and inclusion, local governance, and decentralized service delivery.

NHSP-I and NHSP-II were developed on the basis of National Health Policy (1991) and Health Sector Strategy (2004), which provided basic framework for implementation of health programmes. This strategy guides the health sector to translate the National Health Policy (2014) that has replaced the previous policy (1991). Nepal Health Sector Strategy 2015-2020 (NHSS) is recognised as the strategy that will guide the sector, taking into account multi-sector collaboration to address social determinants of health, over the next five-year period. It responds to the existing socio-political environment and the changes that have taken place both in the local and global health agenda. This strategy is based on the expanded policy and monitoring framework of National Planning Commission and has also embodied the essence of the National Health Policy 2014. Partnership remains one of the cornerstones for health development in Nepal and from the outset the NHSS development process has held to this principle. It is the result of a joint effort between the government and its development partners¹; all parties are committed to align their programmes to NHSS priorities and to be jointly accountable to achieve the proposed results.

Considerable effort has been made to promote the strategy at both national and sub-national levels to ensure horizontal and vertical linkages. The process of developing the NHSS provided ample opportunities for a wide range of stakeholders to offer their inputs and feedback.

The strategy was developed in fiscal year 2014/15 under the patronage of a High-level Committee and under the guidance of the Steering Committee. Both committees had representation of senior officials from different government line agencies. A Programme Development Team (PDT), made-up of officials from the government and development partners, put together this strategy. The strategy, in turn, was based on the technical inputs provided by a range of Thematic Working Groups.

1.2. Policy Context

The National Health Policy of 1991 captured the contemporary democratic essence of bringing government services closer to the people, calling for community participation, and seeking increased private sector engagement. The Constitution of Nepal established people's health as a fundamental right for the first time in its history as per the spirit of 2006 People's Movement.

¹Development partners include external donor and supporting agencies, I/NGOs, Civil Societies, Private Sector, and cooperatives

NHP-2014 sets out a forward looking agenda for improving the health and well-being of all citizens of Nepal, including the elders, differently able people, single women, poor, marginalised and vulnerable communities. It articulates nation's commitment towards achieving Universal Health Coverage (UHC). It seeks to place health as a central component of overall development, building partnerships and establishing multi-sectoral collaboration. The policy recognises the importance of creating a healthy environment and promoting healthy lifestyle choices by people, especially the young, as well as taking an inclusive approach to Ayurveda and other traditional medicine systems². NHSS outcomes are aligned with these policy elements.

Restructuring of the state through federal form of governance is a prominent political agenda and NHSS is designed to accommodate this. It puts special emphasis on decentralization and strengthening local health governance, and calls to restructure MoHP and its subordinate authorities to make them more responsive to current health needs.

MoHP and the development partners continue with their joint efforts to position health in the epicentre of national development and demonstrate how investing in health not only reduces poverty but allows the country to reap the economic dividends through enhanced human capital.

The Government of Nepal's (GoN) Development Cooperation Policy of 2014 provides the basis for NHSS to advance the agenda of aid effectiveness in the health sector. NHSS espouses the Development Cooperation Policy's mission statement to help achieve national goals through mobilizing development cooperation in a way that enhances the country's capacity to be able to realize maximum advantages³. It will also operate under the policy framework of the GoN's vision to graduate Nepal from the status of 'Least Developed Country' to 'Middle Income Developing Country' by 2022.

Nepal is party to many international health commitments and resolutions, which this strategy upholds. Nepal's commitment to Universal Health Coverage (UHC) guides NHSS for the period of the next five years as the country embarks towards progressive universalism by continuing to maintain the focus on Primary Health Care approach and greater equity in health. Nepal has earned international accolades for being on track to meet most of the health related MDGs targets and this strategy is geared towards sustaining these achievements while making headway into the Sustainable Development Goals.

1.3. Scope of the Strategy

As a sector strategy, NHSS is built upon the premise that health is an integral and indivisible part of a nation's socio-economic development and investment in health is fundamental to further national development. Therefore, as part of the development strategy of the GoN, NHSS defines the health sector as being beyond the exclusive domain of the Ministry of Health and Population (MoHP). It recognises that multitudes of state line agencies and non-state actors working for social and economic development are part of the health sector in their differing capacities.

This strategy guides the government and development partners to further improve aid effectiveness in the health sector as agreed under Paris Declaration on Aid Effectiveness and subsequent high-level aid forums.

²Ministry of Health and Population, "National Health Policy 2071," (Kathmandu: Government of Nepal, 2014).

³Ministry of Finance, "Development Cooperation Policy: International Cooperation for Development Effectiveness," (Kathmandu: Government of Nepal).

NHSS adopts the vision as highlighted in the National Health Policy (2014) and operationalizes its aspirations. It articulates the goal and objectives for the next five years of the government and its development partners, who are mutually accountable for its achievement. The Implementation Plan (IP) and the Results-based Monitoring Framework are developed on the basis of this strategy.

The Government of Nepal will progressively seek to fund the implementation of this strategy from its own internal resources. Specifically, over the next five years, the government will aspire to fund the provision of Basic Health Services entirely from government revenues. Nevertheless, as guided by the Development Cooperation Policy (2014), external resources will also be mobilized to narrow the resource gap.

2. Situation Analysis

2.1 Health Outcomes

Nepal has made steady progress on improving the overall health outcomes of its citizens. Particularly, the country has made impressive progress on child survival and maternal health, which are the targets 4 and 5 of the Millennium Development Goals (MDGs)⁴.

The target set for MDG 4 was to reduce the under-5 mortality rate by two-thirds between 1990 and 2015 with an average annual decline of 4.4%. Between the period of 1990 and 2014, there has been an unprecedented decline in under-five mortality in Nepal. It has decreased by 73% - from 142⁵ per thousand live births in 1990 to 38⁶ in 2014. In this period, the infant mortality has also decreased by 67% - from 99⁷ per thousand live births to 33⁸. However, the neonatal mortality has not reduced proportionately, with only 57% reduction during the same period, i.e. 53⁹ per thousand live births in 1990 to 23¹⁰ in 2014. As of 2014, the neonate deaths (i.e. deaths during the first 28 days of life) constitute 57% of under-five mortality in Nepal¹¹. According to the estimates of the United Nations (UN) agencies, the maternal mortality in Nepal has declined by 76% from 790 per 100,000 live births in 1996 to 190 in 2013¹².

Globally, malnutrition contributes to 45% of the under-five mortality¹³. Maternal and child nutrition is also a challenge for Nepal; however, some progress has been made. The stunting rate of under-five children has decreased from 57% in 2001 to 37% in 2014. Similarly, over the same period, the percentage of underweight children has decreased from 43% to 30%¹⁴. However, despite declining trend of stunting, Nepal is still higher than WHO threshold. Nepal is also above WHO's threshold on anaemia among young children and women of reproductive age¹⁵. Wasting of children continues to be a problem; overall, 11% of children are wasted and 3% are severely wasted¹⁶.

The poor nutritional status of women is evident from the fact that 18% of them fall under the Body Mass Index (BMI) of 18.5 – a cut-off point, indicating thinness or acute under-nutrition. Women living in the central Terai region are most susceptible to under-nutrition with 26% falling below the BMI cut-off point of 18.5.¹⁷ Nevertheless, as compared to 2006 when 24% women were under the BMI 18.5, under-nutrition among women has declined. It is interesting to note that while the under-nutrition among women is in the declining trend, the obesity is increasing. In 2006, 9% women were obese or overweight (BMI greater than 25) but in 2011 the proportion has increased to 14%.^{18,19}

⁴United Nations Development Programme, "Nepal Millennium Development Goals Progress Report 2013," (Kathmandu: National Planning Commission, 2013).

⁵UN Inter-agency Group for Child Mortality Estimation, "Levels & Trends in Child Mortality," (New York 2014).

⁶Central Bureau of Statistics, "Nepal Multiple Indicator Cluster Survey 2014 Key Findings," (Kathmandu 2014).

⁷UN Inter-agency Group for Child Mortality Estimation, "Levels & Trends in Child Mortality."

⁸Central Bureau of Statistics, "Nepal Multiple Indicator Cluster Survey 2014 Key Findings."

⁹UN Inter-agency Group for Child Mortality Estimation, "Levels & Trends in Child Mortality."

¹⁰Central Bureau of Statistics, "Nepal Multiple Indicator Cluster Survey 2014 Key Findings."

¹¹UN Inter-agency Group for Child Mortality Estimation, "Levels & Trends in Child Mortality."

¹²WHO et al., "Trends in Maternal Mortality: 1990 to 2013," (Geneva 2014).

¹³WHO, "Children: Reducing Mortality," WHO, <http://www.who.int/mediacentre/factsheets/fs178/en/>.

¹⁴Central Bureau of Statistics, "Nepal Multiple Indicator Cluster Survey 2014 Key Findings."

¹⁵Ministry of Health and Population, New ERA, and ICF International Inc., "Nepal Demographic and Health Survey 2011," (Kathmandu: Ministry of Health and Population, New ERA, ICF International Inc., 2012).

¹⁶Central Bureau of Statistics, "Nepal Multiple Indicator Cluster Survey 2014 Key Findings."

¹⁷Ministry of Health and Population, New ERA, and ICF International Inc., "Nepal Demographic and Health Survey 2011."

¹⁸ibid.

¹⁹Ministry of Health and Population, New ERA, and Macro International Inc., "Nepal Demographic and Health Survey 2006," (Kathmandu: Ministry of Health and Population, New ERA and Macro International Inc., 2007).

The immunization coverage during the last five years has consistently remained above 90% for DPT 3 and Polio and for measles it has hovered around 88%²⁰. Over the last decade, the number of antigens in routine national immunization has increased from 6 to 11²¹. The target set for NHSP II for immunization as well as for comprehensive multi-year plan 2011-2015 has been achieved. As a result, Nepal has achieved Polio Free Status, Measles Mortality Reduction Goal, MNT elimination status, and control of Japanese Encephalitis. Nepal plans to achieve full immunization coverage by 2017.

Case fatality rate for pneumonia has decreased from 0.4 in 2000/01 to 0.06 in 2013/14²². Similarly fatality rate from diarrhoea among under-five children has decreased from 0.4 in 2000/1 to 0.02 in 2013/14²³. The community based intervention has been the key in significantly reducing childhood illnesses. However, even though 93% of households have improved source of drinking water, more than 80% of household members continue to have E. coli risk level in their water²⁴.

In terms of disease specific health outcomes, the programs for tuberculosis (TB), HIV and malaria have shown progress in halting and reversing the trend of the diseases. Though the treatment success rate has improved over the years, TB case detection rate has remained stagnant. Reducing regional disparities will need much more concentrated effort on active case identification. Ever rising drug resistant TB in the country is a further challenge to be addressed in the coming years²⁵.

New HIV infections have declined from a peak of 8,329 in 2002 to 1,408 in 2013 and are projected to decrease further to 720 in 2020²⁶. With scale up of services and integration of Anti-retroviral Treatment (ART) services and coordinated efforts between TB, HIV and maternal and child health services, the gap is minimizing between the estimated numbers and the identified numbers. Prevention of Mother to Child Transmission (PMTCT) and ART treatment coverage has also improved with scale up of these services.

Annual parasite incidence for Malaria has been declining and now the government is gearing towards eliminating Malaria by 2026²⁷. The micro-stratification in 2013 showed precise risk areas up to the lowest administrative division, i.e. the VDCs. The results showed 52% of the population at risk²⁸ which is much less in comparison to the earlier figure of 72%.

The status of different neglected tropical diseases, targeted for elimination, is given below:

Disease	Elimination target year	Elimination definition	Status as of June 2015
Leprosy	2010	Prevalence: Less than 1 case /10,000 population	Achieved elimination at 2010 at national level.
Kala-azar	2015	Incidence: Less than 1 case /10,000 population	Elimination level reached since 2013. On track.

²⁰ Department of Health Services, "Annual Report 2069/70," (2014).

²¹ "Annual Report 2070/71," (2015).

²² Ibid.

²³ Ibid.

²⁴ Central Bureau of Statistics, "Nepal Multiple Indicator Cluster Survey 2014 Key Findings."

²⁵ Lochana Shrestha, Kashi Kanta Jha, and Pushpa Malla, "Changing Tuberculosis Trends in Nepal in the Period 2001-2008," Nepal Medical College Journal 12, no. 3 (2010).

²⁶ National Centre for AIDS and STD Control, "Country Progress Report on HIV/AIDS Response Nepal," (2014).

²⁷ Epidemiology & Disease Control Division, "Nepal Malaria Strategic Plan 2011-2016," (Kathmandu 2011).

²⁸ Shiva Raj Adhikari, "Towards Universal Health Coverage: An Example of Malaria Intervention in Nepal," WHO South-East Asia Journal of Public Health 3, no. 1 (2014).

Trachoma	2017	Prevalence of Trachomatous Trichiasis (TT) <0.1% in population; Prevalence of Follicular Trachoma (TF) <5% in 1-9 year olds	Mapping and Mass Drugs Administration (MDA) completed in all 20 endemic districts; Impact studies done and surveillance initiated, Elimination target on track.
Lymphatic Filariasis	2020	Prevalence below 1% by microfilaria and below 2% by antigen.	Mapping completed, 100% geographical coverage of MDA achieved, MDA phased out in 20 districts, surveillance and Morbidity Management and Disability Prevention initiated

Table 1: Diseases targeted for elimination

2.2 Equity Gap in Health Care Services

The overall progress in health outcomes and aggregate improvements showcased here masks the significant equity gap that continues to persist. Many citizens still face several barriers – financial, socio-cultural, geographical, and institutional – in accessing quality health care services²⁹. Table 1 provides an illustrative example of how these barriers manifest themselves in the health sector.

Barriers	Implications for health sector
Financial	<ol style="list-style-type: none"> 1. High out of pocket expenditure 2. Opportunity cost (e.g. wage loss) while seeking care
Socio-cultural	<ol style="list-style-type: none"> 1. Harmful cultural practices 2. Non-acceptance of particular services (e.g. family planning) 3. Many women are still not able to make independent decisions on matters related to their own health, esp. sexual and reproductive health
Geographical	<ol style="list-style-type: none"> 1. Inconveniently located health facilities and associated travel distance due to difficult terrain 2. Seasonal issues such as floods, landslides restricting movement
Institutional	<ol style="list-style-type: none"> 1. Unavailability of health workers 2. Unfit Attitude and behaviour of health service providers 3. Stock-outs of drugs and commodities 4. Limited and impractical opening hours of health facilities 5. Non-adherence of health facilities to Minimum Service Standards

Table 2: Barriers for Social Inclusion in Health

There are wide variations in health services availability, utilisation and health status across different socio-economic and geographical population groups, indicating the challenge of access and equity³⁰. For example, in under-five mortality the gap between the poorest and wealthiest has increased since 2001; in 2011 the under-five mortality rate for the poorest income quintile was 75 – more than double the rate of 36 for the wealthiest. Infant mortality rate of 69 among Muslims and 65 for Dalits, as compared to 45 for Brahmin/Chhetri, also typifies the variation in health status between different caste/ethnic groups.³¹

²⁹ Ministry of Health and Population, “Operational Guidelines for Gender Equality and Social Inclusion Mainstreaming in the Health Sector,” (Kathmandu: Government of Nepal, 2013).

³⁰ David Daniels et al., “Nepal Health Sector Programme II Mid-Term Review,” (2013).

³¹ Ministry of Health and Population, New ERA, and ICF International Inc., “Nepal Demographic and Health Survey 2011.”

Despite consistently high coverage of immunization, certain population remain excluded from these services. The 2011 NDHS survey has revealed that 3% of the children did not receive any vaccine and 10% did not receive full immunization³².

Complex topographical terrain of Nepal further widens the equity gap in availability, access and utilization of health services. 42.8% of deliveries were attended by Skilled Birth Attendants (SBAs) in Terai region – which has flat topography allowing easier service access – as compared to a meagre 18.9% in mountain region with its harsh terrains impeding easier access³³.

While much effort is still required to deliver equitable health care services to the citizens, this issue itself is not new and several efforts have been made in the past by both the government and its development partners – producing encouraging results.

Equity in health featured prominently in the previous sector strategies: NHSP-I (2005-2010) and NHSP II (2010-2015). NHSP-I attempted to put “clear systems in place to ensure that the poor and vulnerable communities have priority for access.³⁴” Similarly, NHSP-II aspired to “increase access to and utilisation of quality health care services” and “reduce cultural and economic barriers to accessing health care services...³⁵³⁶”. Vulnerable Community Development Plan (VCDP), developed in 2004, supported NHSP-I to operationalize the agenda of social inclusion in the health sector; likewise, Health Sector Gender Equality and Social Inclusion Strategy of 2009 accompanied NHSP II.

During NHSP-I period, Nepal “spent two thirds or more of the health budget on successfully reducing mortality from easily preventable causes.³⁷” As the poorest were more prone to mortality from these causes, the impact of this budget increase was largely seen as being pro-poor.³⁸ During this period, significant progress was made in “reducing inequalities in access to and utilisation of family planning and child health care services between castes and ethnic groups, as well as between poor and wealthier citizens.³⁹” In contrast to this, EQUITAP study conducted in 2005 – which looked at benefit incidence of public health subsidies in 11 Asian territories – indicated that Nepal had the greatest pro-rich bias among the countries studied⁴⁰. However, a major caveat of this study is that it was “based on data for Nepal from the mid-1990s [Nepal Living Standards Survey 1995/96], before the major expansion in public health programmes...⁴¹” took place. Furthermore, Benefit Incidence Analysis conducted in 2012 notes that “the net effect of health subsidies is progressive...⁴²,” i.e. pro-poor.

The government introduced free health care programme in 2008 to mitigate economic barriers in accessing health care services; however, the results are mixed. “Number of clients receiving free

³² Ibid.

³³ Ibid.

³⁴ Ministry of Health, “Nepal Health Sector Programme - Implementation Plan (NHSP-IP),” (Kathmandu: His Majesty’s Government, 2004).

³⁵ Ministry of Health and Population, “Nepal Health Sector Programme II (2010-2015),” (Kathmandu: Government of Nepal, 2010).

³⁶ Ministry of Health and Population, “Nepal Health Sector Programme II (2010-2015),” (Kathmandu: Government of Nepal, 2010).

³⁷ Mick Foster et al., “Review of Nepal Health Sector Programme: A Background Document for the Mid-Term Review,” (Kathmandu: Mick Foster Economics Ltd. and Development Consultancy Center (DECC), 2007), pp 41.

³⁸ Ibid.

³⁹ Ministry of Health and Population, “Nepal Health Sector Programme II (2010-2015),” pp 8.

⁴⁰ Owen O’Donnell et al., “Who Benefits from Public Spending on Health Care in Asia?,” EQUITAP Project: Working Paper #3(2005), <http://www.equitap.org/publications/docs/EquitapWP3.pdf>.

⁴¹ Foster et al., “Review of Nepal Health Sector Programme: A Background Document for the Mid-Term Review.”

⁴² Sebastian Silva-Leander, “Benefit Incidence Analysis in Health,” (Kathmandu: Nepal Health Sector Support Programme, 2012).

essential health care services has markedly increased⁴³ for all levels of facility and “households from the poorest quintile were most likely to have received services free of charge.⁴⁴” However, the fact that in 2011, 31% (and in 2013 19%) of outpatients were paying for the care that should have been provided free of charge means that there is a further room for improvements in implementing free health care programme⁴⁵.

The government introduced Maternity Incentive Scheme in 2005, which subsequently evolved into Aama Programme in 2009. Large increase in the proportion of delivery at health institution – from 31% in 2009/10 to 44% in 2011/12 is often attributed to the success of Aama Programme.⁴⁶ The women from disadvantaged groups have benefitted more from this programme. In 2013, “higher proportion of Dalits (74%) and religious minorities (54%) received free delivery care than [any] other groups.⁴⁷”

The women of Nepal continue to live on the margins of society and suffer from gender gap, as underscored by the 2014 Global Gender Gap Report which ranked Nepal 112 among 142 countries in terms of gender gap,⁴⁸ however, this is a marked improvement as compared to 2011 when it was ranked 126. It is worthwhile to note that in the sub-index of health and survival, the 2014 report ranked Nepal 88 as compared to 111 in 2011.⁴⁹

Despite pro-poor orientation of health subsidies, distribution of Human Resources (HR) has been persistently inequitable. Out of 32, 809 public health workforce in Nepal, 45% are concentrated in the Central Region whereas only 7% are in the Far-Western Region. The distribution scenario is even worse for private health workforce; of the total 21,638 health workers, only 2% are available in the Far-Western Region with 58% concentrated in the Central Region.⁵⁰

There has been realisation that the health equity and access programme was less effective due to lack of disaggregated data to monitor access and utilization of health services by people of various caste and ethnic groups in the absence of such data.

Implementation of this strategy requires collection and analysis of disaggregated indicators, supporting the continued effort required to improve equitable utilization of health services.

2.3 Population Dynamics and Health

Nepal has a population of 26.5 million with an estimated 724,000 births every year. As compared to the last three decades, when the population growth rate hovered around 2~2.5%, the growth rate has declined to 1.35%.⁵¹ The decline in population growth is “attributed both to decline in

⁴³Bal Krishna Subedi et al., “Service Tracking Survey 2011 Nepal Health Sector Programme II,” (Kathmandu: Ministry of Health and Population, 2012).

⁴⁴RTI International, “Pro-Poor Health Care Policy Monitoring: Household Survey Report from 13 Districts,” (Kathmandu: Research Triangle Park, NC, USA, 2010).

⁴⁵Ministry of Health and Population, Health Research and Social Development Forum (HERD), and Nepal Health Sector Support Programme (NHSSP), “Service Tracking Survey 2013 Nepal Health Sector Programme II,” (Kathmandu: Ministry of Health and Population, 2014).

⁴⁶Senendra Raj Upreti et al., “Rapid Assessment of the Demand Side Financing Schemes: Aama and 4anc Programmes,” (Kathmandu: Ministry of Health and Population, 2013).

⁴⁷Ibid.

⁴⁸World Economic Forum, “The Global Gender Gap Report 2014,” (Geneva: World Economic Forum, 2014).

⁴⁹Ibid.

⁵⁰Ministry of Health and Population, “Human Resources for Health Nepal Country Profile,” (Kathmandu: Government of Nepal, 2013).

⁵¹Central Bureau of Statistics, “National Population and Housing Census 2011,” (Kathmandu 2012).

fertility and emigration of youth.⁵² It is interesting to note that “the proportion of the population is gradually declining in Mountain and Hill and steadily increasing in Terai.⁵³”

The Contraceptive Prevalence Rate (CPR) has increased by 2% per year between the 1996 and 2006. During this period, the use of modern contraceptive methods increased from 26%.⁵⁴ The Total Fertility Rate (TFR) declined significantly from 5 births per women in 1990 to 2.6 births per women in 2011; and, in contrast to the CPR, it continued to fall after 2006, declining to 2.6 in 2011⁵⁵. CPR low coverage and unmet needs remain a challenge to meet the planned CPR level of 52 by 2021⁵⁶.

The government is committed to FP2020 which calls for equitable access to voluntary family planning. For this the government has committed to number of financial, policy and programmatic commitments, including raising the annual government allocation for family planning programme⁵⁷. Analysis of the last four Demographic and Health Surveys clearly indicate substantial increase in the practice of prenatal sex selection since 2002. Nepal legalized abortion services in 2002 so there may be possible association of increased prevalence of sex selection with the legalization of abortion⁵⁸. This necessitates further attention and review of the implementation of the Safe Abortion Act.

The current life expectancy of Nepalese at birth is 66.6 years. “The life expectancy of females has overtaken males in the last 30 years. Life expectancy at birth for females has increased from 48.1years in 1981 to 67.9 years in 2011.⁵⁹” The ageing index shows that the “the number of old people compared to children, has been consistently increasing over decades⁶⁰”, underscoring the need for more attention to geriatrics health.

Nine million young (10-24 years of age) people live in Nepal – one third of the total population. Adolescents (10-19 years of age) make up 24.2% of the total population and the youth (15-24 years of age) make up almost 20% of the total population. While there has been a remarkable increase in the number of health facilities providing adolescent-friendly health services (from 78 in 2011 to 500 in 2013), existing challenges such as quality of care, availability of human resources, physical infrastructure hamper effective health care services to young people⁶¹. Nevertheless, establishing youth-friendly health facilities is a good platform to capitalize on to provide health care services that is responsive to young people.

Migration is becoming an important facet in the population dynamics of Nepal. Increasing number of youths are emigrating abroad. The absent population of Nepal in 2011 was 1,921,494 as compared to 762,181 in 2001. There is also an increasing trend in internal migration. In 2011, 2.6 million inter-district migrants were reported to be lifetime migrants, compared to 1.5 million

⁵²“Population Monograph of Nepal,” (Kathmandu: National Planning Commission, 2014).

⁵³Ibid.

⁵⁴Ministry of Health and Population, New ERA, and Macro International Inc., “Nepal Demographic and Health Survey 2006.”

⁵⁵Ministry of Health and Population, New ERA, and ICF International Inc., “Nepal Demographic and Health Survey 2011.”

⁵⁶Department of Health Services, “National Family Planning Costed Implementation Plan 2015-2021,” (Kathmandu: Ministry of Health and Population, 2015).

⁵⁷Family Planning 2020: Commitment Form for Countries, (16 March, 2015).

⁵⁸Melanie Dawn Frost et al., “Falling Sex Ratios and Emerging Evidence of Sex-Selective Abortion in Nepal: Evidence from Nationally Representative Survey Data,” *BMJ Open* 3, no. 5 (2013).

⁵⁹Central Bureau of Statistics, “Population Monograph of Nepal.”

⁶⁰Ibid.

⁶¹Daniels et al., “Nepal Health Sector Programme II Mid-Term Review.”

in 1981.⁶² Vulnerability of migrants to certain health risks, poses an additional challenge for the government to address. For example, “the highest percentage of total cases of HIV in Nepal is contributed by seasonal labour migrant workers (46%).⁶³”

The growth in urban population is significant. As compared to 1991, when only 9% the population lived in urban areas, in 2011 urban population rose to 17%.⁶⁴ However, “if the recently declared (FY 2071/72) 133 municipalities are included, making 192 municipalities in total, the urban population is 38.26% of the total population.⁶⁵” Expanding urbanization has resulted in rapidly growing urban populations, particularly of the urban poor with growing inequities in human health. For example, children from the poorest wealth quintile in urban areas are 4.5 times more likely to die before the age of five than those of the wealthiest urban quintile. Similarly, only 45% of women of the poorest urban wealth quintile have access to Skilled Birth Attendants (SBA) compared to 85% for the women of wealthiest urban quintile.⁶⁶

In 2011, the overall prevalence of disability in Nepal was 2%. The prevalence of disability was highest in the Mountain region with 3%. Most of the disabled were less than 30 years old. Physical disability and blindness/loss of vision accounted for more than 50% of the total disability.⁶⁷ Preliminary assessment after the earthquake of April 2015 indicates that 439 people require long-term care, among which 253 require prolonged rehabilitation services⁶⁸. However, this number is expected to rise.

With the human development index of 0.54, in 2014, Nepal ranks 145 out of 187 countries. As of 2010/11, 25.16% people are living below the poverty line in Nepal; this represents a 5.7% decline in absolute poverty from 2003/04 when 30.8% people were under the poverty line. Among the employed population, 60% are engaged in the agriculture sector; however, “the contribution of the agriculture sector to the GDP has declined from 61% in 1981 to 31% in 2011, while the contribution of the service sector has increased from 27% to 48% during this period.⁶⁹” As the non-agriculture sectors like service, construction, transportation, etc. increasingly employ more and more people, due attention is needed to address the occupational safety and health issues – which to date remain largely neglected.⁷⁰

The census of 2011 showed that 67% Nepalese were literate with female literacy increasing from 43% in 2001 to 58% in 2011. Similarly, 67 of the population attend school. Studies show correlation between education attainment and healthy behaviour, and reciprocally, less permissive towards risky behaviour⁷¹.

⁶²Central Bureau of Statistics, “Population Monograph of Nepal.”

⁶³Arjun Aryal, YN Yogi, and H Ghimire, “Vulnerability to Unsafe Sex and HIV Infection among Wives of Migrant Workers in Far Western Nepal,” *Journal of Chitwan Medical College* 3, no. 3 (2013).

⁶⁴Central Bureau of Statistics, “National Population and Housing Census 2011.”

⁶⁵“Population Monograph of Nepal.”

⁶⁶Health Research and Social Development Forum (HERD) and COMDIS-HSD, “Urban Health Technical Brief,” (Kathmandu 2014).

⁶⁷Central Bureau of Statistics, “Population Monograph of Nepal.”

⁶⁸Health Emergency Operation Centre (HEOC), “Health Sector Response: Situation Update Report,” (2015).

⁶⁹Central Bureau of Statistics, “Population Monograph of Nepal.”

⁷⁰Rudra Prasad Gautam and Jiba Nath Prasain, “Current Situation of Occupational Safety and Health in Nepal,” (Kathmandu: General Federation of Nepalese Trade Unions (GEFONT), 2011).

⁷¹Ministry of Health and Population, New ERA, and ICF International Inc., “Nepal Demographic and Health Survey 2011.”

2.4 Quality of Care

Nepal has expanded public health services to remote corners of the country, increasing people's access to health care services. The expansion has, in many instances, not been accompanied by improved quality at the point-of-care. Increasing the utilization of health services may not improve health outcomes unless the services are also characterized by excellence in delivery along with benchmarks for good quality. The Mid-term Review of NHSP II explicitly notes that, "Access has been the focus... . Now more attention on quality of care is needed as a matter of priority."⁷²

Quality of care related challenges remain with basic inputs such as: deficit (and absence) of qualified health workers at facilities, stock-out of drugs and commodities, non-functioning equipment and poor physical and utility infrastructure.⁷³⁷⁴⁷⁵⁷⁶ Curative services, in particular, have suffered more from the quality issues.⁷⁷

Recently conducted assessment of birthing centres found only 57% of nursing staff assigned at birthing centres had received SBA training⁷⁸. Further, guidelines for infection prevention were not being followed i.e. hand washing was observed only by 12% of service providers during ANC check-ups⁷⁹. Cleanliness, visual and auditory privacy, and poor counselling services at health facilities were major reasons identified for dissatisfaction among maternity and outpatients clients⁸⁰⁸¹⁸². Interestingly, the assessment of the birthing centres found that SBA skills were not better in the private health facilities, surmising that quality of care remains a challenge for the private sector as well⁸³. Low confidence in peripheral health facilities is partly responsible for increased utilization of primary care services at tertiary, secondary, and specialty hospitals. Already crowded referral hospitals are unable to meet the increasing demand for their services and often have bed occupancy rates that surpass their capacity⁸⁴.

Challenges remain in terms of overcrowding of certain facilities – particularly hospitals – while under-utilization of others, particularly peripheral facilities. This is specifically the case in maternity units of the referral hospitals.⁸⁵ This underscores a need for a more organized primary health care system with good gatekeeping function and effective referral mechanism to manage service delivery in a cost effective manner. This also implies for the expansion of the public health facilities in consideration to change in distribution of population across geography.

⁷²Daniels et al., "Nepal Health Sector Programme II Mid-Term Review."

⁷³Subedi et al., "Service Tracking Survey 2011 Nepal Health Sector Programme II."

⁷⁴Suresh Mehta et al., "Service Tracking Survey 2012 Nepal Health Sector Programme II," (Kathmandu: Ministry of Health and Population, 2013).

⁷⁵Ministry of Health and Population, Health Research and Social Development Forum (HERD), and Nepal Health Sector Support Programme (NHSSP), "Service Tracking Survey 2013 Nepal Health Sector Programme II."

⁷⁶Family Health Division, "Results from Assessing Birthing Centres in Nepal," (Kathmandu: Department of Health Services, 2014).

⁷⁷Foster et al., "Review of Nepal Health Sector Programme: A Background Document for the Mid-Term Review."

⁷⁸Family Health Division, "Results from Assessing Birthing Centres in Nepal."

⁷⁹Ibid.

⁸⁰Subedi et al., "Service Tracking Survey 2011 Nepal Health Sector Programme II."

⁸¹Suresh Mehta et al., "Service Tracking Survey 2012 Nepal Health Sector Programme II."

⁸²Ministry of Health and Population, Health Research and Social Development Forum (HERD), and Nepal Health Sector Support Programme (NHSSP), "Service Tracking Survey 2013 Nepal Health Sector Programme II."

⁸³Family Health Division, "Results from Assessing Birthing Centres in Nepal."

⁸⁴Madhu Dixit Devkota et al., "Responding to Increased Demand for Institutional Childbirths at Referral Hospitals in Nepal: Situational Analysis and Emerging Options," (Kathmandu: Family Health Division, 2013).

⁸⁵Ibid.

MoHP drafted a Quality Assurance Policy in 2009 to “ensure the quality of services provided by governmental, non-governmental and private sector according to set standard.⁸⁶” However, with no resource backup, the implementation of the policy remains poor.⁸⁷

Quality of care is often seen as a “holistic” issue with aggregate improvements realized by strengthening individual health system components such as human resource, physical infrastructure, information management, etc. Here it becomes important to ensure that, the cumulative improvements in the health systems actually result in improved quality of care at the point of service delivery; and this can be measured through explicitly defined quality standards.

Reports of increasing resistance to antimicrobial drugs, in Nepal and globally, are threatening to undermine the benefits of antibiotics that have been crucial in treating bacterial infections, preventing the spread of disease and minimizing serious complications^{88,89}. Misuse, over-prescription, dispensing of these without medical consultation, low potency as a result of poor manufacturing and storage conditions have increased the opportunity for individuals to become infected by antibiotic-resistant bacteria. Further, indiscriminate use of antimicrobial use in animals have also been associated with the emergence of this resistance in humans, thereby reducing the effectiveness of antimicrobial drugs in treatment of human disease⁹⁰. These developments underscore the need to better regulate and promote the judicious use of these drugs in both animal and human medicine and slow the development of their resistance.

2.5 Shifting Burden of Diseases and Health Problems

Nepal faces a triple burden of health problems. While communicable diseases account for a large proportion of deaths and disability, there is a growing prevalence of non-communicable diseases and – as a triple burden – so are threats from natural disasters, adverse effects of climate change, accidents, violence, and injuries.

While, the Global Burden of Diseases Study estimates that lower respiratory infections, diarrheal diseases and neonatal encephalopathy remain the main causes of premature death in Nepal, it highlights that Nepal is facing increasing burden of non-communicable diseases (NCDs) and injuries.⁹¹ NCDs account for “more than 44% of deaths, 80% of outpatient contacts, and 39% of DALYs lost⁹². Major NCDs in Nepal are cardiovascular diseases, diabetes, cancer, chronic respiratory diseases, oral diseases, and mental disorders. These burdens are further exacerbated by rising health care costs that have resulted in high out-of-pocket expenditure (55% in 2008/09) despite of increasing government expenditure on health.⁹³ Tobacco use, high alcohol consumption, low fruit and vegetable consumption, physical inactivity, obesity and overweight, and air pollution

⁸⁶Ministry of Health and Population, “Policy on Quality Assurance in Health Care Services: Unofficial Translation,” (Kathmandu: Government of Nepal, 2009).

⁸⁷Daniels et al., “Nepal Health Sector Programme II Mid-Term Review.”

⁸⁸Shyamal Bhattacharya et al., “Prevalence of Shigella Species and Their Antimicrobial Resistance Patterns in Eastern Nepal,” *Journal of Health, Population and Nutrition* 23, no. 4 (2005).

⁸⁹Shyam Kumar Mishra et al., “Drug Resistant Bacteria Are Growing Menace in a University Hospital in Nepal,” *American Journal of Epidemiology and Infectious Disease* 2, no. 1 (2014).

⁹⁰E. K. Shrestha et al., “Antimicrobial Resistance Pattern of Escherichia Coli Isolates from Chicken and Human Samples in Chitwan,” *Nepalese Veterinary Journal* 30.

⁹¹Institute for Health Metrics and Evaluation, “Global Burden of Disease Study 2010,” (Seattle, Washington: University of Washington, 2010).

⁹²Daniels et al., “Nepal Health Sector Programme II Mid-Term Review.”

⁹³Babu Ram Shrestha et al., “Nepal National Health Accounts, 2006/07 – 2008/09,” (Kathmandu: Ministry of Health and Population, 2012).

are the major risk factors for NCDs in Nepal⁹⁴. Specifically in rural households, the indoor smoke and poor ventilation continue to pose risks for pulmonary and cardio-vascular diseases⁹⁵.

Mental health remains a much-neglect areas, despite the fact that mental illnesses alone count for 18% of the current NCDs burden and this burden is only growing further.⁹⁶ For example, in 2009, suicide was the cause of 16% of deaths among women of reproductive age, as compared to 10% in 1998.⁹⁷ Even though the data on mental health situation is very limited, it can perhaps be assumed that the burden of mental health is much higher “due to 10 years of armed conflict, prolonged political instability, mass youth migration abroad for employment, ageing of the population, poverty and unplanned urbanization.⁹⁸” Psychological trauma among the citizens following the earthquake is an emerging challenge for the health sector.

The Road Traffic Accidents (RTA) in Nepal is rising alarmingly. In 2001 there were 879 fatalities in Nepal from road accidents; whereas in 2013, the fatalities had risen to 1,816. In the last decade, more than 9,000 people have perished from the RTA.⁹⁹ Nepal’s fatality rate of 17 per 10,000 registered vehicles in 2009/10 is one of the highest in the world.¹⁰⁰ GDP loss due to RTA is estimated at 0.8%¹⁰¹. Nepal Road Safety Action Plan (2013-2020) calls for a multi-sectoral response to address road safety under the following five pillars: road safety management, safer roads and mobility, safer vehicles, safer road users, and post-crash response.¹⁰² The last pillar requires a major response from the health sector.

Institutional and public health capacities to implement and coordinate environmental health issues remain low. Despite some interventions on disaster preparedness (hospital safety, rapid response training, establishment of Health Emergency Operations Centre, etc.), the actual progress is slow. Service Tracking Survey of 2013 showed that only 59% of surveyed hospitals had emergency contingency plans; out of them only 35% held a meeting to discuss the plan.¹⁰³¹⁰⁴ Climate change and human health remains a new area and there is not much knowledge within the health sector to determine the impact of climate change in the health of the citizens¹⁰⁵.

2.6 Post-disaster situation

The devastating earthquake of April, 2015 took a serious toll of the health sector. It resulted in disruption of health services in affected areas as well as significant damage to health infrastructure. In the earthquake 8,702 people lost their lives (45% male, 55% female). A total of 446 public

⁹⁴Krishna Kumar Aryal et al., “Non Communicable Diseases Risk Factors: Steps Survey Nepal 2013,” (Kathmandu: Nepal Health Research Council, 2014).

⁹⁵Ibid.

⁹⁶Government of Nepal, “Multisectoral Action Plan for the Prevention and Control of Non Communicable Diseases (2014-2020),” (Kathmandu 2014).

⁹⁷Bal Krishna Subedi et al., “Nepal Maternal Mortality and Morbidity Study 2008/2009,” (Kathmandu: Ministry of Health and Population, 2009).

⁹⁸Government of Nepal, “Multisectoral Action Plan for the Prevention and Control of Non Communicable Diseases (2014-2020).”

⁹⁹Arjun Jung Thapa, “Status Paper on Road Safety in Nepal,” in Europe-Asia Road Safety Forum and the 67th Session of the Working Party 1 of UNECE (New Delhi: Department of Roads, 2013).

¹⁰⁰Ministry of Physical Planning & Transport Management, “Nepal Road Safety Action Plan (2013-2020),” (Kathmandu: Government of Nepal, 2013).

¹⁰¹Global Health Observatory (GHO), “Nepal: Country Profile,” World Health Organization, http://www.who.int/gho/countries/npl/country_profiles/en/.

¹⁰²Ministry of Physical Planning & Transport Management, “Nepal Road Safety Action Plan (2013-2020).”

¹⁰³Ministry of Health and Population, Health Research and Social Development Forum (HERD), and Nepal Health Sector Support Programme (NHSSP), “Service Tracking Survey 2013 Nepal Health Sector Programme II.”

¹⁰⁴Daniels et al., “Nepal Health Sector Programme II Mid-Term Review.”

¹⁰⁵Sharad Onta, “Climate Change and Health: An Overview” (paper presented at the National Workshop on Climate Change and Human Health: Potential Impact, Vulnerability and Adaptation in Nepal Kathmandu, 2007).

health facilities and 16 private facilities were completely destroyed while a total of 765 health facilities were partially damaged. This calculates to 43% of country's health institution directly affected by the earthquake. In monetary terms, the damages and losses is estimated at NPR 7.54 billion which necessitates NPR 14.7 billion (estimated) for recovery and reconstruction need¹⁰⁶.

To cater to the health needs of thousands of people affected by the earthquake, in addition to the regular services, MoHP has to provide additional health services such as mental health and rehabilitation services. These require additional capacities and resources. While the immediate post-earthquake response of the health sector was impressive, it nevertheless stretched the capacity of the sector to its limit. It also exposed limitations in current health systems and capacity deficits within MoHP vis-à-vis emergency preparedness and disaster response.

Notwithstanding the tragic consequences of the earthquake, the post-disaster situation is nevertheless an opportunity for MoHP to rebuild the health systems and reorganize the sector to make it more effective, efficient and responsive to people's needs.

2.7 Health Care Financing and Financial Protection

The overall macroeconomic situation of Nepal is slowly improving. The average growth of Gross Domestic Product (GDP) has been 4.3% over the last five years, i.e. from 2010 to 2014¹⁰⁷. However, in post-earthquake scenario, the GDP growth for 2015 is projected to drop down to 3% - the lowest in last eight years¹⁰⁸. The share of public spending in GDP has increased from 21.8% in 2010 to 23% in 2014 which indicates a growing fiscal space.¹⁰⁹ However, while the health sector has benefited from larger public spending, its share in total public spending has declined in the last two years of the NHSP II period (6.2% in 2010/11 to 5.1% in 2013/14)¹¹⁰. The contribution of the EDPs during NHSP I and II has remained almost one third of the total MoHP expenditure, highest being 42% in 2009/10 and lowest being 25% in 2013/14¹¹¹. As Nepal plans to graduate to LMIC by 2022 and coupled with the fact that the overall poverty incidence of Nepal is decreasing¹¹², it is likely that in future EDPs' investment in health may decrease. This gap is then expected to be filled through increased government investment in health. However, in the aftermath of the earthquake –with anticipated increase in fiscal deficit for few years to come – it is very taxing for the government to fulfil this gap alone. To ensure that progress and achievements made in crucial social sectors like health are not jeopardized, the GoN has called for an increased investment in social sector from development partners and international community¹¹³.

Compared to NHSP I period, the share of national expenditure to MoHP has declined during NHSP II. This is linked with low absorption rate of the MoHP (83%¹¹⁴) for the last five years (2009-2014) as compared to the overall national absorption rate of 88% - underscoring the need for a collective effort to further increase public financing in health as well as better management of the

¹⁰⁶National Planning Commission, "Final Report on Post Disaster Needs Assessment and Recovery Plan of Health and Population Sector," (Kathmandu 2015).

¹⁰⁷Ministry of Finance, "Economic Survey Fiscal Year 2013/14," (Kathmandu: Government of Nepal., 2014).

¹⁰⁸National Planning Commission, "Nepal Earthquake 2015 Post Disaster Needs Assessment," (Kathmandu: Government of Nepal, 2015).

¹⁰⁹Asian Development Bank, "Nepal: Economy," Asian Development Bank, <http://www.adb.org/countries/nepal/economy>.

¹¹⁰Ministry of Finance, "Red Book," (Kathmandu: Government of Nepal, 2009 - 2014).

¹¹¹ibid.

¹¹²Central Bureau of Statistics, "Nepal Living Standards Survey 2010/11," (2011).

¹¹³Ministry of Finance, "Theme Address by the Honorable Dr. Ram Sharan Mahat Finance Minister of Nepal," in International Conference on Nepal's Reconstruction (Kathmandu 2015).

¹¹⁴"Red Book."

available financial resources. The underlying factors for low budget absorption of the MoHP are mismatch between needs and planning, delays in authorization of expenditure, weak institutional capacity of MoHP and poor expenditure reporting for activities directly funded by the EDPs.

Over the period of NHSP I and II, MoHP has introduced different interventions to increase the utilization of priority interventions (free care, safe delivery, uterine prolapse, etc.) and provide financial protection to the poor and selected target groups. Consequently, per capita expenditure in the health sector has witnessed an increasing trend (39 US\$ in 2013) and a decreasing trend of out-of-pocket spending¹¹⁵.

But despite this remarkable progress, out-of-pocket expenditure (OOP), which is the most unfair and regressive way of funding health services, still constitute the largest (49%) source of funding in Nepal. In the absence of comprehensive regulatory fee structure, citizens face unfair prices and/or inappropriate, inadequate or unnecessary care when seeking care.

The heavy reliance on out of pocket payments poses not only financial barriers for the utilization of health services, but as people are forced to spend a substantial share of their income¹¹⁶, it even can cause financial impoverishment. A study carried out in Kathmandu valley found that non-communicable diseases – such as diabetes, asthma and heart disease – were often associated with catastrophic spending in the poorest households¹¹⁷. However, even quite common health problems like flu/cold/fever were found to be catastrophic among the population with low paying capacity given relatively high cost of care and very poor access to free health care services in the urban areas¹¹⁸.

Most of the government budget is directed to fund the health systems inputs following the line-item budgeting practice; however, with the introduction of various social protection schemes, the MoHP has also initiated the output-based budgeting practice. However, funds allocated on the basis of inputs and outputs are mixed at the facility level, leading to the MoHP paying for inputs and as well as outputs without a clear distinction.

As a new reform agenda, the government is in the process of implementing Social Health Security scheme – by establishing a semi-autonomous purchasing agency – to increase the financial protection by promoting pre-payment and risk pooling in the health sector. The recently endorsed National Health Insurance Policy foresees the integration of all social health protection schemes, demanding a clear roadmap towards this end.

There is a need to formulate a comprehensive health financing strategy to garner adequate resources in the health sector, ensure efficient and effective utilization of available resources, and to streamline different social health protection schemes.

¹¹⁵World Health Organization, "Global Health Expenditure Database," (Geneva: World Health Organization, 2013).

¹¹⁶Central Bureau of Statistics, "Nepal Living Standards Survey 2010/11."

¹¹⁷Eiko Saito et al., "Catastrophic Household Expenditure on Health in Nepal: A Cross-Sectional Survey," Bulletin of the World Health Organization 2014 92(2014).

¹¹⁸Ibid.

2.8 Sector Management and Coordination

The rapid expansion of health care providers and health institutions provides an opportunity for the development of the sector. However, the health sector is increasingly becoming more complex with numerous state and non-state actors participating and exerting their influence in the sector. The number of non-state health service providers and health institutions continue to grow rapidly, making its overall management and results-orientation more difficult.

As articulated in the National Health Policy, improvement in health outcomes requires efforts across several sectors – not just health. Health becomes part of the broader development agenda as part of the wider social determinants of health such as empowering of women, improving of rural and urban infrastructure, food security, expanding access to clean water and sanitation, better waste management, and improving access to quality education. The approach of ensuring health in all policies is being promoted to emphasise the importance of multi-sectoral workings. These factors ensure stronger public health actions at national and community levels and a more integrated approach on putting health as a central component of development.

However, as the country increasingly seeks multi-sectoral coordination in health, it poses the additional burden for the government to not only manage ever-growing number of customary health actors but also coordinating the plethora of multi-disciplinary stakeholders partaking in the arena of public health.

In the last decade, the country has seen a lot of investment in health from the private sector as reflected by the number of private health facilities that have mushroomed throughout the country. There were 16 private hospitals in Nepal in 1990. By 2006 their numbers increased to 190 hospitals and currently, as of 2014, there are 301 registered private hospitals in Nepal. In fact, data collected in 2012 show that the number of beds (19,580) in private hospitals far surpasses those in the public hospitals (5,644)¹¹⁹. Most of these private hospitals are concentrated in urban areas (67 of them are in Kathmandu valley) and mainly cater to the clients from higher wealth quintiles. Having said that, private health service utilization is also increasing in rural areas where people increasingly visit private pharmacies which also provide basic medical consultation¹²⁰. Contribution of the private sector to improve access to health services is appreciable with increasing preference over the public sector; however, the public sector needs to improve its service delivery to ensure that people have more effective choices at an affordable cost. Necessary regulatory and strategic mechanisms to regulate the private sector and harness the full potential of State and Non-State Partnership (SNP) remain largely missing. Because of weak regulation of the private sector, citizens often face inappropriate, inadequate and unnecessary care.

Nepal has a long tradition of collaboration with the non-state health care providers; some are financed by the government and others by EDPs and international NGOs. Currently a number of partnership models are operational across Nepal in collaboration with not-for-profit NGOs, private-for-profit hospitals, and medical colleges. However, in the absence of uniformity in contract structure or its effective supervision and monitoring, these partnerships are seen as innovative pilots lacking long term strategic commitment for its sustainability. If SNP is to be recognised as a long term, sustainable strategy, it is imperative to create certain minimal enabling conditions.

¹¹⁹Central Bureau of Statistics, "A Report on Census of Private Hospitals in Nepal 2013" (Kathmandu: National Planning Commission, 2013).

¹²⁰"Nepal Living Standards Survey 2010/11."

The current structure of MoHP and its subordinate authorities is more than 25 years old. There is a growing recognition that to address the contemporary and emerging health challenges, there is a need for organisational assessment and restructuring that is also linked to the evolving stewardship role of the government over the sector at large¹²¹¹²². The changing organizational functions also require modifications to existing roles and responsibilities and a sectoral capacity development plan.

Further efforts are required to promote local health governance and decentralization. The NHSP-II mid-term review identified a top down approach being favoured in planning and budgeting.¹²³ Matters of procurement, resource allocation, transfers and leave issues being totally dealt with at the central level does not favour the concept of decentralisation. At district level and below, health management committees and health workers may reflect the local community needs and draw up plans; however, the district level health plans are not always honoured by the central level planning and budgeting. The government recognizes the need for devolution of more functional authority to local levels so that need based planning, budgeting and HR management can be carried out at district level. Collaborative Framework signed between MoHP and MoFALD in 2014 to promote local health governance is a step in that direction.

The Sector Wide Approach (SWAp) that came into effect in 2004 continues to hold and is largely seen as a 'mature' SWAp which the GoN aims to replicate in other sectors.¹²⁴¹²⁵ The assessment of the implementation of the Paris Principles on Aid Effectiveness shows good progress made in the health sector.¹²⁶ Improved aid effectiveness has helped strengthen health systems and "facilitated the rapid scale-up of proven, successful service delivery interventions."¹²⁷

However, the momentum gained on establishing good partnership needs to continue to address some persistent challenges that remain on aid effectiveness. One of them is the effective and efficient management of Technical Assistance (TA) in the sector; the effective use of TA for long-term institutional capacity development is another associated challenge. The large, and growing, volume of health aid channelled through the INGOs largely remains outside the purview of MoHP, weakening the alignment of government priorities and resulting in poor harmonisation among partners.¹²⁸¹²⁹ Although the predictability of aid in the health sector has somewhat improved over the years – with some development partners making multi-year commitments – many partners are still unable to do so. On the other hand, "the government's financial system remains weak which may increase fiduciary risk for partners."¹³⁰

¹²¹Daniels et al., "Nepal Health Sector Programme II Mid-Term Review."

¹²²Nepal Health Sector Support Programme (NHSSP), "Functional Assessment and Organization Review of the MoHP: A Diagnostic Report," (Kathmandu 2013).

¹²³Daniels et al., "Nepal Health Sector Programme II Mid-Term Review."

¹²⁴Ibid.

¹²⁵Ministry of Finance, "Development Cooperation Policy: International Cooperation for Development Effectiveness."

¹²⁶"2011 Survey on Monitoring the Paris Declaration: Nepal Country Report," (Kathmandu: Ministry of Finance, 2011).

¹²⁷Denise Vaillancourt and Sudip Pokhrel, "Aid Effectiveness in Nepal's Health Sector: Accomplishments to Date and Measurement Challenges," (Kathmandu: International Health Partnership (IHP+), 2012).

¹²⁸Daniels et al., "Nepal Health Sector Programme II Mid-Term Review."

¹²⁹Ministry of Health and Population, "Progress Report on Partnership, Alignment and Harmonisation in the Health Sector," (Kathmandu: Government of Nepal, 2014).

¹³⁰Ibid.

2.9 Health Systems Strengthening

Despite some progress made towards establishing systems and controls for procurement of pharmaceutical supplies, more efforts are required to reform procurement management and supply chain systems. While progress has been made, concerns remain over the effectiveness of public financial management and accounting within the government. This is a key element in ensuring progress and confidence in the management of the sector.

Incremental progresses were made in monitoring and evaluation and health information management under NHSP I and NHSP II. However, despite being placed as a prominent strategic direction in both NHSP I and NHSP II, very little progress has been made in the integrated approach to information management. Different information systems seldom 'talk' to each other and suboptimal health information governance means the adequate use of information and evidence in decision making remains limited. The current Health Sector Information Strategy (HSIS) was drafted in 2007; changes in technological, M&E and health landscape that has taken place since then warrants that this strategy be revised. Similarly, to leverage modern information and communication technologies in the health sector, a need for e-health strategy is also there¹³¹. Current system to register births and deaths is not up to the mark and the need for a robust civil registration and vital statistics (CRVS) system is felt.

Despite many efforts, almost all aspects of HR: production, recruitment, deployment and retention remain a challenge and needs focused attention as a matter of priority.¹³² Effective and efficient management of HR capacities remains weak. Fragmented training and orientations not only make capacity development measures inefficient and, together with frequent deputations outside of duty stations, leads to absenteeism of health workers¹³³. Motivation of health workers also remains a challenge. Some exercise on performance-based incentive models has been done but these are yet to be adopted and rolled-out on a meaningful scale.¹³⁴¹³⁵

Over the last couple of decades, the government has brought health services closer to the communities through a decentralized health system. There is at least one health post in every VDC, one PHCC in every electoral constituency, a district level hospital in every district and secondary level hospitals in zonal and regional levels.

During NHSP-II period, a more systematic and scientific basis for developing health infrastructure was realised. As a result, health infrastructures have gradually improved over time. During NHSS period, further effort is required to implement these guidelines and standards to improve access to public sector primary and tertiary level health services, particularly in hard-to-reach areas. Along with new infrastructures, maintenance of these infrastructure and equipment is needed to better serve the local health needs – particularly in districts that were affected by the 2015 earthquake.

¹³¹Daniels et al., "Nepal Health Sector Programme II Mid-Term Review."

¹³²Ministry of Health and Population, "Human Resources for Health Strategic Plan 2011-2015 " (Kathmandu: Government of Nepal, 2012).

¹³³Ministry of Health and Population, Health Research and Social Development Forum (HERD), and Nepal Health Sector Support Programme (NHSSP), "Service Tracking Survey 2013 Nepal Health Sector Programme II."

¹³⁴Foster et al., "Review of Nepal Health Sector Programme: A Background Document for the Mid-Term Review."

¹³⁵Daniels et al., "Nepal Health Sector Programme II Mid-Term Review."

2.10 Ayurveda Health Services and Alternative Medical Systems

Alma Ata Declaration highlights the importance of mobilizing traditional medical systems together with modern medicine system to strengthen primary health care. The role of traditional medicine systems is even more important to realize the vision of NHP 2014 to “ensure social and emotional health of the citizens”. International experiences show that in cases where behavioural, emotional, or spiritual factors lead to illnesses, traditional medical systems have made demonstrable contribution as compared to modern medical system¹³⁶.

Government of Nepal is committed to protect and promote traditional medicine systems. In Nepal, Ayurveda is in the forefront of traditional health care and it has been inherent to Nepal since the early periods of the country’s history.

In the public sector, Ayurveda health services are delivered through two hospitals, 14 zonal Ayurveda dispensaries, 61 District Ayurveda Centres and 214 sub-district level dispensaries. In fiscal year 2013/14, nearly 1 million people availed Ayurveda services through the public sector. In this period, more than 67,000 people were also provided homeopathic services through Pashupati Hospital in Kathmandu - the only government-run homeopathic outlet in the country¹³⁷. This hospital also provides Unani services.

Despite the government’s growing focus on Ayurveda health services, these systems are yet to be delivered in a more integrated manner with the modern health system. The fragmented delivery of these services compromise efficiency and limit the choices for clients.

Nepal has a great opportunity to produce and trade herbal medicines and products. While the country possesses 700 different types of plants that are of medicinal value¹³⁸, this opportunity is yet to be fully exploited. There is ample scope for health sector here to collaborate with sectors like forestry to produce and export herbal medicines and products.

The government also provides Homeopathy and Unani services through its public health networks. In the mountainous regions, the Tibetan medical system called Aamchi and in Terai region herb based traditional medical system called Gurau are practiced. The practice of seeking services from traditional faith healers such as: Dhami, Jhankri, Guvaju, Jharphuke, etc. is still prevalent in many communities of Nepal. In order to understand the efficacy of these practices, the stocktaking of these practices is yet to be done and mainstreamed.

¹³⁶Maurice M. Iwu and Erick Gbodossou, “The Role of Traditional Medicine,” *The Lancet* 356.

¹³⁷Department of Health Services, “Annual Report 2070/71.”

¹³⁸Ministry of Forests and Soil Conservation, “Non-Timber Forest Product Policy,” ed. Department of Plant Resources (Kathmandu: Government of Nepal, 2004).

3. Vision and Mission

As an embodiment of National Health Policy 2071 (NHP-2014), NHSS carries the policy's aspirational vision and mission statements. NHSS is designed to implement the policy goal to realize health as a fundamental right of every citizen by ensuring access to quality health services delivered through equitable and accountable health systems. Furthermore, the 14 policy elements of NHP-2014 guide the overall strategic priorities of NHSS.

1.1 Vision

All Nepali citizens have productive and quality lives with highest level of physical, mental, social and emotional health.

The Vision carries the aspiration to bring about holistic change in individuals and society by improving the health status of the citizens leading to overall human, social and economic development. The vision statement alludes to the idea that increasing the investment in human health is central to Nepal's development; healthy productive citizens are able to better society and drive economic growth. The vision aspires the sector to focus beyond its traditional role of delivering healthcare services to Nepali citizens. It establishes the mental, social and emotional well-being of individuals as integral facets of human health to enable citizens to live quality lives.

1.2 Mission

Ensure citizens' fundamental rights to stay healthy by utilizing available resources optimally and through strategic cooperation between service providers, service users and other stakeholders.

The Constitution of Nepal (2015) recognizes the citizens' right to stay healthy as a fundamental human right. It aims to progressively realise this right by actively engaging the communities and nurturing the notion of individual responsibility towards one's health. For this, the government seeks concerted and coordinated efforts of public and private service providers and other relevant stakeholders. The citizen's right to health is achieved through exploring suitable options to effectively and efficiently manage the available health resources and this also demands strategic cooperation amongst all stakeholders including the service users themselves.

4. Strategic Direction and Approaches

Nepal is committed to accelerate Universal Health Coverage (UHC) to ensure equitable access to quality health services for the population. The move towards progressive universalism is made through the provision of basic health services that are provided free-of-charge and other services beyond the basic health package that are provided at an affordable cost through targeted subsidies and various social health protection schemes. The focus is to concentrate on the progressive expansion in both basic and beyond the basic health package of services with continuous improvement in quality of care being delivered; making these services more affordable; and covering the larger population in need – especially the vulnerable and poor. During NHSS period, MoHP will identify and initiate suitable and sustainable options to finance the sector in moving towards UHC.

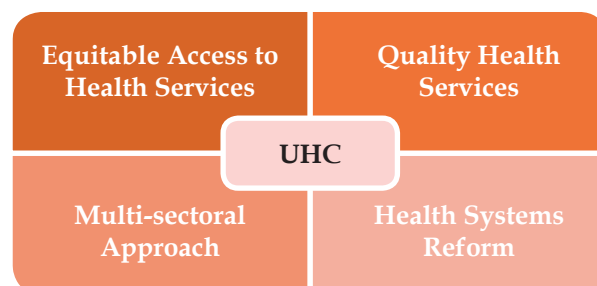


Figure 1: Four Strategic Directions for UHC

For the next five years, NHSS propels Nepal’s health sector towards UHC through four key strategic directions:

- Equitable Access to Health Services
- Quality Health Services
- Health Systems Reform
- Multi-sectoral Approach

This chapter elaborates these directions and highlights some approaches to realize them. The four strategic directions shape the specific outcomes, outputs and targets as presented in Chapter 4 and in the associated Implementation Plan and Results framework. These strategic directions also warrant changes in the way the health sector is currently governed and managed.

4.1 Equitable Access to Health Services

The pursuit of equitable development is included in the Constitution of Nepal (2015), National Health Policy 2014, and periodic plans of the National Planning Commission (NPC). These high-level policy frameworks recognise that women, Dalits, Adibashis Janajatis (indigenous and ethnic people), Madhesis, Muslims, people living with disabilities, sexual and gender minorities, and people in geographically remote areas have experienced barriers to benefit from the nation’s development which warrant affirmative action. Mitigating these barriers to ensure that citizens have greater access to health services is a major thrust for NHSS period.

Overcoming existing health inequities requires a sustained multi-pronged strategy to address both demand and supply side barriers and to build the capacity of MoHP to lead this agenda. NHSS re-emphasises the importance of the equitable provision of health care for all as the backbone strategy for the health sector. The government is committed to ensure that health systems and services are tailored to the needs of the citizens taking into account their socio-cultural, economic, and demographic characteristics. Considering GESI in all policy and management decisions will be the key to achieving the vision of the government as presented in the National Health

Policy 2014. For this reason the government and its partners are committed not only to improving the overall health outcomes on a population basis but to setting and achieving targets that are disaggregated by sex, wealth, geography and ethnicity.

NHSS focuses on strengthening service delivery and demand generation to underserved populations, including urban poor. MoHP will gradually implement the “one village, one doctor” aspiration of NHP-2014 to bring health services closer to the people. Capacities of local bodies will be enhanced to better promote health and increase inclusive participation in local health decision-making processes. Greater partnerships with locally active groups, such as mother’s groups or forest users groups, are required to empower women, promote supportive cultural practices and healthy lifestyles in their respective communities. NHSS also promotes health sector’s role in ultimately eliminating gender-based violence (GBV) in Nepal.

4.2 Quality Health Services for All

Improving quality of health care services requires a focus on the performance across the entire health system. Advancing the quality of systems and services is ingrained in all strategies and actions of NHSS. Strengthening of procurement, supply chain management, human resource management, M&E and information management, sector financing, as well as other core systems are all driven by the ultimate goal of improving quality of services. Nevertheless, it is essential to focus on improving the quality at point-of-delivery, where people receive health services, from immunizations at remote out-reach clinics to specialty care provided at tertiary hospitals.

This requires that services meet basic standards of quality, which are coordinated across multiple layers of public and private providers, centred on clients’ needs and expectations. For this purpose, NHSS focuses on developing minimum standards of care that are applicable to both public and private sector.

Quality Dimensions

The past health sector strategies have emphasized quality but they were not explicit in defining what interventions are necessary to improve quality and how to measure it. Of course, quality of care is often the cumulative end result of many reforms and overall health systems strengthening. However, to formulate necessary strategic interventions it is important to highlight the key elements of quality of care at the point of service delivery. Henceforth, NHSS considers that care is of quality when it is: effective; safe; client-centred; timely; equitable; culturally appropriate; efficient; and reliable.

Without sufficiently defining these domains and understanding what particular deficits exist in the aforementioned elements, it is difficult to improve quality. Therefore, focus for the next five-years is on developing this knowledge; communicating it to the policy makers, providers, and partners; and identifying suitable interventions to improve quality of care at the point of service delivery.

An Accreditation Body for Quality Assurance

In order to ensure quality standards are developed, introduced and employed across all types of public and private sector providers, NHP 2014 envisions the establishment of a new quality

assurance body, in the form of an autonomous authority. This body will work closely with professional associations and existing regulatory authorities for ensuring high standards of health services across the sector and promoting safe and good medical practices. It will regulate quality standards and protocols, investigate non-compliance of service providers.

4.3 Health Systems Reform

NHSS prioritizes good governance to ensure clear lines of authority and decision-making and to instil the understanding that all levels of the health system are accountable, ultimately to the people that they serve. With changing roles comes new responsibilities and these require mechanisms for central and local accountability to be strengthened along with competencies in leadership and management. NHSS will focus on further strengthening district health systems.

Restructuring health sector and rebuilding health systems

The present structure of the public health sector may require reorganizing to implement the forward-looking aspirations of the National Health Policy 2071 and emerging developments in the global health agenda. The recent earthquake induced disaster, which destroyed health infrastructure and damaged health systems in affected districts, while tragic, also provides an opportunity to restructure and rebuild health systems better.

NHSS calls for reviewing current structure and functions at different tiers of health governance, developing and rolling-out restructuring plan, including redefining of roles and responsibilities of different health institutions. Furthermore, structural adjustments – especially with regards to purchasing and providing functions – are required to progressively roll-out health insurance across the nation. These efforts need to be aligned and adjusted with the on-going political agenda of re-structuring of the state.

The post-disaster reconstruction and rebuilding plan, under NHSS, takes into consideration opportunities to restructure and rebuild systems to provide more effective and efficient health care services. The restructuring will also take into account establishing systems, structures and procedures for disaster and emergency preparedness at all levels. The post-earthquake scenario has also created additional health needs such as mental health and rehabilitation services to the affected population.

Decentralized planning and budgeting

Recent evidences show that decentralized health planning and management inspires local leadership, mobilizes local resources and promotes innovations in addressing local health needs leading to local ownership which in turn results in more equitable and quality health services¹³⁹. The MoHP has promoted decentralisation and strengthening of local health governance and, under NHSS, this is accelerated under the provisions of the Local Self Governance Act (1999) that clearly defines the roles and responsibilities of local bodies relating to health and population.

¹³⁹ As indicated by the assessments of Local Health Governance Pilots in Dang, Surkhet and Kailali by MoHP, USAID, and GIZ

NHSS prioritises the implementation of the “Collaborative Framework for Strengthening Local Health Governance in Nepal”. As outlined in the Framework this initiative strengthens overall local health governance, transparency, accountability and responsiveness. It promotes participatory development and prioritizes health within the local development agenda. This initiative attempts to redefine the roles and responsibilities of collaborating partners, leading to a new stewardship role of the MoHP at central level and more evidence-based local planning and decision-making at district, municipality and VDC levels. The introduction of more decentralised planning and resource allocation is accompanied by further introduction of flexible health grants through the District Development Fund. NHSS puts additional emphasis to instil disaster and emergency preparedness at district and below levels.

NHSS imparts necessary authority to the regional health structure to ensure sufficient linkages between the district and national levels in terms of local health planning and budgeting processes. It also recognizes the important role of the regional level to continuously monitor the equitable delivery of quality health services at sub-national levels.

State and Non-State Partnerships

Nepal has a long tradition of collaboration between public (state) and private (non-state) health care providers. Private health institutions make a significant contribution in the health sector. Government has invested in some of these partnerships, similarly, EDPs and I/NGOs have also invested in some of them. A number of partnership models are operational across Nepal in collaboration with not-for-profit NGOs, private-for-profit hospitals, and medical colleges. However, in the absence of standards in partnership structures or its effective supervision and monitoring, these partnerships are seen as innovative pilots lacking long-term strategic commitment for its sustainability. Leveraging private sector in health care delivery has always been a priority for the government, which requires a mutually conducive environment.

NHSS expands state and non-state partnership by building mutually beneficial partnerships between the public and private sectors. Partnerships are not just initiatives of ‘good faith’ between the public authority and private providers. It must be seen as strategic initiatives that are mutually beneficial to both state and non-state actors. Therefore, NHSS prioritizes the development of a State Non-State Partnership policy that assures contextually appropriate and synergistic partnerships between the state and non-state actors.

Regulation across the public and private health system

As decentralization occurs and public-private partnerships are fostered, the state has to take a stronger role in providing stewardship and regulating the sector.

NHSS aims to strengthen institutional capacity of MoHP to ensure healthcare institutions become more accountable to people and patient outcomes rather than simply quantities of services. Nepal Public Health Act, which is expected to be enacted during the early NHSS period, further strengthens the legal authority of MoHP to regulate the sector at large.

Strengthening research and promoting the use of evidence

National Health Policy 2071 calls for improving the quality of health research in line with international standards. NHSS translates this policy vision by strengthening the capacity and regulatory functions, prioritizing research in the health sector, establishing quality assurance mechanisms, and by building partnerships with relevant national and international actors.

One of the ways to facilitate better use of evidence in the health sector is to link researchers, information system managers, and knowledge brokers, with the decision makers. NHSS gives special emphasis to a joint effort among MoHP, NHRC and other stakeholders for evidence-based decision making while also developing capacities at sub-national levels to utilize information and evidences so as to strengthen local level health planning and service delivery.

Application of modern technologies

NHSS recognizes the potential of modern technologies, not only in making the health systems more effective and efficient, but also in increasing access to health care services in remote areas. It emphasises the use of technologies on these fronts:

- Information and Communication technologies for improving M&E and information management functions to promote evidence-based decision making
- Use of technologies, such as telemedicine and m-Health, to increase access to health care services
- New technologies to improve logistics and supply chain management
- Modern engineering technologies to construct more economical, practical, and disaster-resilient physical infrastructure
- Scaling-up of bio-medical technologies – specially for curative services

To prevent ad-hoc use of technologies and to ensure that they are applied in-line to the strategic priorities of the health sector, this strategy calls for necessary institutional arrangements, including building capacities at different levels, to leverage technologies adequately, better manage (asset management) existing technologies and improve repair and maintenance functions.

4.4 Multi-sectoral Approach

Health is part of the broader development agenda more linked to the wider social determinants such as empowering of women, improving of rural and urban infrastructure, expanding access to clean air, water and sanitation, better waste management, and improving access to quality education. Ensuring health in all policies emphasises the importance of multi-sectoral working.

While inter-sectoral coordination in health has been going on for a long time, more institutionalized way of setting-up multi-sectoral approach is a relatively new phenomena. NHSS reviews the current multi-sectoral approaches being practiced in areas such as nutrition and WASH and identifies ways to strengthen them. NHSS also calls for building capacities within MoHP to effectively harness multi-sector collaboration.

Promoting healthy lifestyles and healthy environment through multi-sectoral action

NHSS prioritises multi-sectoral collaboration to improve health lifestyles and healthy environment. It places renewed emphasis on healthy lifestyles and healthy environments so that health again becomes the concern and mutual responsibility of the government and its citizens. Providing information and promoting positive choices on issues such as regular exercise, healthy eating, avoiding smoking and harmful alcohol intake is seen as essential to stem the tide of increasing non-communicable diseases. Engagement of the MoHP with other Ministries involved in areas such as urban planning, roads, education, water, and environment is seen as a means for creating and fostering healthy living environment and tackling the adverse effects of climate change on human health

Children as the starting point

The children of a nation are its future and as such they provide the best place to start when looking at developing basic skills and habits linked to a healthy lifestyle. Investment in children will pay dividends in the future by reducing the burden of ill-health on over-stretched health care systems. The approach that NHSS advocates is to emphasise the process of early promotion of health lifestyle in order to increase resilience later.

The school has a key role to play in providing a conducive learning environment to promote positive healthy practices. For example, global experiences show that early sexuality education equips young people with information, knowledge and skills to negotiate and enjoy better reproductive and sexual health resulting in a responsible and healthy behaviour amongst young population. The idea behind this is that a healthy school environment facilitates healthy choices. This approach requires working with Ministry of Education to jointly develop evidence-based curriculum that educate and promote adoption of healthy and responsible lifestyles, emphasis on balanced diet and exercise, health consequences of substance abuse and harmful practices.

Health facilities as a learning environment for healthy lifestyles

Increased awareness of healthy lifestyle choice across all sections of the population can be promoted through the network of public and private health facilities. These facilities need to be strengthened as they play a critical role to educate and promote healthy lifestyles and behaviours in their local communities.

Reducing the high burden of death and injury through improved road safety

To curb the ever-rising deaths and injuries through road traffic accidents, MoHP is committed to be part of the inter-sectoral action plan. For this, NHSS priorities are aligned with Nepal Road Safety Action Plan 2013-2020, of Ministry of Physical Planning and Transportation Management.

Nutrition as a cross-cutting Issue

Good nutrition is a key driver of development and economic growth whilst under-nutrition incurs significant productivity losses for individuals and ultimately for the nation. With this important realization, the government has accorded a top priority to address under-nutrition in the country.

In 2012, the government put in place Multi-Sector Nutrition Plan (MSNP) to which MoHP is an integral part. MoHP has an array of nutrition related plans, policies and strategies with the aim of implementing cost effective and evidence-based interventions targeting the nutritionally vulnerable groups and promoting the consumption of healthy foods. NHSS emphasises better implementation of these strategies and plans. Increasing use of harmful chemicals, antibiotics and pesticides on food products warrants greater attention of MoHP during the NHSS period. Multi-sector advocacy and communication strategies on nutrition and food security will be adopted.

Collaboration to promote healthy environment

Responses required to promote healthy environment and reduce health risks are often complicated by the fact that responsibility of dealing with many of these divergent external factors lie beyond the scope of customary health actors – thus requiring strong multi-sectoral action.

NHSS puts in place consultative mechanisms to build synergy among different state line agencies and non-state actors to promote healthy environment. NHSS also outlines necessary actions to develop the institutional capacity of MoHP in the areas of environment and occupational health.

Establishing Multi-sectoral Response to Climate Change

The impact of climate change and its adverse effect on human health is increasingly being felt in Nepal, especially among poor and vulnerable groups. Parts of the country have suffered a reduction in food production, diminishing water supply, and increase in temperature – all of which have impact on public health. In the Terai regions in Nepal, incidence of diarrhoeal diseases, other infectious diseases are predicted to rise. A major focus of NHSS, for the next five years, is to develop MoHP's in-house competencies, including on generating relevant evidences, to prepare and plan to alleviate the impact of climate change on public health at the national and local levels.

5. Goal, Outcomes and Outputs

5.1 Goal

Improved health status of all people through accountable and equitable health service delivery system

GoN strives to improve the health status of all people, regardless of their sex, caste and ethnicity, or socioeconomic status. NHSS aims to achieve this by ensuring effective functioning of critical and interconnected health system functions. Further, these functions will be redesigned to make sure that the health care delivery is responsive and accountable to the people's need.

As mentioned in chapter three, Nepal will move towards universal health coverage through persistent emphasis on four strategic pillars: Equity and Access, Quality, Reform and Multi-sector approaches.

Goal Level Indicators	
G1	Maternal mortality ratio (per 100,000 live births)
G2	Under five mortality rate (per 1,000 live births)
G3	Neonatal mortality rate (per 1,000 live births)
G4	Total fertility rate (births per women aged 15–49 years)
G5	% of children under-5 years who are stunted
G6	% of women aged 15-49 years with body mass index (BMI) less than 18.5
G7	Life lost due to road traffic accidents (RTA) per 100,000 population
G8	Suicide rate per 100,000 population
G9	Disability adjusted life years lost due to Communicable, maternal & neonatal, non-communicable and injuries
G10	Incidence of impoverishment due to OOP expenditure in health
Note: See Results Framework	

The achievements will be measured through the goal, outcome and output level indicators. The Results Framework presents these indicators with specific targets for 2020 (Annex 2).

Improvement of health status as reflected in the goal will be the cumulative results of the outcome and outputs along with the key interventions, outlined in the subsequent section of this chapter.

5.2 Outcomes and outputs

The expected outcomes are presented below together with their respective outputs. These statements and the key interventions are the basis for the Implementation Plan, which guides annual planning and budgeting, and for monitoring the sector as per the Results Framework for the next five years.

Outcome 1	Rebuilt and strengthened health systems: Infrastructure, HRH management, , Procurement and Supply chain management
Outcome 2	Improved quality of care at point-of-delivery
Outcome 3	Equitable utilization of health care services
Outcome 4	Strengthened decentralised planning and budgeting
Outcome 5	Improved sector management and governance
Outcome 6	Improved sustainability of health sector financing
Outcome 7	Improved healthy lifestyles and environment
Outcome 8	Strengthened management of public health emergencies
Outcome 9	Improved availability and use of evidence in decision-making processes at all levels

Outcome 1: Rebuilt and strengthened health systems: HRH, Infrastructure, Procurement and Supply chain management

An efficient and effective system is crucial to improve and ensure quality health services at the point of service delivery. A number of health systems functions are important to make the health care delivery responsive to the people's need. Human resources, Infrastructure, Procurement and Supply chain are highlighted as essential, interconnected and complex health systems components that need to function in tandem for smooth service delivery. These systems are altogether geared towards ensuring optimal deployment and quality of health personnel, setting up minimum infrastructure and the timely procurement, uninterrupted supply of drugs and logistics. Considering these, focus will be on strengthening production, deployment and retention of human resources, standardizing procedures for site selection, developing and upgrading physical infrastructure, maintenance, timely procurement and efficient supply chain.

The importance of these health system functions has been heightened in the aftermath of devastating earthquake on 25th April, 2015. In affected districts, resilient and responsive health systems will need to be built that delivers quality health services. New infrastructure will be erected in strategic locations with commensurate skilled human resources, basic equipment and supplies to deliver routine and additional health services that seek to maximize utilization of public health services.

Health Infrastructure

The focus for the next five years is on building and repairing physical infrastructure and medical equipment in earthquake-affected districts. A master plan is envisioned to guide building of earthquake resilient infrastructures in these districts and across the nation, considering population dynamics, geography, and in strategic sites.

Health infrastructure and medical equipment suffer from unplanned and costly maintenance. This strategy prioritises improving capacity for management of health infrastructure and medical equipment. Specifically, this will require revising standards, managing inventories, planning and conducting routine maintenance, and replacing out-of-date buildings and equipment.

Outputs for the achievement of outcome 1

Output	Key Interventions
Output 1a.1 Health infrastructure developed as per plan and standards	<ol style="list-style-type: none"> 1. Revise and implement Health Facility Master-plan based on population and geographic criteria, with special focus on post-earthquake scenario 2. Improve infrastructure planning and ensure adherence to building standards including timely development and commissioning 3. Revise standards and guidelines for earthquake resilient construction, including site selection and routine maintenance with clear roles and responsibilities 4. Revise and implement existing guidelines and standards for facility construction, functioning and licensing, including earthquake resilient and disabled friendly infrastructures 5. Establish coordination mechanism between different line Ministries and include private sector stakeholder. 6. Establish reference laboratories at regional level

Output	Key Interventions
Output 1a.2 Damaged health facilities are rebuilt	<ol style="list-style-type: none"> 1. Demolish and re-build damaged and un-usable facilities by the earthquake according to a build-back-better approach 2. Retrofit health institutions to be earthquake-resilient
Output 1a.3 Improved management of health Infrastructure	<ol style="list-style-type: none"> 1. Develop and implement guideline for renovation and routine maintenance with defined roles for local bodies 2. Develop capacity of regional and district level staff to routinely monitor, supervise and support health infrastructure development and maintenance 3. Pre-qualify and standardize medical equipment by level of health facility 4. Adopt new engineering and biomedical technologies 5. Maintain inventory of medical equipment / products at all levels 6. Develop replacement plan for medical equipment 7. Improve capacity for maintenance of biomedical equipment at local levels

Human Resources for Health (HRH)

Delivering quality health services requires foremost the availability of a competent and motivated workforce. They are ultimately responsible for promoting health, preventing disease, and delivering curative, rehabilitative and palliative care. A contextually suitable skill-mix of health workers and their equitable distribution are prioritized in this output. Given the current context of critical shortage of health workers particularly in rural areas, retention of available health workers also remains a priority area for the next five years.

Proposed restructuring of the MoHP, ever-increasing demand for specialized health care, and scaling-up of health facilities based on population and geographic parameters all require the sanctioning and recruitment of new cadres of health workers. Improved coordination and communication among the wide-ranging stakeholders, as well as reliable and timely data on the distribution of health workers across public and private sector institutions are required. Collaborative platforms among multiple actors are needed at various levels: ministries; councils; academic institutions; centres and divisions within MoHP, responsible for the production, deployment and retention, training, and transfers of health workers.

Outputs for the achievement of outcome 1

Output	Key Interventions
Output 1b.1 Improved availability of human resources at all levels with a focus on rural retention and enrollment	<ol style="list-style-type: none"> 1. Develop an HR master plan based on improved knowledge-base of existing health sector staff and including HR projections, for appropriate production of health sector personnel 2. Strengthen partnerships with academia to better align HR needs with production, particularly for health workers in remote and rural areas 3. Review existing HR recruitment and deployment system to timely fill the vacant positions 4. Initiate sanctioning and recruitment of new HR to address the problem of inequitable distribution and skill-mix of health workers 5. Develop effective mechanisms for efficient recruitment and distribution of health workers for remote areas, including incentives mechanism. 6. Develop a system to deploy recent medical graduates particularly in rural areas and hard to access areas

Output 1b.2 Improved medical and public health education and competencies	<ol style="list-style-type: none"> 1. Establish a joint mechanism among MoHP, MoE and academic institutions to upgrade quality of pre-service education for health worker 2. Review and revise regulations governing health profession education institutions 3. Revise and standardize the academic curricula with focus on national public health programme, information system and health emergencies 4. Undertake institutional development programme to strengthen delivery and management of integrated in-service training 5. Develop and implement new methods for capacity building including clinical and management focused mentoring 6. Implement the principle of task shifting for optimal utilization of health workers 7. Develop the e-learning environment for pre and in service medical education 8. Establish at least one medical academic institution in each region 9. Gradually make provisions to impart specialized medical education free of charge to the citizens with mandatory service obligation 10. Initiate Midwifery Education to create professional midwives cadres in country
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Procurement and Supply chain Management

The output envisions reforming procurement and logistics systems responsible for forecasting, tendering, contracting, and supply chain processes. Establishment of a procurement centre staffed with procurement experts will be initiated, including further capacity enhancement in supply chain management and implementation of innovative approaches to improve supply chain management.

Outputs for the achievement of outcome 1

Output	Key Interventions
Output 1c.1: Improved procurement system	<ol style="list-style-type: none"> 1. Build capacities in procurement and quality assurance at central and decentralised levels 2. Implement Consolidated Annual Procurement Plan. 3. Widen the scope of Multi-year contracts in health products and services. 4. Pilot central bidding and local ordering approach and scale-up as appropriate 5. Lay foundations for the establishment of procurement centre
Output 1c.2: Improved supply chain management	<ol style="list-style-type: none"> 1. Develop capacity in operational planning and logistics management systems in order to develop a cost effective and timely distribution system. 2. Expand warehouse capacities, including upgrading of storage facilities at regional and district levels. 3. Explore innovative approaches (e.g. PPP) and technologies to improve supply chain management between the district store and health facilities for supply management at the district level. 4. Improve management to prevent expiry of drugs and handling of expired drugs and non-functional equipment 5. Improve supply chain of Ayurvedic drugs/medicines

Outcome 2: Improved quality of care at point of delivery

The emphasis of this outcome is renewed focus on improving quality of care at point-of-delivery by establishing minimum standards of care for primary, secondary, tertiary levels institutions with commensurate referral mechanisms. The ministry will develop and enforce regulations to accredit health institutions and establish quality assurance mechanisms for allopathic and Ayurvedic medicines, supplies, lab services and medical equipment.

Outputs for the achievement of outcome 2

Output	Key Interventions
Output 2.1: Quality health services delivered as per protocols/ guidelines	<ol style="list-style-type: none"> 1. Assess eight dimensions of quality at the point of service delivery 2. Revise existing and develop new treatment guidelines/protocols and standards for each level of the health system in line with the defined service packages 3. Standardize pre and in-service training for health workers 4. Develop capacity for hospital management 5. Strengthen supervision and mentoring to build capacity of health workers in quality of care procedures
Output 2.2: Quality assurance system strengthened	<ol style="list-style-type: none"> 1. Develop comprehensive regulatory framework and independent body for quality assurance and accreditation 2. Update quality assurance policy for health sector and strengthen existing quality assurance mechanisms within MoHP 3. Develop quality control mechanism for equipment 4. Strengthen capacity of National Laboratory in regulation and quality assurance, as an international reference laboratory. 5. Strengthen National Drug Regulatory Authority capacity in regulation and quality assurance covering all pharmaceutical supplies. 6. Develop anti-microbial drug resistance action plan, including expanding laboratory capacity 7. Review and implement regulatory system for combatting antimicrobial resistance 8. Review and implement price adjustment of essential drugs and ensure transparency 9. Review and enhance regulatory capacity for rational use of drugs, including over-the-counter sales. Collaborate with Ministry of Agriculture to regulate the use of antibiotics in animals 10. Establish quality assurance mechanism for Ayurvedic medicine production and supply.
Output 2.3: Improved infection prevention and healthcare waste management practices	<ol style="list-style-type: none"> 1. Review and enforce standards for infection prevention and health care waste management 2. Promote state non-state partnership models for waste management

Outcome 3: Equitable distribution and utilization of health services

MoHP will sustain and improve upon the progress on reducing inequities in health outcomes. In the next five years, it will continue to expand client-centred care that are best delivered when services are closer to communities. This will be achieved through expansion of health services – primary to tertiary – by strengthening decentralized network of public health facilities, particularly focusing on under-served, poor and urban communities.

Outputs for the achievement of outcome 3

Output	Key Interventions
Output 3.1: Improved access to health services, especially for unreached populations	<ol style="list-style-type: none"> 1. Update basic healthcare package by including emerging health care need like psychosocial counselling, mental health, geriatric health, oral health, standard NCD package, Ayurveda and rehabilitative services 2. Develop a legal framework for the Basic (free) Health Service package. 3. Expand basic health service packages in different level of health facilities based on population and geography 4. Assess and improve implementation of free care programme 5. Expand community health services through mobilization of extended health workers 6. Implement Extended Health Services in public hospitals 7. Improve capacity of district hospitals to deliver specialized services in partnership with public and private academic institutions 8. Expand health services leveraging modern information communication technology 9. Scale up laboratory services at all levels 10. Expand Blood Transfusion Services
Output 3.2: Health service networks, including referral system, strengthened	<ol style="list-style-type: none"> 1. Establish functional network for basic health services in urban areas 2. Designate satellite clinics for referral level hospitals 3. Revise/update referral guidelines ensuring that: <ul style="list-style-type: none"> • Referral mechanisms are incentivized • Referring institutions are made responsible for cases in transit • Fast-track service delivery for referred cases is established 4. Establish an effective referral system among primary, secondary and tertiary level care providers in urban and rural areas with special plan for remote areas. 5. Develop and launch National Ambulance Service, including networking and standardization of emergency response services

Outcome 4: Strengthened Decentralized Planning and Budgeting

During the NHSS period, there will be a renewed focus on decentralised approach to health sector planning and budgeting that is more accountable to the public and responsive to their needs. Districts will be responsible for participatory planning, budgeting and implementing their respective health plans, while the centre will define national priorities, establish the necessary regulatory framework, monitor progress and provide necessary technical and financial resources.

Outputs for the achievement of outcome 4

Output	Key Interventions
Output 4.1: Strategic planning and institutional capacity strengthened at all levels	<ol style="list-style-type: none"> 1. Strengthen harmonised annual planning, budgeting and review process 2. Enhance the capacity on Planning, Monitoring and Evaluation functions of the MoHP including its sub-ordinate authorities 3. Provide result-based block grants through DDF and MDF in line with Collaborative Framework 4. Provide technical support to decentralised planning units to ensure evidence based planning. 5. Standardize the system of hospital and other institutional block grant in line with the proposed plan 6. Enhance the capacity of local bodies and regional structures to better reflect the health sector priorities in periodic plans and subsequent annual plans. 7. Expand e-AWPB practices up to the district level

Outcome 5: Improved Sector Management and Governance

In order to effectively implement the aspirations of National Health Policy 2014 and emerging local and global health trends, MoHP will start restructuring its organizational setup during the NHSS period. The restructuring process of the health sector will be aligned with the broader state-restructuring agenda vis-à-vis federalism. MoHP also recognizes that the April earthquake has provided further impetus to reorganize the health sector.

NHSS recognizes aid effectiveness as important facet of health governance. MoHP aspires to further improve health aid effectiveness by espousing the principles and priorities of Nepal's Development Cooperation Policy 2014. In particular, this translates to further strengthening SWAp arrangements by advocating and creating conducive environment to maximize the flow of external financial support through government's systems and better aligning technical assistance to the government's priorities. For this the ministry is committed to enhance value for money in the health sector by strengthening current practices on financial planning, auditing and transparency measures with particular emphasis on reducing financial irregularity and improved accountability.

Outputs for the achievement of outcome 5

Output	Key Interventions
Output 5.1: Ministry of Health and Population structure is responsive to health sector needs	<ol style="list-style-type: none"> 1. Complete an organizational review process, develop a restructuring plan, and initiate phase-wise implementation 2. Develop a comprehensive capacity development plan for MoHP 3. Formulate Public Health Act and revise Council Acts and Regulations
Output 5.2: Improved governance and accountability	<ol style="list-style-type: none"> 1. Develop and adopt a state non-state partnership policy that includes both for-profit and not-for-profit organisations working in the health sector 2. Enhance capacity in PPP in the areas such as, infrastructure, human resources and service delivery functions, and production of medicinal herbs 3. Promote the domestic production of medicinal products 4. Effectively implement right to information act 5. Improve transparency of major decisions of public concern 6. Promote social audit and other local accountability instruments 7. Strengthen the mechanisms for effectively handling grievance and timely response
Output 5.3: Development cooperation and aid effectiveness improved	<ol style="list-style-type: none"> 1. Promote and implement Development Cooperation Policy (2014) 2. Establish an effective and transparent database of development assistance to the health sector, including off-budget funding 3. Establish regular meetings of NHSS coordination committee and an annual policy dialogue 4. Establish periodic review mechanism for INGOs involved in health sector, jointly with MSWCW
Output 5.4: Multi-sectoral coordination mechanisms strengthened	<ol style="list-style-type: none"> 1. Review exiting health related multi-sectoral mechanisms and strengthen them 2. Build capacity of key MoHP departments on multi-sectoral actions linked to public health priorities 3. Ensure technical assistance addresses multi-sectoral issues with relevant competencies

Output 5.5: Improved public financial management	<ol style="list-style-type: none"> 1. Establish a mechanism to gradually capture revenue and expenditure data from hospitals and health institutions 2. Improve predictability of health sector budget, including EDP funding 3. Institutionalise on-budget and off-budget reporting mechanism 4. Improve budget allocation and expenditure practices 5. Strengthen implementation of internal control procedures 6. Assess accounting, reporting, monitoring and audit arrangements in autonomous hospitals 7. Improve financial reporting (timing and content) and audit process including response to irregularities 8. Effectively implement TABUCS and align with LMBIS 9. Develop unified budget norms and Standard Operating Procedures
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Outcome 6: Improved Sustainability of Healthcare Financing

NHSS focuses on increasing investments in the health sector, improving mobilization of existing resources and better pooling of resources and risks. Soon to be developed Health Sector Financing Strategy will guide MoHP and development partners towards these efforts.

Outputs for the achievement of outcome 6

Output	Key Interventions
Output 6.1: Health financing system strengthened	<ol style="list-style-type: none"> 1. Establish a medium term financing framework for the health sector by developing a health financing strategy 2. Review health sector expenditure through National Health Accounts 3. Institutionalize and annually produce National Health Accounts to monitor health expenditure 4. Estimate resource need for delivering service packages, including those to be provided free of charge at the point of delivery 5. Develop and introduce resource allocation formula for budgetary allocation to districts and hospitals 6. Expand performance-based resource allocation practices particularly for autonomous hospitals and non-governmental service providers
Output 6.2: Social health protection mechanisms strengthened	<ol style="list-style-type: none"> 1. Establish a legal framework to govern and strengthen institutional arrangement for social health protection schemes 2. Develop and implement a plan for harmonisation and integration of different social health protection schemes 3. Initiate implementation of social health security programme (health insurance)

Outcome 7: Improved Healthy Lifestyles and Environment

Health is influenced by many factors beyond health care services: lifestyle and behaviours as well as the social determinants such as education, income, employment, housing, social security, macroeconomic situation and environmental factors. The importance of creating a healthy environment and healthy lifestyle is central for improvement of overall health status.

Ministry of Health and Population is committed to achieve this outcome through multi-sectoral collaboration with other line ministries. Innovative approaches will be strengthened for behaviour-change that target specific behaviours (i.e. smoking, alcohol consumption, health seeking behaviour) and conditions (e.g. obesity) for addressing increasing trends in non-communicable diseases, mental and sexual health problems. Where appropriate, locally appropriate and innovative approaches for BCC and IEC will be designed and implemented.

Outputs for the achievement of outcome 7

Output	Key Interventions
Output 7.1 Healthy behaviours and practices promoted	<ol style="list-style-type: none"> 1. In collaboration with Ministry of Education, review/revise current approaches for School Health Programme emphasising health promotion, nutrition, sports, resilience from substance-use and sexual health 2. Expand psychosocial, psychiatric and curative care for gender based and sexual violence 3. Promote healthy lifestyles through health facilities and community health workers as an integral part of health system 4. Leverage community groups such as mothers groups and forestry user groups for promoting healthy lifestyles and behaviours 5. Develop and implement urban health interventions in collaboration with municipalities 6. Enhance capacity in environmental and occupational health impact monitoring and surveillance in MoHP 7. Implement surveillance of road traffic accidents 8. Collaborate with other sectors to enforce standards for air, water and food quality 9. Generate evidences on impact of climate change on human health 10. Monitor changes in vector and disease pattern 11. Expand water quality surveillance 12. Gradually recruit and deploy community health inspectors

Outcome 8: Strengthened Management of Public Health Emergencies

Importance of preparedness for and effective management of public health emergencies is heightened in the aftermath of earthquake of April 2015. Drawing upon the lessons of the quake, the ministry will revise protocols and guidelines for improved health sector emergency response at the central and decentralised levels. Institutional and human capacity will be enhanced at regional levels with pre-positioned buffer stock of medicines and supplies for effective and timely response.

Outputs for the achievement of outcome 8

Output	Key Interventions
Output 8.1 Public health emergencies and disaster preparedness improved	<ol style="list-style-type: none"> 1. Revise national level protocols and operational guidelines for emergency situations with clear roles and responsibilities 2. Develop district level protocols and operational guidelines for emergency operations (health clusters, Rapid Response Teams; intra- and inter sectoral coordination and mechanisms) 3. Preposition buffer stocks of supplies and medicines at strategic locations at national and sub-national levels for outbreaks 4. Finalise and implement integrated disease surveillance system 5. Establish trauma management capacity in hospitals near highways and in major urban centres 6. Establish emergency response funds at national, regional and district levels 7. Establish regional level health emergency management centres 8. Develop human resources mobilization plan during emergencies
Output 8.2: Strengthened response to public health emergencies	<ol style="list-style-type: none"> 1. Capacitate Rapid Response Teams (RRTs), at all levels, to respond to public health emergencies 2. Develop Mass Casualty Management plan for all hospitals above 50 beds and test those plans periodically 3. Mobilize and manage trained human resources during emergencies with financial and non-financial incentives 4. Implement disease surveillance and response mechanism

Outcome 9: Improved availability and use of evidence in decision-making processes at all levels

Information generated from various sources such as routine information systems, population and institution based surveys, surveillance, and research studies are important to better inform policy and planning process. Access to available information will be increased through the use of ICT technologies. All the routine information systems will be functional and interoperable with the data being housed at a central data warehouse. Further, health sector reviews at the national and sub-national levels will be better integrated and research will be prioritised to draw innovations that support improved accessibility to quality healthcare.

Outputs for the achievement of outcome 9

Output	Intervention Priorities
Output 9.1: Integrated information management approach practiced	<ol style="list-style-type: none"> 1. Revise and implement the Health Information Strategy 2. Develop and implement e-health strategy 3. Roll out unified codes to ensure interoperability of different information systems 4. Create central data repository to house data generated from routine information systems and national surveys 5. Build institutional capacity on generation, processing, analysis and use of information at all levels 6. Create a common platform among MoHP, councils, other line ministries and non-state sectors on generation, availability and use of information 7. Establish a data quality assurance mechanism for all sources of information 8. Initiate electronic recording and reporting system at health facilities

Output	Intervention Priorities
Output 9.2: Survey, research and studies conducted in priority areas	<ol style="list-style-type: none"> 1. Develop national priority areas for health research, implement them and feed to planning, monitoring and evaluation 2. Develop health sector survey plan; implement; feed to the planning, monitoring and evaluation 3. Conduct impact evaluation of priority programmes for continuation, replication, modification and scale up. 4. Regularly produce standardized policy briefs to inform decision makers 5. Assess cost effectiveness and efficiency of major public health interventions 6. Strengthen institutional capacity of National Health Research Council and M & E wings of MoHP at different levels
Output 9.3: Improved health sector reviews with functional linkage to planning process	<ol style="list-style-type: none"> 1. Strengthen monitoring function of the MoHP to monitor output, outcome and goal level indicators 2. Enhance capacity of divisions and centres for monitoring programme implementation process 3. Revise the existing review processes to make more evidence based, effective participatory, analytical and build linkage with planning 4. Align annual national review and joint annual reviews

6 Moving towards Universal Health Coverage

As the government moves to progressively realize UHC, it remains committed to expand health services, increase the population coverage and reduce financial burdens for the citizens. The ministry, during NHSS period, will provide free Basic Health Services (BHS) and other services beyond the BHS package will be provided at an affordable cost through social health protection arrangements, including targeted subsidies.

6.1 Basic Health Services

Basic Health Services (BHS) is a comprehensive set of preventive, promotive, curative, rehabilitative, Ayurvedic and allied health services provided within the boundary of available resources that satisfy the healthcare needs of the population. Access to these services is considered a fundamental right guaranteed by the constitution; thus, the Government of Nepal is committed to delivering these services free of cost to every citizen primarily through public health networks and, where appropriate, in partnership with non-state providers. Increased utilization and coverage of basic health services will ultimately reduce the burden of diseases and lessen the demand for curative health services through strengthened promotive and preventive services.

The delivery of Basic Health Services is carried out within the parameters of government's free drug list. However, the basic health services – including free drugs list – is not static and its scope will expand depending upon national fiscal space available for health. Recognizing that these set of basic health services are dynamic and may change in the future, this strategy has defined them by stratified level of care in Annex I. Necessary acts and regulations to realize the citizen's right to basic health services will be formulated during the NHSS period.

6.2 Social Health Protection Arrangements

For services that are beyond the package of basic health services, the government will ensure their equitable access in an affordable cost through other social health protection arrangements. National Social Health Security Programme (health insurance) will also be gradually rolled out nationwide with subsidised premiums for the poor. The government, during the NHSS period, will progressively consolidate all social health protection arrangements under a broader framework.

6.3 Health Service Delivery Tier

Public sector health facilities will continue to deliver and expand wide range of services from preventive to super-specialty services through the extensive network of providers across the country. In response to the growing demand for Ayurveda and other allied health services, the government will also expand these services to communities across Nepal.

To ensure more effective and efficient service delivery, the government will gradually start delivering allopathic, Ayurvedic and other allied health services through one-door service outlets. Hospitals will be required to operate their own pharmacies.

The government will also form strategic partnerships with non-state health actors, from pharmacies to tertiary hospitals, to deliver Basic Health Services and other health services beyond the BHS package.

Basic health services will be delivered through the extensive network of service outlets with referrals from communities and lower level health facilities to appropriate service delivery centres. Outreach services will be strategically expanded to underserved or hard-to-reach communities. Lower level health facilities, including health post, sub-district hospital and district hospitals, will be strengthened to meet public's expectations of quality health services and to better perform gate-keeping function.

The following service delivery tiers are realized based on the needs of the catchment population and/or geographic accessibility and will be gradually expanded during NHSS period. In keeping with the thrust to promote local health governance, the management of these service delivery tiers will be decentralized in accordance to the current local governance framework and emerging agenda of state restructuring. Current health posts and Primary Health Care Centres that are located within municipalities will be gradually handed-over to the respective municipal authorities.

Community Health Unit: These health units will be established at the community level to deliver basic health services, especially for hard-to-reach population with referral linkages to higher-level facilities. The community will manage these units under the broader local governance framework and will be accountable to the higher-level facility within the VDC. There will be a maximum of three community health units per VDC based on the geographic accessibility and population settlement. These units will provide services through extended health workers in coordination with FCHVs. There is also opportunity for these units to collaborate with other community-based groups and institutions (e.g. Mothers groups, Ward Citizen Forums, and youth clubs) for better health outcomes.

The community health unit will cater the following services:

- promotive and preventive health services
- Primary Health Care/Out Reach Clinics (PHC/ORC)
- timely referral to the health facilities
- client follow-up and counselling services
- outbreak vigilance and reporting
- dispensary services

Health Post: Health posts provide health services to the population at the VDC level and will generally serve a catchment population of approximately 10,000 people. Health posts will also be required to supervise the management of community health units.

Primary Health Care Centre/Urban Health Centre: The Primary Health Care Centre and Urban Health Centre provide the same level of services. The former is established in rural areas whereas the latter is gradually established in every ward of municipalities, sub-metropolis and metropolis areas. It is the responsibility of respective municipalities to manage the urban health centres. These centres can be operated as hospitals in partnerships with non-profit organizations to serve the needs of respective communities.

Sub-district hospital/Municipal Hospital: Sub-district hospitals will be established at strategic locations considering the geographic accessibility with high population density and potential client flow. As stipulated in Urban Health Policy 2014, every municipality will have a hospital. These hospitals also serve as sub-district hospitals. When situated in urban areas, they will operate under the jurisdiction of municipalities otherwise they will be under MOHP' jurisdiction.

In establishing these hospitals, either the existing facilities are upgraded or new ones setup. These hospitals can either be government owned or managed by NGO or communities under the state non-state partnership arrangements. The size of these hospitals (number of beds) will depend upon the catchment population they serve; nevertheless, these facilities generally cater to approximately 50,000 people.

District Hospital: In keeping with the NHP-2014 directive to have at least one 50-bedded hospital in every district. These hospitals can either be government owned or managed by NGO or communities under the state non-state partnership arrangements. They will serve a catchment population of 100,000 and deliver services in addition to the basic health services, including general surgery and specialized care particularly on maternal and child health.

Specialized hospital: Specialized hospitals provide health services in specialized medical disciplines. Existing zonal, regional, sub-regional, central level hospitals and medical college teaching hospitals fall under this category.

7 Financial Management

This strategy aims to identify and mobilize financial resources from different sources to ensure universal coverage of quality health services. The Government of Nepal will progressively seek to fund the implementation of this strategy from its own internal resources. Specifically, over the next five years, the government will aspire to fund the provision of Basic Health Services entirely from government revenues. Nevertheless, as guided by the Development Cooperation Policy (2014), resources from external development partners will also be mobilized to narrow the resource gap.

8 Implementing NHSS and Measuring Sector Performance

Under the auspices of Sector Wide Approach (SWAp), the overall responsibility of implementing NHSS lies with MoHP with both the government and EDPs being jointly accountable to achieve the results. Similarly, under the leadership of MoHP, the sector performance during NHSS period will be measured jointly. MoHP will also collaborate with the civil society, I/NGOs, private sector, academia, and government line ministries to implement NHSS and measure its performance.

Health Sector Partnership Forum will be established to review the progress on NHSS implementation. This forum will meet quarterly under the chairpersonship of the Secretary of Health and Population.

Depending upon the framework of the forthcoming federal form of governance, this strategy may need to be reviewed and revised.

Measuring Sector Performance

MoHP and its development partners will utilize the following instruments to measure the sector performance during NHSS

- Results Framework of NHSS
- Mid-Term Review (MTR) of NHSS
- Regular Performance Reviews

Results Framework

The NHSS Results Framework monitors the sector performance on an annual basis. The Framework sets out a range of key indicators at Goal, Outcome and Output levels of NHSS. Indicators are chosen to monitor progress against 39 indicators at the goal and outcome level and 56 at the output level. The compendium of indicators provides detailed information on issues such as levels of disaggregation, periodicity, means of verification, assumptions, reliability etc. for each indicator. The Results Framework will utilize information and data from routine health information systems and period national surveys.

NHSS Results Framework (RF), with indicator matrix specifying baseline, milestone, target, data source, disaggregation, periodicity and responsible agency for each indicator, is presented in Annex 2.

Furthermore, MoHP will develop programme level monitoring framework for effective monitoring of the programmes and activities in line with the NHSS Implementation Plan (NHSS-IP).

Mid-Term Review (MTR)

MoHP, with the support of its development partners, will commission a Mid-Term Review (MTR) of NHSS in 2018. The review will be carried out by a team of independent external experts. The overall aim of the MTR will be to assess the progress made in achieving the outcomes and results of NHSS. It will also review the sector management approach, including health aid effectiveness. The recommendations emanating from the MTR will guide the MoHP and its development partners to make necessary programmatic and system-related interventions to achieve NHSS results in the remaining period.

Regular Performance Reviews

The existing performance reviews, at both national and sub-national levels, will also contribute in monitoring the sector performance under NHSS. During this period, MoHP will streamline these reviews and improve their alignment with the NHSS priorities.

Sector Performance Review

The NHSS Implementation Plan (IP) and subsequent Annual Work Plan and Budget (AWPB) will translate the strategy into action. The NHSS-IP is output-based plan and will enable resources to be linked to achievements. It provides a comprehensive set of activities needed to achieve each output and outcome and ultimately the goal of the NHSS. The activities outlined in the IP will be used to produce the detailed Annual Work Plan and Budget (AWPB).

Annex-1 Elements of Basic Health Service Package

	Basic Services (Free of Cost)	CHU	HP	PHC or UHC	< 50 bed hospital (district, sub-district hospital)	> 50 bed hospital
1.	BCG, Oral Polio, Injectable Polio, pneumococcal, DPT-HiBHb (Pentavalent), Measles Rubella, Japanese Encephalitis	√	√	√	√	√
2.	Preventive, promotive, community mobilization, health education and peer education	√	√	√	√	√
3.	Out Patient services (services though Free Drug list and laboratory services)					
	Children and neonates-Management of pneumonia, malaria, diarrhoea, measles, malnutrition, ear infection, neonatal infection		√	√	√	√
	Adolescent, Adult and Elder- Management of pneumonia, malaria, diarrhoeal diseases		√	√	√	√
	STI Syndromic Treatment		√	√	√	√
	Treatment for UTI		√	√	√	√
	Treatment of RTI		√	√	√	√
	Treatment of simple Fungal infection		√	√	√	√
	Treatment of Enteric Fever		√	√	√	√
	Treatment of Epilepsy		√	√	√	√
	HIV treatment (ART First line)*		√	√	√	√
	HIV OI treatment*		√	√	√	√
	TB treatment (CAT I, CAT II)*		√	√	√	√
	Treatment of leprosy *		√	√	√	√
	Treatment of Non Complicated Malaria treatment (PF,PV)*		√	√	√	√
	Treatment of Non Complicated LF*		√	√	√	√
	KA Treatment *		√	√	√	√

	Basic Services (Free of Cost)	CHU	HP	PHC or UHC	< 50 bed hospital (district, sub-district hospital)	> 50 bed hospital
	Deworming	√	√	√	√	√
	Upper respiratory tract infection (eg tonsillitis, pharyngitis and rhinitis)			√	√	√
	Treatment of Schizophrenia, bi-polar disorders				√	√
	Treatment for depression and anxiety			√	√	√
	Physiotherapy		√	√	√	√
	Ring pessaryinsertion		√	√	√	√
	Panchakrma, Yoga (Ayurvedic Services)			√	√	
	One stop crisis management services (selected hospitals), including clinical management of rape and GBV				√	√
4.	In-Patient services (services though consultation, Free Drug list and laboratory services)					
	Children and neonates-severe pneumonia, severe malaria, severe under-nutrition, complications due to measles, severe neonatal sepsis, birth asphyxia, hypothermia, jaundice, LBW/prematurity, feeding problem, exchange transfusion (excluding ventilator support)				√	√
	STI Syndromic Treatment				√	√
	Treatment for UTI				√	√
	Treatment of Epilepsy				√	√
	Treatment of Schizophrenia, bi-polar disorders				√	√
	Treatment for depression and anxiety				√	√
	Physiotherapy services				√	√
	HIV treatment (ART First line)*				√	√
	HIV OI treatment*				√	√
	TB treatment (CAT I, CAT II)*				√	√

	Basic Services (Free of Cost)	CHU	HP	PHC or UHC	< 50 bed hospital (district, sub-district hospital)	> 50 bed hospital
	Treatment of leprosy*				✓	✓
	Treatment of Non Complicated Malaria treatment (PF,PV)*				✓	✓
	Treatment of Non Complicated LF*				✓	✓
	KA Treatment *				✓	✓
	One stop crisis management services (selected hospitals)*				✓	✓
5.	Minor Procedures					
	Minor cut and simple wound dressing		✓	✓	✓	✓
	Simple cut Suturing			✓	✓	✓
	Simple abscess drainage			✓	✓	✓
	Simple fracture reduction and PoP			✓	✓	✓
	Foreign body removal (non-complicated)			✓	✓	✓
	Acute exacerbation of COPD and asthma emergency management			✓	✓	✓
6.	Screening and Counselling					
	Screening for visual and hearing impairment		✓	✓	✓	✓
	Screening for hypertension and Diabetes (Clinical)		✓	✓	✓	✓
	Growth monitoring and BMI screening		✓	✓	✓	✓
	Screening for pelvic organ prolapse, obstetric fistula, cervical cancer (VIA)		✓	✓	✓	✓
	Counselling services (FP, Safe Motherhood, Neonatal, Child health, HIV, PMTCT, Nutrition, NCD, ASRH, Mental health, substance abuse, oral health, Ear, Nose, Throat hygiene and sanitation, legal and GBV counselling)		✓	✓	✓	✓

	Basic Services (Free of Cost)	CHU	HP	PHC or UHC	< 50 bed hospital (district, sub-district hospital)	> 50 bed hospital
	Other Services					
7.	Micro-nutrients supplementation (iron, folic acid, Vitamin A, iodine, zinc)	√	√	√	√	√
8.	Antenatal Check-up		√	√	√	√
9.	Normal Delivery		√	√	√	√
10.	Management of complicated deliveries except c-section			√	√	√
11.	Management of complicated deliveries including Caesarean section and blood transfusion				√	√
12.	Post natal care (newborn/mother)		√	√	√	√
13.	Complication during post-natal period (obstetrics)		√	√	√	√
14.	Post Abortion Care			√	√	√
15.	Postpartum-IUCD Services[1]			√	√	√
16.	Family planning- OCP, Depo, Condoms, emergency contraception		√	√	√	√
17.	Family planning-Vasectomy, Minilap				√	√
18.	Post exposure treatment with anti-rabies vaccine				√	√
19.	Post exposure treatment with anti-snake venom				√	√
20.	Counselling services (FP, Safe Motherhood, Neonatal, Child health, HIV, PMTCT, Nutrition, NCD, ASRH, Mental health, substance abuse, oral health, Ear, Nose, Throat hygiene and sanitation, legal and GBV counselling)		√	√	√	√
21.	Deworming		√	√	√	√

	Basic Services (Free of Cost)	CHU	HP	PHC or UHC	< 50 bed hospital (district, sub-district hospital)	> 50 bed hospital
	Laboratory services (free of cost)		HP	PHC/UHC	< 50 bed Hospital	Satellite clinic
22.	Haematology: TC, DC, ESR, Hb, blood group		√	√	√	√
23.	Biochemistry: Sugar and Urea		√	√	√	√
24.	Biochemistry: Bilirubin			√	√	√
25.	Microbiology: Gm stain, KoH mount			√	√	√
26.	Miscellaneous: stool and urine R/E		√	√	√	√
27.	Microbiology: Sputum AFB stain		√	√	√	√
28.	Miscellaneous: Occult blood, ketone bodies for urine			√	√	√
29.	Serological Test: HBsAg, HCV, RPR, Widal		√	√	√	√
30.	Rapid Diagnostic Test : Malaria, HIV I & II, pregnancy, K39 for KA		√	√	√	√
31.	Urine dip-stick test(albumin and sugar)		√	√	√	√

[1] Only in HF with birthing center

Drugs will be available from relevant health facilities according to the Free Drugs Programme. Ayurvedic medicines are available free-of-charge from Ausadhalaya.

Annex-2 Results Framework

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

Goal: Improved health status of all people through accountable and equitable health delivery system														
Code	Indicator	NFHS 1996	NDHS 2001	NDHS 2006	NDHS 2011	Baseline			Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks
						Data	Year	Source	2017	2020				
G1	Maternal mortality ratio (per 100,000 live births)	539	na	281	na	190	2013	UN estimates	148	125	NDHS	5 years	MoHP	
		118	91	61	54	38								
G2	Wealth quintile	na	na	98	75	54								
		na	na	47	36	26								
		na	na	51	39	28								
	Eco-region	208	157.4	128	87	66	2014	NMICS	34	28	NDHS NMICS	3 years	MoHP	
		127	94	62	58	41								
		139	112.8	85	62	32								
	Equity gap	81	64	66	29	34								
G3	Earthquake affected 14 districts	na	na	na	na	29								
		50	39	33	33	23								
G4	Wealth quintile	na	na	43	37	29								
		na	na	26	19	18								
		na	na	17	18	11								
	Eco-region	71	65	59	46	32	2014	NMICS	21	17.5	NDHS NMICS	3 years	MoHP	
		51	42	28	33	22								
		63	50	42	35	21								
	Equity gap	20	23	31	13	11								
	Earthquake affected 14 districts	na	na	na	na	13								
G4	Total fertility rate	4.6	4.1	3.1	2.6	2.3								
		na	na	4.7	4.1	3.1								
		na	na	1.9	1.5	2.1								
	Eco-region	na	na	2.8	2.6	1.0	2014	NMICS	2.2	2.1	NDHS NMICS	3 years	MoHP	
		5.6	4.8	4.1	3.4	2.9								
		4.5	4	3	2.6	2.2								
	Equity gap	4.6	4.1	3.1	2.5	2.3								
	Equity gap	1	1	1.1	0.9	0.7								

Goal: Improved health status of all people through accountable and equitable health delivery system													
Code	Indicator	NFHS 1996	NDHS 2001	NDHS 2006	NDHS 2011	Baseline			Data source	Monitoring frequency	Responsible agency	Remarks	
						Year	Source	Milestone/Target					
						Data	2017	2020					
G5	% of children under age 5 years who are stunted (-2SD)	na	50.5	49.3	40.5	37.4							
		Lowest quintile	na	61.6	56	54.7							
	Wealth quintile	na	30.9	25.8	15.2								
	Equity gap	na	30.7	30.2	39.5								
	Eco-region	Mountain	na	61.2	62.3	52.9	46.4						
		Hills	na	52.7	50.3	42.1	38.3						
		Terai	na	47.1	46.3	37.4	35.4						
	Ethnicity	Equity gap	na	14	16	15.5	11.0	34	31	NDHS NMICS	3 years	MoHP	
		Brahman/Chhetri	na	na	47.3	36.9	35.3						
		Other Terai Madhesi	na	na	52.5	45.5	42.7						
		Dalit	na	na	56.4	47.3	47.9						
		Newar	na	na	29.9	33.3	13.5						
		Janajati	na	na	48.2	41.2	32.4						
		Muslim	na	na	57.0	32.4	39.7						
G6	% of women aged 15-49 years with body mass index (BMI) less than 18.5	na	26.7	24	18.2	18.2							
		Lowest quintile	na	25.1	21.5	21.5							
	Wealth quintile	na	12.7	11.9	11.9								
	Equity gap	na	12.4	9.6	9.6								
	Eco-region	Mountain	na	19.2	17.1	16.5	16.5						
		Hills	na	16.6	15.9	12.4	12.4						
		Terai	na	35.6	32.7	22.7	22.7						
	Equity gap	na	19.0	16.8	10.3	10.3							
	G7	Life lost due to road traffic accidents (RTA) per 100,000 population	na	na	na	na	34	23	17	MoPPTM	3 years	MoPPTM	

Goal: Improved health status of all people through accountable and equitable health delivery system														
Code	Indicator	NFHS 1996	NDHS 2001	NDHS 2006	NDHS 2011	Baseline		Source	Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks
						Data	Year		2017	2020				
G8	Suicide rate per 100,000 population	na	na	na	na	16.5	2014	Nepal Police	15	14.5	Nepal Police	3 years	MoHA	
	Earthquake affected 14 districts	na	na	na	na	na								
G9	Disability adjusted life years (DALY) lost: Communicable, maternal, neonatal & nutritional disorders; non-communicable diseases; and injuries	na	na	na	na	8,319,695	2013	BoD, IHME	7,487,726	6,738,953	IHME estimates	5 years	MoHP	
	Communicable, maternal, neonatal & nutritional disorders	na	na	na	na	3,081,654	2013		2,773,489	2,496,140				
	Non-communicable diseases	na	na	na	na	4,386,745	2013		3,948,071	3,553,263				
	Injuries	na	na	na	na	851,296	2013		766,166	689,550				
G10	Incidence of impoverishment due to OOP expenditure in health	na	na	na	na	na	2011	NLSS	Reduce by 20%		NLSS	5 years		To further analyze NLSS 2011 data for base line

Outcome 1: Rebuilt and strengthened health systems: Infrastructure, HRH management, Procurement and Supply chain management												
Code	Indicator	Baseline			Milestone/Target			Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2017	2020						
OC1.1	% of health facilities meeting MoHP infrastructure standard	Type of health facility	Public hospital	32	2013/14	HIIS	60	90	HIIS	3 years	MoHP	
				91	2013/14	HIIS	95	100				
				16	2013/14	HIIS	50	90				
				na	2014/15	HIIS	80	100				
OC1.2	Health worker population ratio											
OC1.3	% of procurements completed within the planned timeline as per consolidated procurement plan	Paramedics (HA+AHW) per 1,000 population	0.18	2013	HRH Profile	0.37	0.52	HR Database	3 years	MoHP	Target to have one doctor per 1,000 pop; 2 nurses per 1,000 pop; and 2 paramedics per 1,000 populations by 2030.	
			0.5	2013	HRH Profile	0.85	1.12					
			0.37	2013	HRH Profile	0.75	1.04					
OC1.4	% of health facilities with no stock out of tracer drugs	77	2013/14	LMD report	90	100	LMD report	3 years	MoHP	Drugs, health commodities, civil construction, service		
		70	2013/14	LMS	90	95	LMS	Annual	MoHP			

Outputs of Outcome 1: Strengthened health system: Infrastructure, HRH, Procurement and Supply chain management												
Code	Indicator	Baseline			Milestone/Target			Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2016	2017	2018					2019
OP1a	Infrastructure											
OP1a1	Health infrastructure developed as per plan and standards											
OP1a1.1	% of health institution buildings completed as planned for the year	Public health facilities	na	2013/14	HIIS	100	HIIS	Annual	DoHS DUCBC			
			na	2013/14	HIIS							
			na	2013/14	HIIS							
			na	2013/14	HIIS							
			na	2013/14	HIIS							
			na	2013/14	HIIS							

Outputs of Outcome 1: Strengthened health system: Infrastructure, HRH, Procurement and Supply chain management													
Code	Indicator	Baseline		Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2016	2017	2018	2019					2020
OP1a2	Damaged health facilities are rebuilt	NA	2015/16	HIIS	40	50	60	70	80	HIIS	Annual	MD, DoHS	
OP1a3	Improved management of health infrastructure												
OP1a3.1	% of health buildings maintained annually as per the maintenance plan	na	2015/16	HIIS									
	Hospital	na	2015/16	HIIS									
	PHCC	na	2015/16	HIIS									
	HP	na	2015/16	HIIS									
	Ayurvedic health facilities	na	2015/16	HIIS									
	Other health institutions	na	2015/16	HIIS									HIS to be updated to capture maintenance
OP1b	Human resource												
OP1b1	Improved staff availability at all levels with focus on rural retention and enrollment												
OP1b1.1	% of sanctioned posts filled	na	2015/16										
	District hospital	MDGP	na	2013	STS								
		Medical officer	36	2013	STS								
		Nursing (SN+ANM)	62	2013	STS								
		Paramedics (HA+AHW)	84	2013	STS								
		Medical officer	28	2013	STS								
		Nursing (SN+ANM)	62	2013	STS								
		Paramedics (HA+AHW)	77	2013	STS								
		HA+AHW	75	2013	STS								
		ANM	75	2013	STS								
		% of districts with at least one MDGP available	58	2013/14	FHD								
	Earthquake affected 14 districts	Medical officer	na	2015	NHFS								
		Nursing (SN+ANM)	na	2015	NHFS								
		Paramedics (HA+AHW)	na	2015	NHFS								

Outputs of Outcome 1: Strengthened health system: Infrastructure, HRH, Procurement and Supply chain management															
Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks		
		Data	Year	Source	2016	2017	2018	2019	2020						
OP1b1.2	% of health workers working at their own deputed (Durbandi) institution	na	2015	NHFS											
		MDGP	2015	NHFS											
		Medical officer	2015	NHFS											
		Nursing (SN+ANM)	2015	NHFS											
		Paramedics (HA+AHW)	2015	NHFS											
		Medical officer	2015	NHFS											
		Nursing (SN+ANM)	2015	NHFS											
PHCC	Paramedics (HA+AHW)	na	2015	NHFS											
		HA+AHW	2015	NHFS											
		ANM	2015	NHFS											
OP1b2	Improved human resource education and competencies														
	OP1b2.1	% of health academic institutions meeting minimum standards of respective councils	na	2013/14	Councils										
OP1b2.2	Health academic institutions	Medical colleges	na	2013/14	NMC										
		Nursing colleges	na	2013/14	NNC										
		Pharmacy institutions	na	2013/14	NPC										
		Paramedics institutions	na	2013/14	NHPC										
		Ayurvedic institutions	na	2013/14	NAC										
	Medical council	Success rate of council examinations in their first attempt (Medical and nursing)	na	2013/14	Councils										
		Graduate	Public institutions	na	2013/14	NMC									
			Private institutions	na	2013/14	NMC									
			Foreign institutions	na	2013/14	NMC									
		Post graduate	Public institutions	na	2013/14	NMC									
Private institutions	na		2013/14	NMC											
Nursing council	Foreign institutions	Public institutions	na	2013/14	NMC										
		Private institutions	na	2013/14	NMC										
		Foreign institutions	na	2013/14	NMC										
		Public institutions	na	2013/14	NNC										
		Private institutions	na	2013/14	NNC										

Outputs of Outcome 1: Strengthened health system: Infrastructure, HRH, Procurement and Supply chain management												
Code	Indicator	Baseline		Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	2016	2017	2018	2019	2020				
OP1c	Procurement and supply chain management											
OP1c1	Improved procurement system											
OP1c1.1	% of procurement contracts awarded against Consolidated Annual Procurement Plan	48	2014/15	LMD		100				LMD	Annual	LMD, DoHS
OP1c2	Improved supply chain management											
OP1c2.1	% of health facilities receiving tracer commodities within less than two weeks of placing the order	na	2015	NHFS	90	90	95	95	100	LMIS	Annual	LMD, DoHS
OP1c2.2	% of health facilities complying good storage practices for medicines	na	2015	NHFS		100				LMIS	Annual	LMD, DoHS

Outcome 2: Improved quality of care at point-of-delivery													
Code	Indicator	Baseline			Milestone/Target			Data source	Monitoring frequency	Responsible agency	Remarks		
		Data	Year	Source	2017	2018	2020						
OC2.1	% of health facilities meeting minimum standards of quality of care at point of delivery	na	2015	NHFS								Dimensions of quality: effective; safe; client-centered; timely; equitable; culturally appropriate; efficient; and reliable.	
		na	2015	NHFS									
		na	2015	NHFS									
		na	2015	NHFS									
		na	2015	NHFS									
OC2.2	% of clients provided with quality services as per national standards (composite indicator for tracer services)	na	2015									NHFS observation. Tracer services include ANC, FP & IMCI	
		na	2015										
		na	2015	ANC									
		na	2015	Family planning									
		na	2015	IMCI									
		na	2015	Public	80								
		na	2015	Private									
na	2015	PHCC											
na	2015	HP											

Outcome 2: Improved quality of care at point-of-delivery

Code	Indicator	Baseline				Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source		2017	2020				
OC2.3	Inpatient mortality rate	na	2014/15	HMIS	20% reduction		HMIS	3 years	MoHP	HMIS needs to be strengthened to cover reporting from all public and private hospitals.	
		na	2014/15								
		na	2014/15								
		na	2014/15								
OC2.4	% of tracer drugs meeting quality standard at different levels	na	2014	DDA	90		DDA	3 years	MoHP	To strengthen the monitoring system	
		na	2014	DDA							
		na	2014	DDA							
		na	2014	DDA							
		na	2014	DDA							
OC2.5	% of infection rate among surgical cases	na	2014/15	HMIS			HMIS	Annual	MoHP	HMIS needs to be strengthened to include this and cover reporting from all public and private hospitals. Targets to be set based on the baseline.	
		na	2014/15	HMIS							
		na	2014/15	HMIS							
		na	2014/15	HMIS							
		na	2014/15	HMIS							
		na	2014/15	HMIS							

Outputs of Outcome 2: Improved quality of care at point-of-delivery														
Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2016	2017	2018	2019	2020					
OP2.1	Health services delivered as per standards and protocols													
OP2.1.1	% of health workers complying service delivery standard protocols/guidelines for tracer services (sick child treatment, ANC check-up, FP)	Services	na	2015	NHFS						NHFS	3 years	PHAMED, MoHP	Tracer services: Sick child treatment, ANC check-up and FP A composite index to be defined based on NHFS 2015
			na	2015	NHFS									
			na	2015	NHFS									
	Type	na	2015	NHFS						90				
		na	2015	NHFS										
		na	2015	NHFS										
		na	2015	NHFS										
Level of public health facilities	na	2015	NHFS											
	na	2015	NHFS											
OP2.1.2	% of pharmaceutical companies with good laboratory practices (GLP) and good manufacturing practices (GMP)		2014	DDA					100	DDA	Annual	DDA, MoHP		
OP2.1.3	% of health facilities with capacity to provide selected laboratory services as per standard	Type	na	2015	NHFS					NHFS	3 years	NPHL	Tracer laboratory services to be defined	
			na	2015	NHFS									
			na	2015	NHFS									
	Level of public health facilities	na	2015	NHFS					90					
		na	2015	NHFS										
		na	2015	NHFS										
OP2.2	Quality assurance system strengthened													
OP2.2.1	% of hospitals based maternal deaths reviewed	Type	na	2014/15	MPDSR	100					MPDSR	Annual	FHD	MPDSR system to be strengthened
			na	2014/15	MPDSR									
			na	2014/15	MPDSR									

Outputs of Outcome 2: Improved quality of care at point-of-delivery													
Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2016	2017	2018	2019	2020				
OP2.2.2	% of registered laboratories accredited	0											
	Region	0	2014/15	MoHP		30				MoHP	Annual	NPHL	
	Eastern	0											
	Central	0											
	Western	0											
	Mid-western	0											
	Far western	0											
OP2.3	Improved infection prevention and health care waste management												
OP2.3.1	% of health facilities segregating health care waste at the time of collection	na	2015	NHFS		100				DoHS	Annual	MoHP	
	Type of hospital	na	2015	NHFS									
	Public hospital	na	2015	NHFS									
	Private hospital	na	2015	NHFS									
	Hospital	na	2015	NHFS									
	Level of public health facilities	na	2015	NHFS									
	PHCC	na	2015	NHFS									
	HP	na	2015	NHFS									
OP2.3.2	% of health facilities safely disposing health care waste	na	2015	NHFS		100					Annual	CD, MoHP MD, DoHS	
	Type of health facility	na	2015	NHFS									
	Public	na	2015	NHFS									
	Private hospital	na	2015	NHFS									
	Hospital	na	2015	NHFS									
	Level of public health facilities	na	2015	NHFS									
	PHCC	na	2015	NHFS									
	HP	na	2015	NHFS									

Outcome 3: Equitable utilization of health care services

Code	Indicator	Baseline			Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2017	2020					
OC3.1	% of clients who received basic health services free of cost (tracer services)	ANC	na	2015	NHFS	75	NHFS	3 years	MoHP	Tracer services: ANC, FP, IMCI, PM Baseline includes delivery service only	
		Family planning	na	2015	NHFS						
		IMCI	na	2015	NHFS						
		Delivery	47	2013	STS						
OC3.2	% of children fully immunized	84.5									
		Lowest quintile	83.1								
		Highest quintile	92.7								
		Equity gap	9.6								
		Mountain	81.9								
		Hills	85.4	2014	NMICS	>90	>90	NDHS NMICS HMIS	3 years	MoHP	
		Terai	84.3								
		Equity gap	3.5								
		Earthquake affected 14 districts	86.9								
		DPT 3	88								
		Measles	93								
		% of districts with >90% fully immunized children	NA	2014	HMIS	80	100				
		% of districts with >80% coverage of DPT3	64	2014	HMIS						

Outcome 3: Equitable utilization of health care services											
Code	Indicator	Baseline			Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2017	2020					
OC3.3	% of institutional delivery	55.2									
	Wealth quintile	Lowest quintile	27.9								
		Highest quintile	90.7								
		Equity gap	62.8								
	Eco-region	Mountain	32.1								
		Hills	54.5								
		Terai	58.8								
		Equity gap	26.7								
	In earthquake affected 14 districts	70.5	2014	NMICS	65	70	NDHS NMICS HMIS				
	Caste/ethnicity	Brahman/Chhetri	61.8								
		Other Terai Madhesi	48.9								
		Dalit	47.1								
		Newar	85.4								
Janajati		55.5									
Muslim		35.8									
Equity gap		49.6									
% of districts with >70% institutional delivery	68	2014	HMIS		100						
OC3.4	% of demand satisfied for family planning	66.3									
	Wealth quintile	Lowest quintile	62.8								
		Highest quintile	67.5								
		Equity gap	4.7								
	Eco-region	Mountain	72.2								
		Hills	63.3								
		Terai	68.1								
		Equity gap	8.9								
	In earthquake affected 14 districts	68.3									

Outcome 3: Equitable utilization of health care services

Code	Indicator	Baseline		Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2017				
OC3.5	Number of new outpatient visits per 1,000 population	50.1							
	Sex	Female	na	2013/14	HMIS	60	70		MoHP
		Male	na						
OC3.6	% of eligible clients currently receiving anti-retroviral therapy (adults and children)	21.8	2013/14	HMIS	36	51	3 years	NCASC	

Outputs of Outcome 3: Equitable utilization of health care services

Code	Indicator	Baseline		Milestone/Target				Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2016	2017	2018				
OP3.1	Improved access to health services, especially for unreached population										
OP3.1.1	% of health facilities providing all basic health services by level	na									
		Hospital	na								
		PHCC	na								
	Level of public health facilities	HP	na	2014/15	HMIS						
		Hospital	na								
		PHCC	na								
OP3.1.2	% of households within 30 minutes travel time to health facility	HP	na								
		61.8	2011	NLSS							
	Eco-region	Mountain	44.3	2011	NLSS						
		Hills	48.9	2011	NLSS						
		Terai	77.9	2011	NLSS						
OP3.1.3	% of districts with at least one CEONC site	81	2014	HMIS	84	88	100	100	100		
OP3.2	Health service networks including referral system strengthened										
OP3.2.1	Number of community health units	100	2013/14	PHCRD							
		21	2013/14	PHCRD	150	300	500	750	1000		
	Eco-region	Mountain	54	2013/14	PHCRD						
		Hills	25	2013/14	PHCRD						
		Terai	14	2013/14	PHCRD						
	In earthquake affected 14 districts										

Outputs of Outcome 3: Equitable utilization of health care services													
Code	Indicator	Baseline			Milestone/Target				Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2016	2017	2018	2019					2020
OP3.2.2	% of referral hospitals providing fast track services for referred clients												
		Public hospitals	2015/16	MoHP									
			Central										
OP3.2.3	% of public health facilities providing both modern and Ayurveda services	0											
		Zonal and above hospitals	2014/15	DoHS									
		District hospitals											
		PHCC											
OP3.2.4	% of public hospitals with own pharmacy service	na	2015	NHFS									
		Zonal and above hospitals	2015	NHFS									
		District hospitals	2015	NHFS									

Outcome 4: Strengthened decentralized planning and budgeting										
Code	Indicator	Baseline			Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2017	2020				
OC4.1	% of MoHP's district budget disbursed as block grant	na	2013/14	Budget analysis	5% increment	MoHP	3 years	MoHP		
OC4.2	Proportion of district development fund (DDF) allocated for health	na	2013/14	MoFALD	10	MoFALD	3 years	MoHP		

Outputs of Outcome 4: Strengthened decentralized planning and budgeting															
Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks		
		Data	Year	Source	2016	2017	2018	2019	2020						
OP4.1	Strategic planning and institutional capacity enhanced at all levels														
OP4.1.1	Number of districts (DHO & DPHO) submitting DDC approved annual plan to DoHS on specified time Development regions	2013/14	DoHS	75	75	75	75	75	75	75	DoHS	Annual	DoHS	System to be established	
		2013/14	DoHS	16	16	16	16	16	16	16	16				DoHS
		2013/14	DoHS	19	19	19	19	19	19	19	19				DoHS
		2013/14	DoHS	16	16	16	16	16	16	16	16				DoHS
		2013/14	DoHS	15	15	15	15	15	15	15	15				DoHS
	2013/14	DoHS	9	9	9	9	9	9	9	9	DoHS				
OP4.1.2	% of grant receiving hospitals submitting the progress report to MoHP (above district hospitals)	2013/14	PPICD	100	100	100	100	100	100	100	PPICD	Annual	PPICD	18 public and 38 non-state hospitals are receiving the grant and all submitting report	
OP4.1.3	% of flexible budget provided to districts (DPHO/DHO) in total district programme budget	2013/14	PPICD							5	PPICD	Annual	PPICD	System to be established	

Outcome 5: Improved sector management and governance													
Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2017	2018	2019	2020					
OC5.1	Budget absorption rate (% expenditure of budget)	75.1	2013/14	FMR	FMR	90	90	95	95		Annual	MoHP	
		56.6	2013/14	FMR	FMR	100	100	100	100				
		78.9	2013/14	FMR	FMR	80	85	85	85	FMR			
		81.8	2013/14	FMR	FMR	90	95	95	95	FMR			
	EDP on-budget off-treasury	33.3	2013/14	FMR									
OC5.2		% of irregularities (Beruju) cleared	39.5	2013/14	MoHP	50	70	70	70				

Outputs of Outcome 5: Improved sector management and governance													
Code	Indicator	Baseline		Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	2016	2017	2018	2019	2020					
OP5.1	Ministry of Health and Population (MoHP) structure is responsive to health sector needs												
OP5.1.1	% of activities of the restructuring plan executed	0	2015/16	PPICD	0	50	75	90	100	MoHP	Annual	MoHP	System to be established
OP5.1.2	% of health posts with laboratory services	na	2015/16	HIIS	10	30	50	75	100	HIIS	Annual	NPHL	
		na	2015/16	HIIS									
		na	2015/16	HIIS									
OP5.2	Improved governance of private sector												
OP5.2.1	% of private hospitals complying MoHP guidelines	na	2013/14	PHAMED									
		na	2013/14	PHAMED									
		na	2013/14	PHAMED	20	30	40	70	100	PHAMED	Annual	PHAMED	System to be established
		na	2013/14	PHAMED									
		na	2013/14	PHAMED									
		na	2013/14	PHAMED									
OP5.2.2	% of private hospitals accredited	0	2013/14	PHAMED									
			2013/14	PHAMED									
			2013/14	PHAMED	0	0	2	5	10	PHAMED	Annual	PHAMED	System to be established
			2013/14	PHAMED									
			2013/14	PHAMED									
OP5.3	Development cooperation and aid effectiveness in the health sector improved												
OP5.3.1	% of multiyear committed aid disbursed by development partners	na	2013/14	PPICD	100	100	100	100	100	PPICD	Annual	PPICD	
OP5.3.2	% of health official development assistance (ODA) reflected in national budget	na	2013/14	PPICD	40	45	50	55	60	PPICD	Annual	PPICD	

Outputs of Outcome 5: Improved sector management and governance													
Code	Indicator	Baseline		Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2016	2017	2018	2019					2020
OP5.4	Multi-sectoral coordination mechanisms strengthened												
OP5.4.1	% of districts with functional District Health Coordination Committee	na	2013/14	DoHS	40	50	60	75	100	DoHS	Annual	DoHS	
OP5.4.2	% of external development partners reporting their health expenditure to MoHP/AMP	na	2013/14	PPICD	100	100	100	100	100	PPICD	Annual	PPICD	
OP5.5	Improved public financial management within MoHP												
OP5.5.1	% of irregularities (Beruju) in MoHP expenditures	11.51											
		0.81	Ministry										
		10.68	DoHS	2013/14	OAG	<9	<8	<7	<6	<5	AG	Annual	HRFMD
		0	DDA										
		0.02	DoA										
OP5.5.2	% of MoHP expenditure captured by TABUCS	70	2014/15	TABUCS	80	90	100	100	100	TABUCS	Annual	HRFMD	As of Jestha 2072

Outcome 6: Improved sustainability of health sector financing												
Code	Indicator	Baseline		Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2017	2018	2019	2020				
OC6.1	Government health expenditure as percentage of GDP	1.4	2013/14	Budget analysis			1.6		2	Budget analysis	Annual	MoHP
OC6.2	Incidence of catastrophic health expenditure	13	2013/14	NLSS			12		10	NLSS	5 years	MoHP

Outputs of Outcome 6: Improved sustainability of health sector financing												
Code	Indicator	Baseline		Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2016	2017	2018	2019				
OP 6.1	Health financing system strengthened											
OP6.1.1	% of health budget in total government budget	6.1	2013/14	Red Book	6.5	7.5	8.5	9	10	Red Book	Annual	PPICD

Outputs of Outcome 6: Improved sustainability of health sector financing

Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2016	2017	2018	2019	2020					
OP6.1.2	% of health budget in total budget of Local Government	na	2013/14	MoFALD	2.5	3	3.5	5	7	HRFMD	Annual	HRFMD		
OP6.1.3	% of districts receiving budget based on identified needs and output criteria	0	2014	PPICD	0	25	40	75	100	HRFMD	Annual	HRFMD		
OP6.2	Social health protection mechanisms strengthened													
OP6.2.1	% of OOP expenditure in total health expenditure	49	2014	NHA					40	NHA	Annual	MoHP		
OP6.2.2	% of population covered by social health protection schemes		2014	MoHP						HRFMD	Annual	HRFMD		
	Free delivery	47	2014	DoHS					70	FHD		FHD		
	Basic health service	77	2014	DoHS					90	PCHRD		PCHRD		
	Enrollment in insurance	0	2014	SHSB	1	2	3	5	7	NSHSC		NSHSC		

Outcome 7: Improved healthy lifestyles and environment

Code	Indicator	Baseline			Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2017	2020				
OC7.1	Prevalence of diarrheal diseases among children under five years (%)	12					NDHS NMICS	3 years	MoHP	
		Lowest	15.4							
		Highest	7.9							
		Equity gap	7.5							
		Mountain	14.7							
		Hills	11.9							
		Terai	11.7							
Equity gap	3.0									
	Earthquake affected 14 districts	9.1								

Outcome 7: Improved healthy lifestyles and environment												
Code	Indicator	Baseline			Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks		
		Data	Year	Source	2017	2020						
OC7.2	Prevalence of anaemia in women age 15-49		35	2011	NDHS							
		Lowest	34.5	2011	NDHS							
		Highest	31.2	2011	NDHS							
		Equity gap	3.3	2011	NDHS							
			26.9	2011	NDHS							
OC7.3	% of people aged 15-69 years with raised blood pressure (above normal)	Mountain	26.9	2011	NDHS							
		Hills	26.9	2011	NDHS							
		Terai	42	2011	NDHS							
		Equity gap	15.1	2011	NDHS							
	Earthquake affected 14 districts	19.6	2011	NDHS								
OC7.3	% of people aged 15-69 years with raised blood pressure (above normal)		25.7	2013/14	STEPS							
		Female	20.6	2013/14	STEPS	24	22					
		Male	31.1	2013/14	STEPS					STEP wise approach to surveillance		

Outputs of Outcome 7: Improved healthy lifestyles and environment													
Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2016	2017	2018	2019	2020				
OP7.1	Healthy behaviors and practices promoted												
OP7.1.1	Prevalence of tobacco use among people aged 15 – 29 years	11.4	2013	STEPS	10.6	10.0	9.8	9.5	9.2				
										STEPS NDHS NMICS	3 years	DoHS	
OP7.1.2	% of households with a specific place for hand washing where water and cleansing agents are present	72.5	2014	NMICS		75			90				
			2014	NMICS		75			90				
			2014	NMICS		75			90				
			2014	NMICS		75			90				
			2014	NMICS		75			90				
	In earthquake affected 14 districts												

Outputs of Outcome 7: Improved healthy lifestyles and environment														
Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks	
		Data	Year	Source	2016	2017	2018	2019	2020					
OP7.1.3	% of women aged 15-49 who have experienced gender based violence in the last one year	na	2016	NDHS						20% reduction	NDHS	3 years	DoHS	
OP7.1.4	% of population using an improved drinking water source	93.3	2014	NMICS										
	Eco-region	na	2014	NMICS										
		na	2014	NMICS										
		na	2014	NMICS										
	In earthquake affected 14 districts	na	2014	NMICS										

Outcome 8: Strengthened management of public health emergencies														
Code	Indicator	Baseline		Milestone/Target			Data source	Monitoring frequency	Responsible agency	Remarks				
		Data	Year	Source	2017	2018					2019	2020		
OC8.1	Case fatality rate per 1000 reported cases due to public health emergencies	7.0	2013/14	DSS										
	Public health emergencies		2013/14	DSS										
		Disease outbreaks and events		2013/14	DSS									
OC8.2	% of natural disasters and disease outbreaks responded within 48 hours	92.6	2013/14	DSS	100	100								
	Disaster (flood and landslide)	100												
		Disease outbreaks	86.7											
Outputs of Outcome 8: Improved management of public health emergencies														
Code	Indicator	Baseline		Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks		
		Data	Year	Source	2016	2017	2018	2019					2020	
OP8.1	Improved preparedness for public health emergencies													
OP8.1.1	Number of districts having health emergency response plan	61	2013/14	EDCD	70	75	75	75	75	75	EDCD	Annual	MoHP	
OP8.1.2	Number of hospitals with trauma management capacity	2	2013/14	MoHP	4	6	8	10	12	12	MoHP	Annual	MoHP	

Outcome 8: Strengthened management of public health emergencies										
Code	Indicator	Baseline			Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2017	2020				
OC8.1	Case fatality rate per 1000 reported cases due to public health emergencies	7.0	2013/14	DSS			DSS	EDCD	Routine system to be established	
	Public health emergencies		2013/14	DSS						
	Disease outbreaks and events		2013/14	DSS						
OP8.2	Strengthened response to public health emergencies									
OP8.2.1	% of public health emergency events notified at least within 24 hours		2013/14	EDCD	100		EDCD	Annual	EDCD	

Outcome 9: Improved availability and use of evidence in decision-making processes at all levels										
Code	Indicator	Baseline			Milestone/Target		Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2017	2020				
OC9.1	% of health facilities electronically reporting to national health reporting systems: HMIS and LMIS	0	2013/14	HMIS LMIS			HMIS LMIS	Annual	DoHS	All health facilities to be strengthened to be able to report electronically.
			2013/14	HMIS	100	100				
		0	2013/14	HMIS	100	100				
		0	2013/14	HMIS	100	100				
		0	2013/14	HMIS	50	100				
		0	2013/14	LMIS	100	100				
		0	2013/14	LMIS	100	100				
45	2013/14	LMIS	100	100						
OC9.2	% of children below one year whose births are registered	32.8	2014	NMICS	37	41	CRVS	Annual	MoFALD	
OC9.3	Overall score of health information system performance index (%)	na	2013/14	PHMED		50	PHAMED	Annual	PHAMED	

Outputs of Outcome 9: Improved availability and use of evidence in decision-making processes at all level													
Code	Indicator	Baseline			Milestone/Target					Data source	Monitoring frequency	Responsible agency	Remarks
		Data	Year	Source	2016	2017	2018	2019	2020				
OP9.1	Integrated information management approach practiced												
OP9.1.1	Number of health information systems that have functional linkages with national database	0	2014	PHAMED		2	3	4	5	PHAMED	Annual	PHAMED	
OP9.1.2	Number of districts with functional integrated disease surveillance system	3	2014	EDCD	3	10	20	50	75	EDCD	Annual	EDCD	
OP9.2	Survey, research and studies conducted in priority areas; and results used												
OP9.2.1	% of national level surveys and researches producing policy briefs	0	2013/14	NHRC		75			100				
OP9.2.2	Number of grants provided to public health institutions for innovation	0	2014	MoHP	5	5	10	15	20	DoHS	Annual	DoHS	To establish a system
OP9.3	Improved health sector reviews with functional linkage to planning process												
OP9.3.1	% of RF indicators reported on specified frequency	na	2015	PHAMED			100			PHAMED	Annual	PHAMED	
OP9.3.2	% of programme budget allocated for M&E	na	2014	HRFMD			10			HRFMD	Annual	HRFMD	
OP9.3.3	% of prioritized action points agreed during national review reflected in AWPB	na	2014	DoHS			80			PPICD	Annual	DoHS	

Note: Please see 'Compendium of Indicators' which includes explanation of rationale, definition, milestones, targets, disaggregation, sources of information for each indicator; and Glossary of key terminologies used in the results framework. See 'Programme Monitoring Framework' for programme specific indicators.

Annex-3 References

Adhikari, Shiva Raj. "Towards Universal Health Coverage: An Example of Malaria Intervention in Nepal." *WHO South-East Asia Journal of Public Health* 3, no. 1 (2014): 103-12.

Aryal, Arjun, YN Yogi, and H Ghimire. "Vulnerability to Unsafe Sex and HIV Infection among Wives of Migrant Workers in Far Western Nepal." *Journal of Chitwan Medical College* 3, no. 3 (2013): 26-31.

Aryal, Krishna Kumar, Sushhama Neupane, Suresh Mehta, Abhinav Vaidya, Sunil Singh, Frank Paulin, Renu Garg Madanlal, et al. "Non Communicable Diseases Risk Factors: Steps Survey Nepal 2013." Kathmandu: Nepal Health Research Council, 2014.

Asian Development Bank. "Nepal: Economy." Asian Development Bank, <http://www.adb.org/countries/nepal/economy>.

Baral, Sushil Chandra, Yeshoda Aryal, Rekha Bhattarai, Rebecca King and James N Newell. The importance of providing counseling and financial support to patients receiving treatment for multi-drug resistant TB: mixed method qualitative and pilot intervention studies. *BMC Public Health* (2014): 14-46.

Central Bureau of Statistics. "National Population and Housing Census 2011." Kathmandu, 2012.

———. "Nepal Living Standards Survey 2010/11." 2011.

———. "Nepal Multiple Indicator Cluster Survey 2014 Key Findings." Kathmandu, 2014.

———. "Population Monograph of Nepal." Kathmandu: National Planning Commission, 2014.

———. "A Report on Census of Private Hospitals in Nepal 2013 ". Kathmandu: National Planning Commission, 2013.

Daniels, David, Kapil Ghimire, Poonam Thapa, Marc Réveillon, Deb Raj Pathak, Kedar Baral, Narmeen Hamid, et al. "Nepal Health Sector Programme II Mid-Term Review." 2013.

Department of Health Services. "Annual Report 2069/70." 2014.

———. "Annual Report 2070/71." 2015.

———. "National Family Planning Costed Implementation Plan 2015-2021." Kathmandu: Ministry of Health and Population, 2015.

Devkota, Madhu Dixit, Devi Prasai, Senendra Raj Upreti, Shilu Aryal, Ganga Shakya, Maureen Dariang, and Jagadishwor Ghimire. "Responding to Increased Demand for Institutional Childbirths at Referral Hospitals in Nepal: Situational Analysis and Emerging Options." Kathmandu: Family Health Division, 2013.

Epidemiology & Disease Control Division. "Nepal Malaria Strategic Plan 2011-2016." Kathmandu, 2011.

Family Health Division. "Results from Assessing Birthing Centres in Nepal." Kathmandu: Department of Health Services, 2014.

Foster, Mick, John Quinley, Raghav Regmi, and Binjwala Shrestha. "Review of Nepal Health

- Sector Programme: A Background Document for the Mid-Term Review.” Kathmandu: Mick Foster Economics Ltd. and Development Consultancy Center (DECC), 2007.
- Frost, Melanie Dawn, Mahesh Puri, and Peter Richard Andrew Hinde. “Falling Sex Ratios and Emerging Evidence of Sex-Selective Abortion in Nepal: Evidence from Nationally Representative Survey Data.” *BMJ Open* 3 (2013).
- Gautam, Rudra Prasad, and Jiba Nath Prasain. “Current Situation of Occupational Safety and Health in Nepal.” Kathmandu: General Federation of Nepalese Trade Unions (GEFONT), 2011.
- Global Health Observatory (GHO). “Nepal: Country Profile.” World Health Organization, http://www.who.int/gho/countries/npl/country_profiles/en/.
- Government of Nepal. “Multisectoral Action Plan for the Prevention and Control of Non Communicable Diseases (2014-2020).” Kathmandu, 2014.
- Health Emergency Operation Centre (HEOC). “Health Sector Response: Situation Update Report.” 2015.
- Health Research and Social Development Forum (HERD), and COMDIS-HSD. “Urban Health Technical Brief.” Kathmandu, 2014.
- Health Research and Social Development Forum (HERD), and COMDIS-HSD. “Developing a behaviour change intervention for tobacco cessation.” Kathmandu, 2014. <http://comdis-hsd.leeds.ac.uk/wp-content/uploads/2012/08/Developing-a-behaviour-change-intervention-for-smoking-cessation-in-Nepal.pdf>
- Health Research and Social Development Forum (HERD). “Media Monitoring of Nepal Earthquake - Special Series”. Kathmandu, 2015. <http://www.herd.org.np/content/summary-media-monitoring-report-nepalearthquake>
- Institute for Health Metrics and Evaluation. “Global Burden of Disease Study 2010.” Seattle, Washington: University of Washington, 2010.
- Ministry of Finance. “2011 Survey on Monitoring the Paris Declaration: Nepal Country Report.” Kathmandu: Ministry of Finance, 2011.
- . “Development Cooperation Policy: International Cooperation for Development Effectiveness.” Kathmandu: Government of Nepal, 2014.
- . “Economic Survey Fiscal Year 2013/14.” Kathmandu: Government of Nepal, 2014.
- . “Red Book.” Kathmandu: Government of Nepal.
- . “Theme Address by the Honorable Dr. Ram Sharan Mahat Finance Minister of Nepal.” In *International Conference on Nepal’s Reconstruction*. Kathmandu, 2015.
- Ministry of Health. “Nepal Health Sector Programme - Implementation Plan (NHSP-IP).” Kathmandu: His Majesty’s Government, 2004.
- Ministry of Health and Population. “Human Resources for Health Nepal Country Profile.” Kathmandu: Government of Nepal, 2013.
- . “Human Resources for Health Strategic Plan 2011-2015 “. Kathmandu: Government of Nepal, 2012.

- . “National Health Policy 2071.” Kathmandu: Government of Nepal, 2014.
- . “Nepal Health Sector Programme II (2010-2015).” Kathmandu: Government of Nepal, 2010.
- . “Operational Guidelines for Gender Equality and Social Inclusion Mainstreaming in the Health Sector.” Kathmandu: Government of Nepal, 2013.
- . “Progress Report on Partnership, Alignment and Harmonisation in the Health Sector.” Kathmandu: Government of Nepal, 2014.
- Ministry of Health and Population, Health Research and Social Development Forum (HERD), and Nepal Health Sector Support Programme (NHSSP). “Service Tracking Survey 2013 Nepal Health Sector Programme II.” Kathmandu: Ministry of Health and Population, 2014.
- Ministry of Health and Population, New ERA, and ICF International Inc. “Nepal Demographic and Health Survey 2011.” Kathmandu: Ministry of Health and Population, New ERA, ICF International Inc., 2012.
- Ministry of Health and Population, New ERA, and Macro International Inc. “Nepal Demographic and Health Survey 2006.” Kathmandu: Ministry of Health and Population, New ERA and Macro International Inc., 2007.
- Ministry of Physical Planning & Transport Management. “Nepal Road Safety Action Plan (2013-2020).” Kathmandu: Government of Nepal, 2013.
- National Centre for AIDS and STD Control. “Country Progress Report on HIV/AIDS Response Nepal.” 2014.
- National Planning Commission. “Final Report on Post Disaster Needs Assessment and Recovery Plan of Health and Population Sector.” Kathmandu, 2015.
- . “Nepal Earthquake 2015 Post Disaster Needs Assessment.” Kathmandu: Government of Nepal, 2015.
- Nepal Health Sector Support Programme (NHSSP). “Functional Assessment and Organization Review of the MoHP: A Diagnostic Report.” Kathmandu, 2013.
- O’Donnell, Owen, Eddy van Doorslaer, Ravi P. Rannan-Eliya, Aparnaa Somanathan, Shiva Raj Adhikari, Deni Harbianto, Charu C. Garg, et al. “Who Benefits from Public Spending on Health Care in Asia? .”EQUITAP Project: Working Paper #3 (2005). <http://www.equitap.org/publications/docs/EquitapWP3.pdf>.
- Onta, Sharad. “Climate Change and Health: An Overview.” Paper presented at the National Workshop on Climate Change and Human Health: Potential Impact, Vulnerability and Adaptation in Nepal Kathmandu, 2007.
- Population, Ministry of Health and. “Policy on Quality Assurance in Health Care Services: Unofficial Translation.” Kathmandu: Government of Nepal, 2009.
- RTI International. “Pro-Poor Health Care Policy Monitoring: Household Survey Report from 13 Districts.” Kathmandu: Research Triangle Park, NC, USA, 2010.
- Saito, Eiko, Stuart Gilmour, Md Mizanur Rahman, Ghanshyam Gautam, Pradeep Krishna

- Shrestha, and Kenji Shibuya. "Catastrophic Household Expenditure on Health in Nepal: A Cross-Sectional Survey." *Bulletin of the World Health Organization* 2014 92 (2014): 760–67.
- Shrestha, Babu Ram, Yogendra Gauchan, Ghanshyam Gautam, and Prabha Baral. "Nepal National Health Accounts, 2006/07 – 2008/09." Kathmandu: Ministry of Health and Population, 2012.
- Shrestha, Lochana, Kashi Kanta Jha, and Pushpa Malla. "Changing Tuberculosis Trends in Nepal in the Period 2001-2008." *Nepal Medical College Journal* 12, no. 3 (2010): 165-70.
- Silva-Leander, Sebastian. "Benefit Incidence Analysis in Health." Kathmandu: Nepal Health Sector Support Programme, 2012.
- Subedi, Bal Krishna, Padam Bahadur Chand, Babu Ram Marasini, Suresh Tiwari, Pradeep Poudel, Suresh Mehta, Ajit Pradhan, et al. "Service Tracking Survey 2011 Nepal Health Sector Programme II." Kathmandu: Ministry of Health and Population, 2012.
- Subedi, Bal Krishna, Ajit Pradhan, Sarah Barnett, Mahesh Puri, Shovana Rai Chitrakar, Pradeep Poudel, Sharad Sharma, and Louise Hulton. "Nepal Maternal Mortality and Morbidity Study 2008/2009." Kathmandu: Ministry of Health and Population, 2009.
- Suresh Mehta, Susheel Chandra Lekhak, Padam Bahadur Chand, Dipendra Raman Singh, Pradeep Poudel, and Sarah Barnett. "Service Tracking Survey 2012 Nepal Health Sector Programme II." Kathmandu: Ministry of Health and Population, 2013.
- Thapa, Arjun Jung. "Status Paper on Road Safety in Nepal." In *Europe-Asia Road Safety Forum and the 67th Session of the Working Party 1 of UNECE*. New Delhi: Department of Roads, 2013.
- UN Inter-agency Group for Child Mortality Estimation. "Levels & Trends in Child Mortality." New York, 2014.
- United Nations Development Programme. "Nepal Millennium Development Goals Progress Report 2013." Kathmandu: National Planning Commission, 2013.
- Upreti, Senendra Raj, Sushil Baral, Prabhat Lamichhane, Mukti Khanal, Suresh Tiwari, Meera Tandan, Helen Elsey, and Tomas Lievens. "Rapid Assessment of the Demand Side Financing Schemes: Aama and 4anc Programmes." Kathmandu: Ministry of Health and Population, 2013.
- Vaillancourt, Denise, and Sudip Pokhrel. "Aid Effectiveness in Nepal's Health Sector: Accomplishments to Date and Measurement Challenges." Kathmandu: International Health Partnership (IHP+), 2012.
- WHO. "Children: Reducing Mortality." WHO, <http://www.who.int/mediacentre/factsheets/fs178/en/>.
- WHO, UNICEF, UNFPA, The World Bank, and United Nations Population Division. "Trends in Maternal Mortality: 1990 to 2013." Geneva, 2014.
- World Economic Forum. "The Global Gender Gap Report 2014." Geneva: World Economic Forum, 2014.
- World Health Organization. "Global Health Expenditure Database." Geneva: World Health Organization, 2013.