Draft, Uttarakhand State Public Health Policy, 2020

Health and Family Welfare Department

2020

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VISION

1 To position good health as the product of development agenda including water supply, nutrition, sanitation, prevention of ecological degradation, respect for citizens' rights and gender sensitivity.

2 To ensure availability of the needed financial, technical and human resources to meet health needs of the state.

3 To effectively organize provision of health care from primary to tertiary levels through referral networks managed by primary care providers to maximize efficiency and reduce costs.

4 To regulate practice in health sector to ensure quality and patient protection

BROAD POLICY STATEMENTS

1 Developing Sustainable Development Goal based outcome plans to materialize final vision of better health for each permanent or transient inhabitant of State

2 Developing conducive atmosphere /financial encouragement for promoting private hospitals to establish hospitals in hills.

3 Making Health care resilient to climate change.

4 HR Policy for all health workers at all levels (One of Goals of Highly skilled HR/Physician: population ratio to be assed at district level rather than at state level)

5 To bring specialized /professional edge to public health interventions/approach a public health cadre (with provision of lateral entry of non-medical background public health professional at non administrative posts)

6 Responding to need of hour is paradigm shift of health care approach from health for all to Health in All through promotion of wellness and wellbeing.

7 Provision/establishing health facility (with provisions of primary care and guided referrals at least)

8 Phase wise increment in ANC and Institutional delivery so as to achieve 100% against target by 2030.

9 Efforts to achieve 100 % against target in all four thrust areas of Child and Adolescent Health approach.

10 Up scaling Govt and Govt aided School based School Health programme to all schools in hilly areas.

11 Promotion of efforts to develop centres/regions capable of catering to needs of Medical Travel as well as Medical Tourism in State.

12 Coverage of total vulnerable population for NCD load estimation as well prevention and mitigation of NCDs through primary focus on Health education and corrective/supportive measures nearer to dwelling of population.

13 Comprehensive Disaster management through establishing dedicated cell in Directorate of Health.

14 Curative and Palliative care in Cancer treatments especially in elderly population to be provided nearest to their dwellings.

15 Expanding Universal Health Care by extending provisions of Ayushman Insurance to health care on OPD basis.

16 Utmost priority to principle of doing no harm in delivering health care, Surveys and Research.

17 Taking precaution in introducing new health technology (hard ware/software/vaccine and nutritional Supplements not in National Schedule) interventions through screening and recommendation by Health Tech Assessment Committee/cell.

18 Provision of adequate budget to meet all activities for addressing points in this State Health Policy 2020.

19 Elaborate IEC policy.

20 Strict Adherence to Bio Medical Waste Laws and provisions.

Chapter 1

INTRODUCTION

1.1 Background

Health policy can be defined as the "decisions, plans, and actions that are undertaken to achieve specific healthcare goals within a society". According to the World Health Organization, an explicit health policy can achieve several things: it defines a vision for the future; it outlines priorities and the expected roles of different groups; and it builds consensus and informs people.

Uttarakhand has been one of the first states to formulate a State level Health Policy in 2004 with clear objectives of which some have been achieved and few yet remain elusive. Not only that but due to ever evolving clarity on public health measures every day newer programme and newer strategies keep on coming to fore front which not only requires revisiting the older policy but update in such a manner that it remains relevant even many years later after its promulgation which can only be possible by keeping an eye on projections too.

The rationale for an updated health policy document is to bring together in one manuscript all the main health policy elements and issues related to healthcare, including illness and healthy growth and development, to establish a technically sound political, economic, social and legal framework that gives clear long-term directions and support to improve the health status of the people of Uttarakhand.

Priority setting can be State's prerogative but Goals set by International Agencies are also to be kept in consideration, not only because of being signatory to such accords, which of course is a moral and legal obligation, but because such goals provide a realistic, tangible and effective solution to local health issues. Sustainable Development Goals is one such endeavor at international level to which multistakeholder response will lead to achievement of desired health status in defined times and this makes one of reasons to revise the State Health Policy.

1.2 Salient Features of Previous State Health Policy (2002)

1.2.1 Policy Objectives

To address the health issues of Uttarakhand, Government has embarked upon the formulation of comprehensive, integrated, state-specific health and population policy. This policy reflects the needs aspirations and view of the people of Uttarakhand.

1.2.2 Health Objectives

- Eradicate polio by 2007.
- Reduce the level of leprosy to below 1 per 10,000 population by December 2007 (Uttarakhand has achieved P/R -0.72/10000)
- Reduce mortality on account of tuberculosis, malaria, and other vector and water-borne diseases by 50 percent by 2010.
- Reduce prevalence of blindness from around 1 to 0.3 percent by 2010.
- Reduce Iodine Deficiency Disorder (IDD) by 50 percent of the present level by 2010.
- Reduce RTIs to below 10 percent among men and women by 2007.
- Increase awareness on HIV/AIDS.

1.2.3 Population Stabilization Objectives

- Reduce the total fertility rate (TFR) from the current estimated level of 3.3 to 2.6 by 2006 and further 2.1 to 2010
- Reduce the crude birth rate (CBR) from 26 to 22.6 by 2006 and further to 19.9 by 2010.
- Increase modern contraceptive prevalence (CPR) from the present level of 40 percent to 49 percent by 2006 and to 55 percent by 2010
- Reduce infant mortality rate (IMR) from the present level of 50 per 1000 live births to 41 by 2006 and further to 28 by 2010
- Reduce the child mortality rate (CMR) from the present level of 19 to 17 by 2006 and further to below 15 per 1000 live births by 2010
- Reduce maternal mortality rate (MMR) from the present level to 300 per 100000 live births by 2006 and further to below 100 by 2010
- Increase life expectancy at birth from 63 years in 2001 to 67 years by 2006 and 70 years by 2010

1.3 Proposed Strategy:

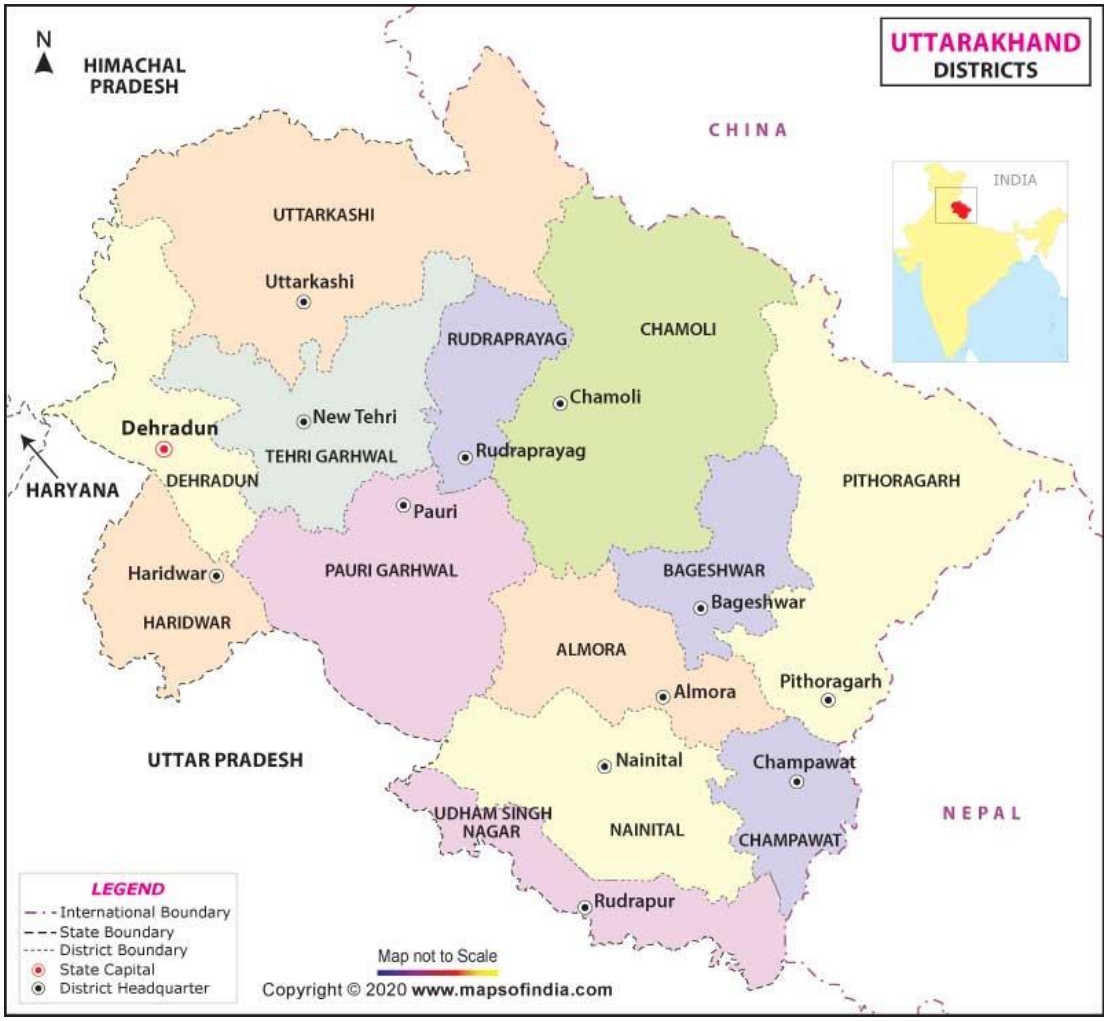
In the 10th (2002-07) 5 year plan about 240 Sub centers, 19 PHCs, 26 CHCs, 7 Blood banks, 5 TB Clinics, 1 District Hospital at Rudraprayag and 3 Regional Diagnostic Centers have been established. In the 11th 5-year plan (2007-2012) the objective of Directorate of Medical Health and Family Welfare is "Health for all". Under this

- To provide medical health services in states remotest and disadvantaged blocks 3080 new sub centers will be established 275 new PHCs 35 new CHCs
- Apart from the above in district Bageshswar and Champawat specialist hospitals will be established.
- To provide Neo natal care services to neonates NICU will be established in all Districts, in order to reduce neo natal mortality.
- To establish and strengthen emergency services in 10 district hospitals situated in national road routes. The objective is to provide good and effective emergency services in cases of road accidents and during natural disaster. Further, it is proposed to establish 5 new blood banks.
- To strengthen paramedical staff and to train nurses, a nursing institute will be established in Dehradun to provide BSc nursing training to aspirants. This activity will be taken up in the 11th Five Year Plan. In 3 districts ANM training centers will be strengthened and will begin training of ANMs in the 11th Five year plan.
- Considering natural disaster and accidents in 30 Block Hospitals Postmortem Centers will be establish.
- In difficult and disadvantage areas where SC and ST population is existing will be provided with health services through 10 Mobile Hospital Vans under TCP program

Chapter 2

SITUATION ANALYSIS

Figure 1: Map of Uttarakhand



(Source: https://www.mapsofindia.com/maps/uttarakhand/uttaranchal.htm

2.1 Health Facilities in Uttarakhand

Table 1: Health Facilities in Uttarakhand			
S.No.	**Type of Health Facility**	**No.**	**Details(category wise)**
1	Number of Govt. Medical colleges	3	Doon Medical college, Srinagar Medical college Haldwani Medical college
2	Large Hospitals	37	District Hospitals 12,district female hospitals-6,3- base , 16 sub-district hospitals
3	CHC	60	FRU-7
4	Block level PHC	56	24 *7 -87 Others-170
5	AHC	201	
6	State Allopathic Dispensary	317	
7	SC	1847	46 being upgraded to Health and well ness centers
	Total	2521	

2.1 Demographics

Table 2: Demographic Profile of Uttarakhand

Total Geographical Area	53483 Sq. KM
No of Division	02
No of Districts	13
No of Tehsils	100
No of Sub Tehsils	03
No of Development Blocks	95
No of Villages	16826
No of Municipal Corporations	06
No of Municipalities.	32
No of Town Areas	41
No of Cantonment Board	09
No of Panchayat of villages	7982
Population (Census 2011)	1.01 Crore
Population Covered in NUHM	30.55%
SC/ST Population	15/2.5%
Child Sex Ratio	888

2.2. Health Financing

In recent years a steady rise in total as well as proportional (to total state budget) allocation of Health budget has been recorded as under:

Table 3: Allocation of Health budget (INR Crores) (Allopathic+Ayush+Med.Edu.)

FY	Total State Budget	Public Health and Family Welfare Budget	Health Budget as Percentage of Total Budget
2019-20	48663.9	2545.7	5.23%
2018-19	45585.1	2286.5	5.02%
2017-18	39957.8	1923.3	4.81%
2016-17	40422.2	1872.4	4.63%
2015-16	32693.6	1669.6	5.11%

Same rise is also being noted in budget allocation of allopathic services in isolation as under:

Table 4: Health Outlay in State Budget (INR Crores) (Allopathic)

FY	Total State Budget	Public Health and Family Welfare Budget (Allopathic)	Health Budget as Percentage of Total Budget (Allopathic)
2019-20	48663.90	1831.32	3.76%
2018-19	45585.10	1811.48	3.97%
2017-18	39957.80	1558.52	3.90%
2016-17	40422.20	1459.19	3.61%
2015-16	32693.60	1386.01	4.24%

A dip in proportional allocation has also to be noted in recent year which can be explained by additional resource allocation to AAYU for UHC.

NHM has been a force multiplier in efforts state to mobilize of health financing for addressing gaps in same. Not only rise in allocation is evident same is seen in expenditure as well, as under:

Table 5: Trends in Expenditure - National Health Mission

Financial Year	Approved Resource Envelope Rs in crs	Total Available Funds Rs in crs	Expenditure Rs in crs	% of Expenditure against total Available funds	% Increase over last year expenditure
2009-10	108.55	163.22	99.17	60.76	
2010-11	174.65	182.4	153.09	83.93	54.37
2011-12	159	222.22	133.35	60.01	-12.89
2012-13	179.62	269.8	172.28	63.85	29.19
2013-14	191.61	336.68	162.18	48.17	-5.86
2014-15	279.08	323.58	178.71	55.23	10.19
2015-16	379.62	358.23	236.79	66.1	32.50
2016-17	381.4	357.21	244.47	68.44	3.24
2017-18	411.59	312.96	278.26	88.91	13.82
2018-19	504.85	399.25	350.29	87.71	25.89
2019-20	652.49				

2.3 Determinants of Health

2.3.1. Water Supply

Uttarakhand typically exhibit problem of plenty but perils of distribution as far as water availability and its supply is concerned. Rivers originating from glaciers within boundaries of Uttarakhand supply drinking water to most of Indo Gang etic plain but scene is completely different in Uttarakhand itself as most of drinking water resources are natural springs (in hills) or underground water (in most of plain areas). A pattern of water scarcity has been noted in some areas in past few years in summers, due to various reasons ranging from delayed rains to tectonic activity to climate change. This leads to behavioral change in personal and local hygiene maintenance, further leading to outbreaks of Gastrointestinal

and Liver diseases, both having significant effect on mortality and morbidity of inhabitants especially in vulnerable age groups of population.

2.3.2 Sanitation

On first hand sanitation does not seem to be a marked problem in Uttarakhand, being a perceived hilly State but on closer look, as 60% of population lives in plains and in densely packed habitations, sanitation management can go a long way in breaking transmission chain of diseases being spread by faeco oral route (Polio, Hepatitis etc.) again leading to significant morbidity and mortality.

Though significant strides had been made by stakeholder departments in improving situation of sanitation but mention of sanitation management still needs to be given space in health policy document.

2.3.3 Solid and Liquid Waste management system

For last few years this is the most burning issue with administrative, ecological and public health dimensions. It is a challenge in Municipal Corporations which may become a major threat to public health in urban areas and urban townships of the rural areas also. Absolute ban on single use plastic, and its regulation of course, will address these threats to some extent, but there is a lot of interventions which still required to be done. Hence this also needs to find space in health policy.

Ecological degradation and the contamination of the water bodies and ecosystem in general due to the unscientific use / misuse of pesticides and insecticides pose a serious health hazard. Health problems due to occupational pollutants, asthma, allergy, chronic obstructive pulmonary diseases especially in the context of raising urbanization and increase in the automobile use are other related issues to be addressed.

2.3.4. Climate change and Public Health

The changing climate will inevitably affect the basic requirements for maintaining health, clean air and water, sufficient food and adequate shelter. Climate change also brings new challenges to the control of infectious diseases. Many of the major killers are highly climate sensitive as regards to temperature and rainfall, including cholera and the diarrheal diseases, as well as diseases including malaria, dengue and other infections carried by

vectors. Also the issues of reductions and seasonal changes in the availability of fresh water, regional drops in food production, and rising sea levels etc. has the potential to force population displacement with negative health impacts.

Climate Change is a new challenge for the control of infectious diseases and public health. It leads to change in pattern of infection, emergence / resurgence /of diseases like H1N1, H5N1, Malaria, Dengue, *Chikungunia, Letospirosis*. Similarly many diseases caused, transmitted or harbored by insects, snails and other cold-blooded animals can take epidemic proportions by a change in climate eg. Lyme disease, Tick-borne encephalitis, Salmonella and other food borne infections.

Uneven precipitation/rainfall leading to cloud bursts and landslides makes hilly areas of Uttarakhand a disaster prone geography. This necessitates the preparedness for managing all varieties of natural disasters as well.

2.3.5. Other social determinants of Health

As per WHO's report on social determinants of health and HLEG report of GOI other factors like food and nutrition, regular employment housing, women empowerment etc. are very significant in achieving better health. As per the RBI figures (16th September 2013) 32.70 % of the population of Uttarakhand is below poverty line. Evidence suggests that relative poverty, more than absolute poverty, leads to poor health outcome leading to an urgent need for addressing the issue of social determinants of health in a holistic and by phase wise action plan.

2.4 Managing the emerging / re-emerging Communicable diseases

Waterborne diseases like diarrheal diseases, Hepatitis, Typhoid fever and vector bone diseases like Dengue fever, Malaria, remains a problem in Uttarakhand. Dengue which was a problem for few in the last decade has become a major communicable disease in the state and causing much morbidity throughout the year. These diseases follow a seasonal pattern. Outbreaks of waterborne diseases like diarrhoea cholera are always more in the monsoon season, extending from May to September. Higher incidence of acute viral fevers along with diseases like Dengue, Chikungunia, scrub typhus etc. make this as the "season of epidemics". There is an apprehension that the presence of migrant laborers from different

states might introduce/ reintroduce diseases that are not prevalent here. A high level of epidemiological surveillance and outbreak management has to be maintained in the State.

2.5 Non Communicable Diseases

In Uttarakhand the NCDs account for around 48% of total deaths occurring in the age group between 30 and 60. Although in a wider survey (NFHS 4) Blood Sugar Level, was found to be higher than 140 mg/dl in 6%Women and 8% of men only but a later study (Prevalence of hypertension, diabetes, and associated risk factors among geriatric population living in a high-altitude region of rural Uttarakhand, India) shows the prevalence of HTN and DM was found to be 54.5% and 14.6%, respectively. For HTN, advancing age, high educational level and body mass index (BMI) (≥25 kg/m2) and for DM higher education level and BMI (≥25 kg/m2) were found to be significant risk factors, which is an alarming situation.

Objectives

- Health promotion through behavior change
- Prevention and early detection of NCDs.
- Building capacity at various levels of health care facilities for prevention, early diagnosis, treatment and rehabilitation in respect of NCDs.
- Supporting development of database for NCDs through regular surveillance
- Monitoring risk factors, morbidity and mortality associated with NCDs.

Strategies

Prevention through behavior change:

- Prevention of identified risk factors for NCDs by creating general awareness about the Non Communicable Diseases (NCD)
- Promotion of healthy life style and habits in the community through use of inter alia mass media (electronic and print), community education and interpersonal communication.

2.5.1 Tobacco Control Programme

As per report of the Tobacco Control of India 2004, more than 0.8 million people die due to tobacco consumption every year in India. There are studies to indicate that

approximately 40% of the disease burden in the country is associated with some form of tobacco or other. Approximately 50% of all cancers in males and 20% cancers in females can be attributed to tobacco use. As per studies carried out by ICMR in 1998-99 (extrapolated in 2002-03), the burden to the economy for treating just 3 major diseases (cancer, cardio-vascular diseases and lung disorders) attributable to tobacco use was more than Rs. 30,800 Crore.

According to the Global Adults Tobacco Survey 2009-10 (GATS), About 28.5% of male population smoked tobacco daily whereas smoking among females was low (3.6%). Overall 11.6% of the population used smokeless tobacco whereas 16.6% of men and only 2.1% of women used smokeless tobacco. 30.7% of total population in Uttarakhand used tobacco in any form (i.e. smoking or smokeless). This prevalence was 43.9% among males and 5.8% among females. These findings emphasize the need of implementing the National Tobacco Control Programme for prevention of NCD.

Goals and Objectives

The goal of the National Tobacco Control Programme is to reduce the prevalence of the tobacco use by 5% at the end of the 12th FYP.

The objectives of NTCP are as under:

- To build up capacity of the States / Districts to effectively implement the tobacco control initiatives;
- To train the health and social workers;
- To undertake appropriate IEC activities and mass awareness campaigns, including in schools, workplaces, etc.;
- To set up a regulatory mechanism to monitor/ implement the Tobacco Control Laws;
- To establish a system of tobacco product regulation.
- Provide facilities for treatment of tobacco dependence
- To conduct Adult Tobacco Survey/Youth Survey for surveillance, etc.
- To take necessary action, in co-ordination with other Ministries and stakeholders, to fulfill the obligations(s) under the WHO Framework convention on Tobacco Control.

Implementation Mechanism (along with key strategies/ activities)

NTCP shall be implemented through a three tiered structure .i.e. National Tobacco Control Cell, State Tobacco control Cell and District Tobacco Control Cell. The National Tobacco Control Cell (NTCC) will be responsible for overall policy formulation, planning, monitoring and evaluation of the different activities envisaged under the programme. Likewise the State Tobacco Control Cell (STCC) shall monitor and review all the activities under NTCP carried out in the state.

2.5.2 Blindness Control

It was initiated in 1976 as 100% centrally sponsored programme with the goal to reduce prevalence of blindness to 0.3% by 2020. Main cause of blindness in children and young adults is refractive error and in + 50 adults cataract.

Objectives

- To reduce Backlog of blindness through identification and treatment of blind at Primary, Secondary and tertiary level.
- To provide high quality comprehensive eye care to the affected population.
- To expand coverage of eye care services to the underserved areas.
- To enhance community awareness on eye care and lay stress on preventive measures.
- To develop institutional capacity for eye care services by providing support for equipment, consumable material and training personnel

2.5.4 Oral health

Oral disease burden in India is very high due to several reasons. Many oral health surveys have been done from time to time from different regions: the comprehensive data on oral health was cited in the report by National Commission on Macro-economics and Health and Oral Health in India: Report of multi-centric oral health survey (Shah et al, 2007). According to these reports, prevalence of various oral diseases in the population is as follows:

Objectives

- Improvement in the determinants of oral health e.g. healthy diet, oral hygiene improvement etc. and to reduce disparity in oral health accessibility in rural and urban population.
- Reduce morbidity from oral diseases by strengthening oral health service at district/sub district hospital to start with.
- Integrate oral health promotion and preventive service with general health care system and other sectors.
- Promotion of Public Private Partnerships for achieving public health goals.

2.5.5 Prevention and Control of Deafness

Hearing loss is the most common sensory deficit in humans today. As per WHO estimates in India, there are approximately 63 million people, who are suffering from significant auditory impairment; this places the estimated prevalence at 6.3% in Indian population. As per NSSO survey, currently there are 291 persons per one lakh population who are suffering from severe to profound hearing loss (NSSO, 2001). Of these, a large percentage is children between the ages of 0 to 14 years. With such a large number of hearing impaired young Indians, it amounts to a severe loss of productivity, both physical and economic. An even larger percentage of our population suffers from milder degrees of hearing loss and unilateral (one sided) hearing loss.

Objectives

- To prevent the avoidable hearing loss on account of disease or injury.
- Early identification, diagnosis and treatment of ear problems responsible for hearing loss and deafness.
- To medically rehabilitate persons of all age groups, suffering with deafness.
- To strengthen the existing inter-sectorial linkages for continuity of the rehabilitation programme, for persons with deafness.
- To develop institutional capacity for ear care services by providing support for equipment and material and training personnel.

Components of the Programme

a) Manpower Training and Development – For prevention, early identification and management of hearing impaired and deafness cases, training would be provided from medical college level specialists (ENT and Audiology) to grass root level workers.

b) Capacity Building – for the District Hospital, Sub-District Hospital, CHC and PHC in respect of ENT/Audiology infrastructure. Service Provision Including Rehabilitation – Screening camps for early detection of hearing impairment and deafness, management of hearing and speech impaired cases and rehabilitation (including provision of hearing aids), at different levels of health care delivery system.

c) Awareness Generation Through IEC Activities – for early identification of hearing impaired, especially children so that timely management of such cases is possible and to remove the stigma attached to deafness.

2.5.6 Dialysis Program

In financial year 2016-17 Government of India has launched *Pradhan Mantra National Dialysis Program* under PPP mode. Major objective of the program is to provide dialysis services in government health facilities at reasonable rates. Government of India has fixed the price capping of Rs. 1100/- for per dialysis for both BPL and APL patients. Payment for Dialysis facility to the patients from below poverty line (BPL) patients will be paid through National Health Mission. For non BPL patients the benefit of accessing the services will be at the same rates as paid by Government for the BPL patient.

2.6 Universal Screening for Common NCDs

Major objective of the program is early diagnosis and prevention of five Non Communicable Diseases (Hypertension, Diabetes, Oral, Breast and Cervix Cancer). ASHA will conduct household survey and fill the Health Cards of people above 30 years of age as per Community Based Assessment Checklist. On the basis of the CBAC form suspected people will be referred to higher center for early diagnosis and treatment.

- In Financial year 2018-19, three districts (Dehradun, Pauri Garhwal and Nainital) are covered under the program and 11 blocks of six new districts (Chamoli, Champawat, Haridwar, Pithoragarh, Uttarkashi and U.S Nagar) were approved.
- In Financial year 2019-20, 18 blocks of 13 districts are approved in ROP including blocks approved in FY- 2018-20.

Table 6: Districts Approved in ROP including block in FY 2018-19 and 2019-20

S No	District	Approved Block in 2018-19	Approved Block in 2019-20
1	Almora	-	DaulaDevi,Salt,Tarikhet
2	Bageshswar	-	Kapkote
3	Chamoli	KaranPrayag, Joshimath	Gairsain,Ghat
4	Champawat	Champawat Block	Barakot
5	Dehradun	Doiwala, Chakrata	Vikas Nagar, Shahaspur
6	Haridwar	Narsan, Bhadarabad, Roorkee	Laksar
7	Pauri	Thalisain	Birokhal
8	Pithoragarh	Munsyari	Berinag
9	Rudraprayag	-	Jakholi
10	Tehri	-	Chamba
11	Nainital	Ramnagar	Kotabag
12	U S Nagar	Jaspur, Sitarganj, Rudrapur	Khatima, Gaddarpur
13	Uttarkashi	Mori	Chinyalisour

2.6.1 Community Interventions

Incentive is to be given to ASHA worker for filling up of CBAC form and for follow-up of confirmed cases of NCDs. ASHA incentive is Rs.10/- for per CBAC form and Rs. 100/- for follow-up of per confirmed cases of NCDs.

Under NTCP, training of various stakeholders is an important activity of DTCC. Implementation of COTPA Act in achieving its outcome at district level is significantly

dependent on well-functioning of gram, block and district level Panchayats. DTCC Team will sensitize Panchayati Raj Institutions members and other stakeholders through workshop.

a. Pradhan Mantri National Dialysis Program

- Dialysis Centers (Coronation Hospital, Dehradun & Base Hospital Haldwani) running under PPP mode since 2016.
- Establishment of 07 more Dialysis Center under PMNDP.
- Out of 42 Dialysis Machines has been installed.

Table 7: Dialysis Centre under PMNDP

Dialysis Centre	Mode	Machines	Status
District Hospital Rudrapur (USN)	PPP	10	Dialysis Centre is functional
Meal Hospital, Haridwar	PPP	10	Dialysis Centre is functional
Combined Hospital, Kotdwar	PPP	10	Dialysis machines are installed. Centre will be functional by end of April 2019
Base Hospital, Almora	State Run Model	03	Dialysis Centre is functional only for 2 days a week as trained doctor is posted at DH Almora.
Medical College Srinagar	State Run Model	03	Dialysis machines are installed. Centre will be functional by end of April 2019 (Training of Doctors and staff is in process)
District Hospital Rudraprayag	State Run Model	03	Site is ready and site readiness certificate has been provide to Fairfax Foundation for installation of dialysis machines. (training of Doctors and staff is in process)
District Hospital, Pithoragarh	State Run Model	03	Site readiness under process and will be completed end of April 2019.

b. Screening of Common NCD (NPCDCS)

District NCD Clinic are established in District Hospitals of each district with the objective of opportunistic screening of individuals above 30 years of age for early detection of common NCDs.

Universal Screening of Common NCDs (community Based)

- **FY 2018-19:** Screening initiated in 172 HWC
- **FY 2019-20:** NCD screening will be implemented in 18 new blocks (363 SC & 47 PHC)

Table 8: Present Status of NCD Screening

Programme	Patient Screened	HTN	DM	Oral Cancer	Breast Cancer
District NCD Clinic	109796	28542	24724	2210	1856
Universal Screening	29708	11478	11725	4319	2186
Total	**139504**	**40020 (46%)**	**36459 (42%)**	**6529 (7%)**	**4032 (5%)**

Table9: Progress under Universal Screening Programme

District	Blocks covered	Screening in BWC	Target Population	CBAC filled	Individual Screened
Dehradun	All Blocks	**81/81**	**122100**	**15690(13%)**	**14616**
Pauri Garhwal	All Blocks	**30/30**	**58500**	**17552(30%)**	**244**
Nainital	All Blocks	**49/49**	**80500**	**16655(21%)**	**14389**
Haridwar	lmilekheda, Dhander, Laldhang, Roshanabas, Makdoompur	**12/105**	**42350**	**8912 (21%)**	**546**
Total		**172/265**	**303450**	**58809(19%)**	**29708**

Table 10: National Mental Health Program

S.No.	Head	Activity under NMHP
1	HR	Psychiatrist posted at Dehradun, Haridwar & U.S. Nagar.
2	Training	Training is imparted to 10 doctors of the State under One Year Training Programme at NIMHANS, Bangalore. Training of 15 more doctors is going-on under One Year Training Program under clinical support and mentoring by NIMHANS.
3	Drugs	To fulfill the requirement of psychotropic drugs budget @ Rs. 50,000/- per district is approved in RoP 2019-20.

Table 11: Mental Patients OPD by Psychiatrists and Trained Doctors

Almora	Bageshwar	Chamoli	Champawat	Dehradun	Haridwar
247	35	168	741	2311	3152

Nainital	Pauri	Pithoragarh	Rudraprayag	Tehri	U S Nagar	Uttarkashi
583	224	145	264	358	1068	270

2.7 National Mental Health Program

It is estimated that 6-7 % of population suffers from mental disorders. The World Bank report (1993) revealed that the Disability Adjusted Life Year (DALY) loss due to neuro-

psychiatric disorder is much higher than diarrhea, malaria, worm infestations and tuberculosis if taken individually. Together these disorders account for 12% of the global burden of disease (GBD) and an analysis of trends indicates this will increase to 15% by 2020 (World Health Report, 2001). One in four families is likely to have at least one member with a behavioural or mental disorder (WHO 2001). These families not only provide physical and emotional support, but also bear the negative impact of stigma and discrimination. Most of them (>90%) remain un-treated. Poor awareness about symptoms of mental illness, myths and stigma related to it, lack of knowledge on the treatment availability and potential benefits of seeking treatment are important causes for the high treatment gap.

Objectives

- To ensure the availability and accessibility of minimum mental healthcare for all in the foreseeable future, particularly to the most vulnerable and underprivileged sections of the population;
- To encourage the application of mental health knowledge in general healthcare and in social development; and
- To promote community participation in the mental health service development and to stimulate efforts towards self-help in the community.

Strategy and Innovations proposed

- Integration with existing activities for optimal utilization of resources.
- Capacity strengthening of major component
- Developing linkages with various stakeholders
- According to gaps identified in Mission report
- Effective Intersectoral linkages
- Capacity development in project management
- Awareness generation and demand for services
- Stigma reduction and social dignity for the mentally ill
- Innovation at multiple levels of programme functioning
- Strengthened institutional and referral linkages for care and treatment of MH patients.

Psychiatrist recruited under DMHP, along with the other staff of DMHP will visit and conduct outpatient clinics/camps at block level/schools/slum areas to identify the patients with mental illness and to aware people regarding mental health.

2.8 Cancer and Palliative Care

Palliative Care is an essential component of Cancer Care of the Elderly and can be effectively provided in conjunction with these programme reducing the morbidity burden to a great extent.

Goal:

Availability and accessibility of rational, quality pain relief and palliative care to the needy, as an integral part of Health Care at all levels, in alignment with the community requirements.

Objectives

- Improve the capacity to provide palliative care service delivery within government health programs such as the National Program for Prevention and Control of Cancer, Cardiovascular Disease, Diabetes, and Stroke; National Program for Health Care of the Elderly, the National AIDS Control Program, and the National Rural Health Mission.
- Refine the legal and regulatory systems and support implementation to ensure access and availability of Opioids for medical and scientific use while maintaining measure for preventing diversion and misuse
- Encourage attitudinal shifts amongst healthcare professionals by strengthening and incorporating principles of long term care and palliative care into the educational curricula (of medical, nursing, pharmacy and social work courses).
- Promote behavior change in the community through increasing public awareness and improved skills and knowledge regarding pain relief and palliative care leading to community owned initiatives supporting health care system.
- Encourage and facilitate delivery of quality palliative care services within the private health centers of the state.
- To contribute in developing National standards for palliative care services and continuously evolve the design and implementation of the National program to ensure progress towards the vision of the program.

2.9 Women's Health

In Uttarakhand 76.5% of all women are literate whereas 89% currently married women usually participate in household decisions (NFHS 4) as well as 70 % Women age 15-24 years use hygienic methods of protection during their menstrual period and 58 % operate their own bank accounts. This gives a fair picture of gender emancipation and indicates higher probability of health seeking behavior in women in Uttarakhand not only for assistance in maternal services (70 %institutional Delivery) where as in non-maternal services too.

a) Primary Objectives

The primary objective is to ensure "Delivery of Respectful and Quality Care" for,

- Better Antenatal (ANC) Services during pregnancy
- Better Care around Birth (Delivery) Services
- Better Postnatal (PNC) Services during post delivery period
- Strengthen Maternal and Neonatal Death Surveillance and Response System

b) State Goals

i. Immediate Goals: To be achieved by 2020-21.

- Number of 4 ANC Visits are to be increased 2.5 times of current coverage i.e. from current 31% (NFHS-4:2015-16) to more than 75% of all ANC.
- Number of Full ANC coverage is to be increased 3 times of current coverage i.e. from current 12% (NFHS-4:2015-16) to more than 50% of all ANC.
- Number of 1st trimester ANC Visits are to be increased from current 61% (HMIS 2017-18) to more than 90% of all ANC.
- Number of High Risk Pregnancy Detection is to be increased 4 times of current coverage i.e. from current rates of 1% (MCTS: 2016-17) to > 4%
- Achieve Birth Planning rates of greater than 80%
- Increase Institutional Delivery rates from 69% (NFHS-4:2015-16) to > 85%
- Increase Safe Delivery Rates from current 73% (NFHS-4:2015-16) to > 90%
- Bring Home Delivery Rates to single digits (less than 10%) across all Blocks

- Improve Access to Delivery Points (DP's) and 2 times availability of DP's at PHC level from current 35% to > 70%

ii. Long Term Goals: To be achieved before 2025-26

- Achieve Sustainable Developmental Goals for Maternal and Newborn Health by year 2025-26; five years before the expected timelines in 2030.
- Maternal Mortality Ratio (MMR) – Below 70 per 1 lakh live births
- Neonatal Mortality Rate (NMR) – Below 12 per one thousand live births

c) Priority Interventions

- Organize Fixed ANC and PNC Service Day (Samman Divas) at Sub-Center Level every Monday
- Focus on ANC Counselling and Birth Planning and use of ANC Counselling and Training Wall and Birth Plan cards.
- Conduct Facility Level Emergency Drills in the Labor Room every week.
- Track and ensure availability of Key commodities as listed in GOI RMNCH+A 5x5 Matrix.
- Ensure regular Online Data Reporting on Samman portal, SNCU Online and PMSMA Portal. Use of Scorecards for recognizing Health Providers and Teams and address gaps.
- Organizing Quarterly Review and Facilitation Event at District level

d) Expectations

- Improve Demand for Institutional Deliveries,
- Improve Access to Delivery Points based on Time to Care approach,
- Better provisions, availability and development of Human Resource for Health
- Fill Vacant Sub Centers to achieve average Vacant Sub-center Rates below 2% to total Sub-centers at any given point.
- Rationale case based deployment of HR at all levels. Calculate requirements for the Post of Specialists, Medical Officers, and Staff Nurses and ANM's to below 2%.

- Improve Screening, Monitoring, Treatment, Referral and Follow-Up Processes for Maternal and Newborn Health related services
- Standardize Recording and Reporting Processes
- Strengthen Review and response Systems and,
- Build Recognition Platforms

2.10 Child Health

Uttarakhand has not only been able to halt the rising IMR (38 SRS 2015) whereas reverse it too (32 2017) but still a lot is needed to be done for maintenance of downtrend in IMR especially in Urban areas.

Thrust Areas Under Child Health Programme

i. Thrust Area 1 : Neonatal Health

- Essential new born care (at every 'delivery' point at time of birth)
- Facility based sick newborn care (at FRUs and District Hospitals)
- Home Based Newborn Care (HBYC)
- Home Based Newborn Care and Home Based Young Care (HBYC) Programme.
- Kangaroo Mother Care
- Breast Feeding Week

ii. Thrust Area 2 : Nutrition

- Promotion of optimal Infant and Young Child Feeding Practices under Mother's Absolute Affection (MAA) Programme
- Micronutrient supplementation (Vitamin A, Iron Folic Acid)
- Management of children with severe acute malnutrition
- National Deworming Day (NDD)

iii. Thrust Area 3:

- Management of Childhood Diarrhoeal Diseases and Acute Respiratory Infections
- Intensified Diarrhoea Control Fortnight (IDCF)

iv. Thrust Area 4:

- Intensification of Routine Immunization
- Eliminating Measles and Japanese Encephalitis related deaths
- Polio Eradication

This health policy document revises its commitment to Child Health programme by continuing interventions in community as well as in institutes by promoting Birth Screening, Home visits of new born by grass root workers and early referrals by them to specialized institutes.

Child Death Audit Child Death Review (CDR) is a strategy to understand the geographical variation in causes of child deaths and thereby initiating specific child health interventions. Analysis of child deaths provides information about the medical causes of death, helps to identify the gaps in health service delivery and social factors that contribute to child deaths. The Chief Medical Officer (CMO) is to be made responsible for the Child Death Reviews at the District level. Both facility and community based reviews from rural and urban areas would be taken up at this level. Guidelines (Child Death Review) for Implementation of CDR and process of CDR reporting based on national norms are to be widely circulated and implemented.

2.11 Adolescent Health

Health Policy seeks to equip, sensitize, and empower all adolescents of the State to realize their full potential.

Adolescents (approximately 22 lakh) comprise nearly one-fifth (22 percent) of Uttarakhand total population (Census 2011). Of the total adolescent population, 12 percent belong to the 10-14 years age group and nearly 10 percent are in the 15-19 years age group. Adolescence is a very promising phase of life. Compulsory education at least up to 14 years of age, opportunities for higher education al skills, access to health care and protection from coercion or violence are some ways in which our government is committed to provide an enabling environment for adolescents. The health and well – being of the adolescent population is a key determinant of any country's overall development. Supporting adolescents in reducing barriers to access education, health and opportunities for growth and

development will help India realize its demographic bonus, as healthy adolescents are an important resource for the economy.

2.11.1 The Adolescent Health Strategy

The Adolescent Health Strategy is one such initiative in this direction. The adolescent health strategy has six priorities:

1. Sexual and reproductive health
2. Mental and emotional well-being
3. Healthy lifestyle
4. Violence-free living
5. Improving nutritional status
6. Substance misuse prevention.

Activity

Counseling Services to adolescents are to be provided in All Adolescent friendly health clinics (AFHC), as per guidelines. These AFHC s should be open on all working days of week in Medical College and District Hospitals. Since these facilities have male and female counselors, one of them should manage AFHC at facility while other can do so in field in two working days per week.

In AFHCs located at CHC /PHC counseling services are to be provided at facility for at least 4 working days per week. Counselor will make field visit for counseling in field (either community or school) for two days in a week.

2.12 School Health Programme (SHP)

SHP is aimed at screening of children from 0 to 18 years for 4 Ds - defects at birth, diseases, deficiencies and development delays including disabilities in Uttarakhand. As per available estimates, 6% of children are born with birth defects, 10% children are affected with development delays leading to disabilities. Further, 4% of under-five mortality and 10% of neonatal mortality is attributed to birth defects.

Health Policy affirms to continue Child Health Screening and Early Intervention Services envisage covering 30 identified health conditions for early detection, free treatment and management through dedicated mobile health teams placed in every block in the country.

The teams carry out screening of all children in the pre-school age enrolled at Anganwadi centres at least twice a year besides screening of all children studying in Government and Government aided schools, whereas the newborns will be screened for birth defects in health facilities by service providers and during the home visits by ASHAs. District Early Intervention Centres are planned to be set up as first referral point for further investigation, treatment and management. Tertiary care centre would be roped in for management of complicated cases requiring high-end medical care and treatment. This herculean effort is ultimately targeted to benefit children annually in a phased manner in Uttarakhand.

Needless to say, those dividends of early intervention would be huge including improvement of survival outcome, reduction of malnutrition prevalence, enhancement of cognitive development and educational attainment and overall improvement of quality of life of our citizens. Bringing down both out of pocket expenses on belated treatment of diseases / disabilities (many of which become highly debilitating and incurable) and avoidable pressure on health system on account of their management are among obvious benefits.

Children diagnosed with illnesses shall receive follow up including surgeries at tertiary level, free of cost under RBSK. Rashtriya Baal Swasthya Karyakram is being implemented in 13 districts of Uttarakhand. Under this programme the children taking birth in government hospitals, children enrolled in government and government aided schools and Anganwadi from age of 0 to 18 years are covered. These children are screened for selected health conditions by 148 Mobile Health Teams (MHTs). For confirmation of preliminary findings, referral support, management and follow up of screened children for which four early intervention centres are established in Almora, Bageshwar, Haridwar, Dehradun. DEIC is the hub of all activities will act as a clearing house and also provide referral linkages. DEIC should be aiming at early detection and early intervention so as to minimize disabilities among growing children. WHO has stated that defect or developmental delay leads to functional disability and these functional disability in turn lead to handicap if not addressed adequately.

Government of India has provided Guideline “Procedure and Model Costing for Surgeries” for the treatment of these children and treatment is provided to these children on the basis of this guideline.

2.13 Healthcare of the Elderly

The population of elderly person is rapidly increasing globally. As per Census 2001, total population above 60 years of age in India was 76.6 million (7.5%). The data of 2011 Census is yet not available, but as per projection, the elderly population as on date is expected to be around 98 million. According to estimated projection the population of elderly will be around 12.4% of the total population by 2025.

The National Sample Surveys of 1986-87, 1995-96 and 2004 have shown that:

- The burden of morbidity in old age is enormous.
- Non-communicable diseases (life style related and dangerative) are extremely common in older people irrespective of socio-economic status.
- Disabilities are very frequent which affect the functionality in old age compromising the ability to pursue the activities of daily living.

The objectives are:

- To provide easy access to preventive, promotive, curative and rehabilitative services to the elderly.
- To make use of the community based primary health care approach and strengthen capacity of the medical and paramedical professional as well as the care-takers within the family for caring practices of the elderly.
- To identify health problems in the elderly and provide appropriate health interventions in the community with a strong referral backup support.
- To provide referral services to the elderly patients through district hospitals, medical colleges and strengthen health manpower development in the field of geriatric medicine.

Development of treatment models for the elderly persons in our state.

- Preventive and promotive care
- Management of Illness
- Health Manpower Development for geriatric services
- Medical rehabilitation and therapeutic intervention
- Developing appropriate training courses for medical and paramedical health professional in geriatric care.

- Promotion and encouraging basic, clinical, epidemiological and applied research in aging and the health care of the elderly
- Integrating other systems of medicine such as AYUSH in provision of health care to the elderly.

2.14 Health of vulnerable sections:

The health status of tribes is better than what exists in most parts of India. This is partly the result of political empowerment and partly due to their education achievements of community as a whole. But nevertheless a close watch and effective Universal Health Care will beneficial for vulnerable and marginalized population whether they fall in tribal category or not.

2.15 Health Infrastructure:

Age old Health Infrastructure provisions need attention at policy level especially with consideration of reframing TOR of institutes like sanatoriums, leprosy hospitals etc.

Major reforms are envisaged like merging of various hospitals in same location under one administrative command with utilisation of thin Human Resource for optimal utilisation. Some work has already been done in this field which needs to be taken further.

Chapter 3

HEALTH SYSTEM IN STATE

3.1 Tertiary care

Tertiary care in government service is provided through Medical college hospitals. Currently 4 public Medical College and 2 private medical colleges are giving service to public but critical level and extent of services in most of medical colleges is yet to be attached. Focus on better faculty and its retention will be primary objective. Each of these hospitals would be equipped for managing cases in all specialties and super specialties. Coupled with a revamped primary care system, referral linkages between secondary and teaching hospitals and an ICT enabled networking of care the medical college hospital can be positioned as the manager of the health care needs of the entire district, including capacity building, quality and research. But to achieve this, capacity and standards in teaching of medical colleges will have to be substantially improved and better organizational arrangements made. Diagnostics and treatments will have to be standardized at all levels and referral linkages.

3.2. Secondary care institutions

General/District hospitals, Sub Divisional hospitals and will be strengthened to provide secondary care. Expecting the burden of non-communicable diseases these hospitals will be equipped to handle routine cases of such diseases. Government's effort will be needed at all fronts i.e. HR, Infra and trainings would be needed to strengthen these hospitals with specialties and attendant services such as trauma care, dialysis Centre, counseling services, de-addiction centres and physical rehabilitation centres.

3.3 CHC

In Uttarakhand, let aside the IPHS norms, the national pattern of one post of Gynecologist, Pediatrician, Physician, Surgeon and Anesthesiologist are not available in every CHCs since at present the available specialists are inadequate to meet the requirements of specialists in General/ District / Specialty and Sub Divisional hospitals. Right now three pronged approach of placing HR (PPP mode, NABH accreditation outsourcing and direct recruitment though routine and rational placement by State) is being practiced which is to be continued.

3.4 Primary Health Centre

Primary Health Centres were set up for health promotion activities including prevention of communicable and non-communicable diseases, disease surveillance, implementation of the maternal and child health programme comprising antenatal care, immunization, post natal care, adolescent health and implementation of other national health programme. But the system, originally designed to address reproductive and child health issues and communicable diseases, has not been reconfigured to meet the needs of a population that is well on the way through a demographic and epidemiological transition. The job description of primary care physicians will be reworked to resemble that of the Family Physician or General Practioner. Each team will be responsible for a population of 10,000, provide them preventive, primitive and basic curative services and help them navigate through the health system should they need higher level of services.

3.5 Sub Centers

There are 547 posts vacant against total 2296 ANMS operating in 1875 Sub Centres. The role and responsibilities of the sub centres and primary health centres has come down markedly due to changes in pattern of utilisation of health services. There is a need to better reorganize the functioning of the Sub Centres in such a manner to address the health promotion prevention and other primary health care services at the field level. With the introduction of concept of Health and Wellness centres a new life is to be transpired in these institutes so that they can cater to wider population segment rather than maternal and child pop segment only.

3.6 Emergency medical services and management of trauma

With ever increasing number of accidents which is compounded by transportation difficulty resulting in huge no. of deaths we need an efficient system for efficient evacuation and good management of victims of road traffic accidents. The since management of emergency cases and trauma a specialist cadre of doctors and nurses trained in life saving and trauma management techniques will be built up. Post graduate courses in emergency

Medicine and emergency nursing needs to be started.

3.7 Clinical establishment Bill 2013

In the state private hospitals, laboratories and other diagnostic Centre play an important role in providing medical care. But unfortunately there is no system for mandatory registration and monitoring of the functioning of these institutions. On line with the Medical establishment bill

of GOI, a comprehensive bill covering the registration and regulation of the all health care institutions adopted in the state has to enforce.

3.8 Human Resource Policy in Health

Human Resource is the core building block of any Health system. In order to ensure a health HR the management capabilities will be improved in all the directorates. HR policy and job descriptions will be dynamically updated to meet changes in the sector. An HR cell and another HR Advisory Committee will be set up to advice government on this. Adequate investments will be made to develop, manage and implement an HRMIS system that will gather and update HR related data on a regular basis. This will ensure availability of authentic information on every individual staff within the department at all levels. This will further aid in process of transfer, capacity building, HR planning etc. All directorates will have a systematic capacity building system including induction and periodic training. A performance appraisal and grievance redressal system will also be institutionalized.

3.9 Nursing Care and Nursing education

The potential of nursing cadre as an independent professional need to be identified and propagated. The role of nurses in initial work up and counseling of the patients in outpatient sections, and the right to administer key drugs at times of emergencies in OP / IP sections based on a protocol would be very much helpful in improving the patient care. There are total 1571 posts of Staff Nurses in Uttarakhand which even if totally filed (currently 454 vacant) will be less than doctor: nurse norm of 1:3. Sanctioned posts of Staff nurses needs to be increased after a thought full study.

3.10 Treatment protocol, referral protocols and management guidelines

The absence of proper guidelines/ protocols for treatment, medical investigation and case management is an area which needs urgent attention for quality work as well as standardized documentation purposes too. Work in this direction is to be given priority to ensure quality and transparency in health.

3.11 Data Management System

Health sector generates a large amount of data. This should be analyzed and form the basis for managerial decision making and informed and evidence based policy formulation. Uttarakhand Health System do use the data from IDSP and Health Management Information System etc. for decision making. However there is no system to integrate this data and

present it in a manner useful to managers at different levels. Dashboard level data display software's have been developed to capture input and output both in critical events (Child Healthcare, Blood component availability/status, ANC and Immunization Status, etc.). These data are regularly updated and are being monitored by decision/policy makers at highest level.

Uttarakhand has also developed its own attendance/ availability verification software tool known as **e-parchi** which has contributed to great extent in ensuring real time status and thus ensuring greater availability of Doctors even in peripheral institutes. Such efforts are to be continued and upscaled.

3.13 Medical Education

At the time of inception of state there was no Government Medical College. Till 2016 no. of Government medical colleges was just two whereas now one more public MC has come up and one is coming up. A school of Public Health is also proposed to be established which will not only impart public health certification courses but will also encourage research activities and innovation in health care delivery and management.

Chapter 4

PRIVATE SECTOR

The private sector in Uttarakhand is majorly limited to just 4 districts out of 13 districts thus issues of accessibility haunt even this sector and leaving government health system more responsible in vulnerable places. The types of ownership range from corporate to single proprietor. They vary in sophistication from single doctor hospital to multi-specialty hospitals and have become the preferred providers for the District Hospitals and above it was the private sector that provided services in some remote areas of the state. These small hospitals, which fulfilled an important role in the health sector, are threatened by increasing cost of operation and the preference of patients for more sophisticated hospitals. In the past there was very little engagement between government and private hospitals. That changed with government officials being allowed to access care in private hospitals under some conditions. This was further accentuated by the Rashtriya Swasthya Bima Yojana and then MSBY and much more pronounced in current days of Atal Ayushman Yojana. However any proposal to systematically engage spare capacity in private sector to provide health coverage is derided as a sell out to the private sector. This needs to be changed. Implementation of CEA as well as synergistic operation of public private enterprise with benefit of common population at heart of matter will result in gainful engagement.

Chapter 5

DETERMINANTS OF HEALTH CARE

5.1. Determinants of health care

Many of the factors that determine health status of the population lie outside the purview of the health sector. These include clean drinking water, proper management of solid and liquid waste, food safety. Many of these have been delegated to local self-governments under the 73rd and 74th amendments to the constitution. Health department will leverage their representation in the local administration to effect convergence of efforts to improve such determinants.

i. Clean drinking water

Responsibility for provision of safe water is to share between the Water Authority, water resources department, local self-governments and a host of community based water supply schemes. There is scarcity of drinking water in many parts of the state, leading to a host of health problems. The state will continue the efforts to provide adequate drinking water of good quality in these areas. Health department will access technologies to test the quality of water being provided in all the schemes and by adhoc providers in times of scarcity or natural calamity.

ii. Sanitation facilities

In addition to providing sanitary latrines in all houses Uttarakhand has to deal with issues created by first generation toilets which have no septic tanks and the lack of scientific system for management of sewage. In the absence of such a system many agencies dump such waste abandoned areas and water bodies causing serious public health hazard. Government will access and implement technologies that can treat sewage in water logged areas and high density residential areas.

iii. Solid Waste Management Policy, and Plan of action

The system of collection of waste without segregation and dumping them without a scientific system of management has resulted in an ecological and social crisis. By

legislative means and education of the public generators of the waste, including households will be asked to assume responsibility for the waste, segregate them and participate in decentralized scientific system of management. Banning of thin plastic carry bags and other administrative, managerial and legal measures will also be enforced.

iv. **Poverty:** Poor persons have greater load of morbidity without the means of paying for treatment. RSBY, Janani Sishu Suraksha Programme, free distribution of generic drugs and similar schemes have increased financial risk protection in the state. However government will also introduce other measures to ensure that the poor have access to preventive and curative services free at the point of outdoor care consumption.

5.2. Enforcement of regulations for good health.

Enforcement of enabling and preventive measures, if necessary by coercive means remains a necessary element of public health anywhere in the world. Due to outdated laws and poor enforcement public health has not benefited fully from such regulatory support. Government will revise such laws and move towards their effective enforcement relying on democratic institutions in the state to prevent their abuse.

i. **Food Safety**

With the passing of the FSSA in India now has a legal framework for ensuring food safety. However the enforcement machinery lacks the capacity to effectively implement the provisions of the act. In addition to strengthening the Commissionerate of Food Safety will leverage capacities available in other departments for technical support (e.g: Laboratory tests) or to administer areas that fall into other areas as sanitation. To respond to increased awareness of food safety and the demand for quality food government will scale up the machinery to ensure safe food and beverages.

ii. **Public Health Act**

To think and act on proposals of new public health act including all components of it (ethical, evidence based regulation, non-coercive, people friendly but effective, educative, addressing practice of highest level of quality standards etc.) a health Task Force should be set up with time bound agenda for recommendations.

5.3. Reorganization of Government Health System:

Government health services currently function as a conglomeration of standalone institutions. This creates high degree of inefficiency. Government will aim to link them in a networked care system with the primary care team providing initial care and assisting individuals navigate through different levels of health system. This calls a higher level of organization and management than what health services currently possess.

iii. Primary Care

The primary care system has concentrated on family planning, maternal and child care and prevention and management of communicable diseases. It is not designed to respond to some of the current challenges as non-communicable diseases, mental health issues and geriatric care. Government intends to revamp the primary care provision to make them assume responsibility for population allotted to them. The primary care team will be trained to function as a general practice team dealing with a smaller population. Currently fresh graduates are assigned charge of primary care duties which in many countries are discharged by family physicians with post graduate qualifications and specialized training. We will develop a cadre of primary care providers like General Practitioners or Family Physicians. Initially they would receive specialized training before posting. Concurrently Uttarakhand will start a PG course on Primary Care and gradually create a Cadre of qualified doctors to provide primary care through proposed School Of Public Health.

Using ICT the Primary Care Team will keep track of health care needs of persons assigned to their care. They will be trained to provide basic services themselves and to refer to appropriate levels when specialist care is needed. Using ICT framework they will develop appropriate messaging and track compliance. Since every interaction of the referred patients with the government health system is tracked and available on the central data server the primary care team will be able to guide the patients on treatment compliance and prevention. Referral protocols and systems will regulate their interaction with secondary and tertiary levels of the health system. The Primary care team will be the prime managers of the Electronic Health Record of every individual that will be developed from the ICT framework. Developing the new system would involve

identifying the knowledge and skill sets needed by the crucial members of the primary care team and building them; shifting some of the tasks currently discharged by the medical practitioner to nurses and paramedics; fine tuning referral protocols and developing the managed referral networks around Primary Care and developing a monitoring framework.

Primary health centres

Staffing of Primary health centres will be reworked with three teams of a doctor and a nurse managing a population of 10,000 each. Only OPD and field activities will be discharged in PHCs and OPD would be managed in evening hours by turn. The job responsibility of nurses will be revised to assign more patient care responsibilities to them. Laboratory services will be available at all PHCs. The primary care in difficult to reach areas will be configured differently.

Community Health centres:

Community Health Centres are the block level institutions expected to provide basic specialty services. Considering shortages in specialists such services will be provided only after the requirements of higher level institutions are addressed. Facilities at the CHC would be utilized as Coordinating Centres of Pain and Palliative Care, terminal care and Community Mental Health Programme. Community Health Centre will be the lowest unit of the Public Health Cadre.

iv. Sub Divisional Head Quarters Hospital

A SDH with all major and minor specialties, with average bed strength of 300 provides an optimal level to provide secondary care. It will have such supporting services as emergency services, laboratories, blood bank/blood storage centres, units for maintenance dialysis, physiotherapy and rehabilitation and de-addiction centres.

v. **District/ General Hospitals**

One District or General hospital in the district will have in addition to all major and minor specialties a few super specialties built up over time subject to availability of doctors. These would be Cardiology, Neurology, Nephrology and Urology. To ensure

adequate attention to the needs of mothers and children will have a Women and Child Hospital in every district.

vi. **Specialty Hospitals**

With advances in pharmacology specialist hospitals like TB and Leprosy have lost their relevance. Mental Health care is also increasingly being managed at general hospitals. While it will not be possible to close them down now increasingly their role would be brought down and the institution developed for alternate uses.

vii. Medical College hospitals:

In time all districts in will have a government medical college (or at least DNB courses in DH of smaller districts). Some of the existing medical college hospitals have been performing sub optimally. With better referrals linkages and teaching hospitals coming up in every district it should be possible to give quality medical care round the clock and focusing on quality and research. All teaching hospitals, in addition to providing specialist consultation services to other hospitals in the districts, will also be involved in training and quality control of services in other hospitals. They will provide the top most level of the networked care system managed by primary care providers. For the purpose of planning of health care services the state will follow demographic/administrative norms: a subcentre catering to 5000 population or the ward of a panchayat, a Primary Health Centre serving one Grama Panchayat or 30,000 population, a Community Health Centre for a block panchayat or 1, 00,000 population and a District Level Hospital for every district. Disparities that exist between hospitals in different regions will be rectified before sanctioning or upgrading hospitals.

5.4. Other specialized services

5.4.1 Public Health Cadre and Health protection Agency

The absence of a dedicated public health cadre with adequate skill and knowledge to lead the public health functions of the health services department is one of the reasons for the repeated failure of public health work which we come across. Dedicated Public Health Cadre of doctors and other non-medical supervisors from block level and above is very much needed for this purpose. A Medical Officer who is busy with the routine clinical

works may not be able to deliver the necessary public health functions at the field level. And he / she may not be in a position to supervise guide and monitor the activities of the field level functionaries and their supervisors. At the block level a post of Public Health cadre doctor will be created and the candidate opting this cadre will have opportunity to go for Public Health qualification. The block level supervisors namely Health supervisors and Senior Public Health Nurse would be similarly equipped with similar courses and the designation of the officers may be appropriately changed. At the district level also dedicated Medical officers and Non-medical Officers with public Health Qualifications would lead the team. Strengthening of the Public Health cadre at the state level without bifurcating it as a separate directorate would be done. Public Health laboratories and State Institute of health and Family Welfare/State Training Centre and SHSRC would be important partners in capacity development of this cadre. Providing appropriate Public Health Qualifications for around 1000 plus doctors and non-medical public health cadre officers is a major task requiring necessary course formulation, developing a mechanism for providing the courses etc. It is to be provided in a time bound manner through the medical colleges, public health institutes and the institutes referred above. Effective enforcement of the Public health act would be the responsibility of this cadre. Enactment of an updated public health act would further strengthen the Public Health cadre.

5.4.2 National health Mission (NHM)

i. Integration

NHM is to be integrated more with General Health System especially at state level with greater participation of State level officers of Directorate rigrously participating in planning, execution and monitoring of NHM in State.

ii. Communicable disease surveillance and execution of control measures

For last many years Directorate of Health Services is maintaining a daily and weekly surveillance system of communicable diseases through the IDSP system. There are many shortcomings in this system. Most of the data from the private hospitals are not covered and many a time increase in the number of cases is not timely detected. Under the leadership of the Public health cadre and a health protection agency will be formed and referred above these activities need to be further streamlined and strengthened. The IDSP system with the contract staff has its inherent weakness of frequent changes and lack of

motivation. The existing posts of IDSP including the data entry operators, data managers, epidemiologists etc at the district level, and the posts at the state level and the laboratories need to be made regular posts so that over the years the system will be improved. The proposed health protection agency under the public health cadre will have representation from the other health determining sectors like water resources, LSGI, total sanitation mission, Social Justice Departments and will be empowered.

iii. Non communicable Disease control:

Considering the multiple dimensions of social determinants of Non Communicable Diseases multiple levels of policy decisions and activity plan from various departments, stakeholders and other agencies would be required. Inter-sectoral actions for health promotion activities prevention and early diagnosis are very critical. Educating and encouraging hotel and bakery group for promoting NCD food and of junk foods in schools and government run canteens. School health screening / incentives for keeping fit/ walking /cycling/involving in outdoor exercises / health education in schools. The policy is to be crafted with an aim to improve the quality of health, by restricting the incidence, prevention of complications and reduction in mortality. Specialised diabetic, hypertensive clinics will have to be started in General Hospitals, District hospitals and Taluk hospitals on a step by step manner. Dedicated diet counselors and other supporting staff to be provided in these units to work with the specialist doctors as a team so that follow up of cases, counseling, awareness generation etc are organized in a better manner. The public health cadre and the health protection agencies would impart health promotion activities at work places, schools and other institutions. Physical fitness centers with adequate machineries and equipment for doing exercises and for outdoor games to be started at school level and at major works sites, offices etc. Promotion of household level backyard kitchen garden, linking the ward level health and sanitation committee activities with exercise and outdoor game promotion, group farming, community kitchen (with healthy diet) etc would be other activities.

iv. Cancer care

Cancer control programs in Health sector aims at decentralizing cancer treatment from tertiary hospitals to district / general hospitals in districts and organizing detection camps and screening programs for promoting early detection of cancers. Two medical

colleges in state are being developed as tertiary /super specialty centres in cancer treatment whereas extent of cancer care is to be explored in two other public medical colleges with system of continued care in peripheral institutes namely Health and Wellness centres in a district where there is no cancer treatment facility in Government sector. All these activities need to be more expanded and strengthened with better community participation.

v. **Measures for decreasing the Road Traffic Accidents** other trauma and developing systematic trauma care services

The ongoing activities of the Road Safety Authority at the state level and the limited activities at the district level through the district collectors are not yielding the expectant results. Effective enforcement of the existing rules and regulations, and enactment of new laws like giving registration for the vehicles only on the basis of the available road facilities, enforcing 'no drunk and drive' on regular basis are to be done.

Policy envisages to develop multiple level trauma care centres within different level of existing health facilities

vi. Community mental health care and services

Considering the higher prevalence of the mental health problems suicides, alcoholism etc. department has to extend the District Mental Health Programme and NRHM supported community mental health programme to all districts in the state by this year. But the integration of the activities with the primary health care at the PHC, CHCs and with the health care providers namely doctors and field workers has not materialized so far. This policy envisages a package of preventive and primitive mental health activities through the field workers, supervisors, ASHA etc. at the field level and early mobilization of those requiring the counselling / treatment. Similarly for providing effective systematic follow up, the patient is identified and treated at the peripheral institutions. From the ASHAs in the block a selected group of ASHA s will be given specific training and certification for the working as part of the block level team and empowered with necessary skill and knowledge for the household level counselling of the patients/ family members. As per the policy frame work and activity plan proposed in the revised state mental health policy activities would be conducted.

vii. Strengthening Laboratory Net Work in the State

Government will take steps to ensure quality in laboratory services in the Government and private sector. Registration is being made compulsory and periodic quality assurance checks will be insisted upon. The paramedical council will be activated to function as a watchdog for training institutions and laboratories. In government sector the State and Regional Public Health laboratories will be constituted, strengthened and District Public Health Laboratories started in all districts. All government laboratories will be covered by internal and external quality assurance systems. Laboratory facilities will be made available at PHC level (Health and Wellness Centres) to support management of life style diseases like hypertension, diabetes and health problems of the elderly.

5.4.3 State Health Resource Centre (SHRC)

State Health Resource Centre which is primarily as an institution that is responsive for providing technical assistance to Public Health Department and National Health Mission will be established in state. Advent of many new programme since launch of NRHM in April, 2005 requires to have a separate resource Centre for providing time bound technical/academic assistance to executive bodies ,working in field of health promotion, prevention and care , like Health department ,NHM, Urban Civic bodies, ICDS etc. Main objectives of SHRC are:

- To undertake research, evaluation and technical support in various aspects of health system aimed at improving state health system.
- To develop operational guidelines for implementation of various health programs and providing on-going technical support to the State and District level in implementing various health programs in the state.
- To facilitate development of appropriate policies and guidelines in health sector for the consideration of the state and central government based on evidence based research.
- To undertake evaluations and assessment of various health schemes/programs operational in the state and recommend corrective actions.

- To publish journals, reports and working papers in various domains of health systems aimed at be improving the state health system.

5.4.4 State Training Centre:

Uttarakhand State does not have a State level training institute for Health rather we have two regional health training centres one in Dehradun and other in Haldwani, Nainital which are imparting training programme on as and when basis without clear annual academic calendar. Opportunity for up scaling one of them as State training Centre and other one as School of Public Health are to be explored and set up both institutes for promotion of public health training, research and evaluation studies. Adequately trained staff needs to be posted on existing and new posts (to be created if required) in these institutes. Staff can be posted on deputation from other government departments as well as fresh recruitment of public health Specialists with overall administrative control of Health Department officials of Public Health Cadre.

5.4.5 Accreditations: NABH/NABL

Quality is most integral part of health care system performance and reviews too. For this NABH accreditation of all District, Sub District Hospitals and then CHCs is to be aimed in phase wise manner especially in tandem /resource utilisation of UKHSDP too.

5.4.6 Medical Tourism and Medical Travel

Natural locale and environment of Uttarakhand can be a force multiplier in any effort of establishing institutes/facilities of Medical Travel (travel from external places with purpose of seeking immediate medical care) as well as Medical Tourism (travel from external places for non-emergency but life modulating procedures). A separate task force shall be constituted for giving recommendations on establishment of such facilities in state.

5.4.7 Insurance:

Comprehensive, Universal, non-exclusive, cashless Insurance has been launched in state to cover hospitalization expenses of total population. Further efforts are to be maintained for exploring such cover in OPD.

5.4.8 Exploring Public Sector Capacity for manufacturing essential drugs and vaccines:

For greater independence from market forces in providing vaccines and essential drugs the possibility of manufacturing such essentials in state should be explored even if it is in PP mode. Possibility of development of Health Parks, Special Medical Industrial Zones for same should be explored. A separate task force /working group can be constituted from recommendations on same.

5.4.9 Health **Surveys**

Few Health surveys (Gender Survey, Family Health Survey) have been taken up by State but to give more credibility and do it on institutional level arrangement like training Center and SPH are to be made.

5.4.10 **Health Research**:

Research in Health related field has been going on in Medical Colleges but mainly for academic purposes without much contribution of it in general health system. A need based and action oriented research system with funding provisions is needed to be set up in State under aegis of Training Centres or School of Public Health.

5.5.11 Governance:

This topic has recently found its way in discussions regarding enhancing health outcomes by managing things at this level. Niti Ayog, which is pivotal body for monitoring and helping in improvement of SDG indicators, has been focusing on this issue through indicators like 3 year fixed schedule of tenure at key decisive posts at State and District level. Such fixed tenure for post of State and District level functionaries is to be fixed along with clear guidelines to their violations if any.

5.5.12 Procurement, Store and Transportation of Drugs/Consumables/Vaccines

A separate, professionally managed Procurement Corporation is to be established for timely, transparent procurement and supply of logistics to periphery.

5.5.13 IEC

Comprehensive IEC policy is to be developed in State with clear annual calendar addressing all components of IEC at various levels.

5.5.14 Disaster Management

A dedicated round the year fully staffed Disaster Management cell is to establish at Directorate level for in time mitigation as well preventive responses by working in close coordination with such agencies at District and State Level. The IT cell already established at directorate should be strengthened further and be made a part of this wider Disaster Management Cell.

5.5.15 Bio Medical Waste Management

Under ethical lines of 'do no harm' State is aware of its responsibility of not dissipating any collateral harm to society which can occur in form of Bio Medical Waste being generated from health facility. Strict adherence to existing law is to be ensured as well as provisions for collection, segregation, transportation, incinerators, etc. for efficient Bio Medical Waste management.

Chapter 6

Indigenous Health Systems

6.1 Ayurveda

Ayurveda can be an integral part of Uttarakhand's wellness platter especially in wake of its endeavor of Medical Tourism offering treatments ranging from common household remedies and prevention to specialized treatment for diabetes, stroke rehabilitation and cardio vascular care. However the system faces many challenges today due to shortage of raw materials, lack of enforcement of standards and diluting the system by unqualified providers. Government will work with leading Ayurveda practitioners to improve the sector.

i. Research and documentation.

Ayurveda is considered efficacious to treat certain type of ailments and is commonly accessed by most persons in the state. However due to poor documentation and systematic research it has not been able to prove this. Government, in partnership with leading Ayurveda practitioners, will support systematic clinical trials to prove the comparative efficacy of such treatment. Since Institutional Research Boards of any institution cannot approve research proposals cutting across systems of medicine, Government or the Uttarakhand Medical University of Health Sciences, will set up the IRBs and ethical committees to oversee such research.

ii. Quality Assurance

Due to the popularity of Ayurveda treatment many spurious manufacturers and treatment providers have sprung up in recent years. Due to poorly equipped and staffed enforcement agencies and legal loopholes these manufacturers have been able to achieve spectacular growth affecting the reputation of the Ayurveda system itself. Drug Regulatory facilities for Ayurveda in the state will be separated and strengthened. Proper implementation of Good Manufacturing Practices (GMP), Good Agricultural and Collection Practices (GACP) etc. for proper manufacturing and marketing of Ayurveda drugs will be supported. Standardization of Ayurveda hospitals will be achieved with the

implementation of the Clinical Establishment act including qualification of persons staffing these institutions.

iii. Support to manufacturing

Availability of raw materials for manufacture of Ayurveda medicines has come down due to destruction of forest cover and reclamation of waste lands. The State Medicinal Plants Board will work with cultivators and manufacturers to augment availability of raw materials at required quantities. They will also be supported to achieve quality parameters in preparation and packaging.

iv. Awareness regarding the benefits of Ayurveda.

The overwhelming prominence given to treatments under modern medicine has obscured the comparative advantage of Ayurveda for some conditions. After these have been documented and validated government will endorse and propagate these therapeutic procedures in India and abroad. Government will also work with experts in the field to develop appropriate communication strategies for better acceptability of Ayurveda.

6.2 Homeopathy

Homeopathy is part of ongoing AYUSH programme but a separate task force is needed to recommend on promotion and propagation of Homeopathy in State, especially its integration and service provision at Health and Wellness Centre.

6.3 Oral Health

The prevalence of oral diseases is increasing especially among the poor and disadvantaged population groups. Of concern are dental caries (especially among young), periodontal disease, oral cancer, (more among adults), malocclusion, and fluorosis and maxillofacial trauma. These problems are exacerbated by lack of access to quality dental care and other equity issues.

Government will scale up the availability of dental care by ensuring all paraphernalia needed at already established dental clinics in State and ensuring regular checkup of kids in school health programme as well as referral and treatment of such kids at nearest health institute having all facilities for dental care. Free dental treatment facilities to senior citizens will be part of geriatric care programme. Gradually District hospitals will have the specialties of

Oral Surgery, Prosthodontics, Orthodontics, Conservative Dentistry, Periodontics and Pedodontics and supporting staff. They will also function as early detection centers for oral cancer. The possibility of operating Mobile dental units will also be explored. Retraining at least in the health services every five years will be made mandatory. Dental Colleges should also serve as research centers focusing on popularizing and adapting advanced clinical techniques and implementing projects of public health importance. The Dental Council will be encouraged to work on quality up gradation of dental clinics with emphasis on infection control practices and waste disposal and to assist clinics to obtain NABH accreditation.

Chapter 7

FUTURE DEVELOPMENTS

I. Quality up gradation in health sector

Since many achievements in conventional parameters are going on at reasonable rate we can wait for all were with to be established and then go for quality enhancements rather quality improvement works should go hand in hand with establishment work and it's time to raise the bar and aspire towards higher levels of quality and efficiency. Ensuring quality in every interaction with patients, being transparent, avoiding medical errors, avoiding systemic pitfalls such as hospital acquired infections and medical errors are some of the target the health sector in the state should aspire to. This would mean evolving statements of standards to be maintained, building capacity of service to comply with them, monitoring that they are adhered to and taking corrective measures when they are not. Improving efficiency to ensure better results and managerial efficiency to prevent bottlenecks, giving autonomy for hospital management are also needed. State will try to get such technical support from wherever needed but will try to build such capacity in one of the institutions in the state with external support.

II. **Universal Health Coverage**

The High Level Expert Group on health set up by the Planning Commission had recommended that India move gradually along the road to achieve universal health coverage. State has already attempted to achieve the Universal Health Coverage successfully by extending the net of health insurance to all population irrespective of income or class category in tertiary care. These intervention are to be strengthened and would provide a goal of good health for all.

III. Artificial Intelligence (Data Sciences and Technology Innovations)

Applications of technology and data science to improve human capital as well challenges and solutions in integrating data within and across sectors and systems enhancing public health decision making and interventions is gaining ground day by day. It becomes essential that our health system also reaps its benefit by investing time and money for same, thus it's envisaged in this policy to form a committee for exploring and laying out fundamentals to roll out AI /DSTI interventions in public health systems in state.

Table 12: Implementation Framework: State Public Health Policy Goals in alignment with Sustainable Development Goals								
SPHP GOALS (SDG Indicators)	**Base Line Data (Year)**	**Current Level (2019)**	**ELA (2020)**	**ELA (2024)**	**ELA (2030)**	**Strategy for ELA (2020)**	**Strategy for ELA (2024)**	**Strategy for ELA (2030)**
3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live birth								
3.1.1 Maternal mortality ratio	210 (2014-16)	201	80	75	70	1. Rise in no. of functional delivery points 2. Effective ANC 3. Ensuring MDSR 4. Community participation in planning and execution of Maternal Care.	1.Rise in no. of functional FRUs.2 Detection and Management of severe anemia in pregnant women	1.Time to care approach to DPs and FRUs 2.Anaemia management of all adolescent girls
3.1.2 Proportion of births attended by skilled health personnel	71 (2015-16)	71	75	85	95	1. Identifying high home delivery regions and reasons 2. Quality early ANC (early entry and case based tracking on RCH Portal)	1. Access to line listing from Pvt. delivery points 2.HR deployment for functional DPs	1. Efficient and free, to and fro transportation for delivery. 2 Ensuring all components of RMC
3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births								
3.2.1 Under-five mortality rate		35	35	30	25	1. Effective identification/referral/management of congenital and acquired ailments in community by RBSK teams. 2. Learning and awareness generation about importance of healthy food habit right from aaganwadi to school with focus on anemia and under nutrition. 3. Skill enhancement of our MBBS doctors to deal with new born and under five children.	1. 100 % placement of ORS once a year in all households having kids below one year of age (campaign mode). 2. Management of mild/moderate Pneumonia by ASHA and early referral of severe cases.	1. Diarrhea control through campaigns like IDCF and round the year intervention (training of mothers at AWCs in identifying diarrhea and pneumonia).

3.2.2 Neonatal mortality rate		24	24	15	12	1. Rise in no. of functional delivery points with standardized SNCUs/NBSUs 2. Effective ANC and HBNC/HBYC 3. Ensuring MDSR 4. Community participation in planning and execution of Maternal Care.	1. Effective implementation of Gentamycin for sepsis prevention. 2. KMC and other methods of hypothermia prevention.	1. Effective identification/ referral/management of congenital and acquired ailments in community by ASHA in HBNC/HBYC 2. Availability of snake bite management at Health and Wellness Centre
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases								
3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations		0.11 (2016-17)	0.08	0.03	0	HCTC up to community (COMMUNITY BASED TESTING)	1.5 lakh high risk pop covered, Awareness campaign in schools and colleges	Promoting voluntary blood donation
3.3.2 Tuberculosis incidence per 1,000 population		2.36	2.8	0.72	0.07	1. Enhancing TB case detection at PHI 2. Intersect oral Coordination, enhanced medical colleges involvement in Diagnosis and Treatment of all forms of TB including DRTB, 3. Involvement of PRIs, ACSM, Integration with NUHM, HWCs, corporate sec. and community engagement by TB forums 4. Trainings of AAA/Paramedical/MLHP for case identification at the community level.	1. Awareness through mass media communications should be made mandatory. 2. Diagnosis and Treatment of LTBI	Robust Surveillance and Monitoring, extensive Public Health efforts, Mop up rounds.

3.3.3 Malaria incidence per 1,000 population	.04(2016)	0.02	0.02	0.01	0	1. Based on API (Annual Parasite Incidence) stratification up to Sub Centre/ Village level. 2. Under Early detection and Prompt Treatment strengthening of testing facilities (Microscopy/ RDTs) up to Sub Centre level. 3. Case-based surveillance and Screening of all fever cases for malaria.	4. Mandatory notification of malaria cases. 5. For vector control - Entomological surveillance and use of Larvicide/ insecticides accordingly. 6. Capacity building of Medical/ Paramedical staff.	7. Intersectoral collaboration for elimination of vector borne diseases. 8. Intensive IEC/BCC activities.
3.3.4 Hepatitis B incidence per 100,000 population						1. Awareness generation 2.Hep B Immuninisation	1. Blood and Blood Product Safety campaigns 2. Inj. Safety	Safe Drinking water/hygiene
3.3.5 Number of people (per 1,00,000)requiring interventions against neglected tropical diseases*		50	30	20	5	1. Awareness generation for symptoms, consultation points and treatment availibilty.2 Campaign for source reduction	Availability of definitive diagnostic tools and local treatment centers	Study to map exact locale of all NTDs
3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being								
3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	48.2 (2016)	48.2 (2016)	70.4	82	78			

Cardio	28	28	38	42	40	STEMI	Setting up of Early detection (high risk analysis)port at HWC as well as tertiary care centers	Mass communication about benefits of exercise and fitness
Cancer	6	6	8	10	10	Functional Cancer Institutes in Haldwani and Jolly Grant Hospital	Early Identification and referral of pt. at HWC	Environmental measures to reduce carcinogens
Chronic respiratory disease	12	12	20	22	20	Early Identification and referral of pt. at HWC	Availability of diagnosis and treatment at HWC	Environmental measures to reduce respiratory disorders
Diabetes	2.2	2.2	4.4	8	8	Early Identification and referral of pt. at HWC	Expansion of certificate course in GDM as well as General Diabetes management	Extensive IEC with message of factors affecting diabetic prevalence
3.4.2 Suicide mortality rate	10	10	8	8	6	Expanding Mental Health intervention through tele-consultation	1. Strict regulation on pesticide sale 2.Multisectoral Stakeholder planning on reducing social stress /disintegration	Extensive Suicide helplines
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol								
3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders	5%(2016)	5%	10	20	50	Awareness campaign about de addiction measures available	Identification and early referral to identified/accredited de addiction referral centres	Expansion of de addiction support programme at HWC level

3.5.2 Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in liters of pure alcohol	35(2016)	40	35	20	10	Awareness campaign about harmful effects of alcohol consumption	Strict measures to reduce alcohol consumption	Having chapters about harmful effects of alcohol consumption in school curriculum
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents								
3.6.1 Death rate due to road traffic injuries	4.2 (2016) Absolute no. reduce	5	7	7	2	1. Road Safety measures	1. Expanding coverage of Trauma Centres	Expanding organ donation and transplant services in RTA cases
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programme								
3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need	57% (2016)	60	80	90	100	Ensuring availability of FP Commodities via FPLMIS	Area specific knowledge and provision of desirable interventions to	Mass Communication for benefits of family planning

for family planning satisfied with modern methods							reduce unmet need	
3.7.2 Adolescent birth rate (aged 15-19 years) per 1,000 women in that age group	416 (AHS 12-13)	450 HMIS	300	200	100	Increasing age specific contraceptive/temp methods prevalence rate	Delaying conception in early marriage thru strengthening incentivisation of ASHAs	Mass Communication for marriage delay before legal age of marriage
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all								
3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)	90% (If presence of ASHA in village is taken as a proxy indicator for essential health services coverage)	90	95	100	100	Saturating ASHAs (ASHAs to be identified at 100 places)	Effective VHNDs	Effective HWCs

3.8.2 Number of people covered by health insurance or a public health system per 1,000 population	250	1000	1000	1000	1000	PMJAY	PMJAY	PMJAY
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination								
3.9.1 Mortality rate attributed to household and ambient air pollution	12.5% (2017,Lancet)	13	11	10	5	Total replacement of conventional fuel in household cooking as well better strategies for forest fire fights	Air pollution markers to be increased in local areas for public consumption	Policy regulation in vehicular and industrial emissions
3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	18.6/100 000	15	10	5	5	School education programme including WASH lessons and water born disease prevention	Stakeholder participation and strategy on separating sanitary and drinking water supply lines on either parts of roads	To put up water pollution markers as being done in air pollution
3.9.3 Mortality rate attributed to unintentional poisoning	2/100000	2	1	1	1	Awareness campaigns	Strict sale regulations	Basic medical intervention availability at PHC level
3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries								

3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older	47% (NFHS 4)	50	50	45	30	Mass awareness about harmful side effects	Strict Sale Regulations	Stop manufacture ,sale and promotion of smoking
3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all								

3.b.1 Proportion of the population with access to affordable medicines and vaccines on a sustainable basis	Medicines 40%, Vaccines in national schedule 100%	40	60	80	100	Expansion of Generic Drug Stores	Total Reimbursement through OP care too	Total Govt Supply
3.b.2 Total net official development assistance to medical research and basic health sector								
3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States								
3.c.1 Health worker density and distribution								
Doctors (Public) (Take MCI Registered doctors ,above 65 not be included)	0.1/1000 (2017)	.20/1000	1/1000	1/1000	1/1000	Recruitment Drive	Better Living and Service conditions especially in far flung areas	Fixed posting schedule with PG opportunities
Staff Nurse	0.3/1000	0.3/1000	1/1000	1/1000	1.5/1000	Recruitment Drive	Better Living and Service conditions especially in far flung areas	Increasing number of BSc Nursing Colleges in State

No.of Beds {9076 (health dept) + (700+650+500 =1850 Med ed) +5000(Pvt.)}	15926/100,00,000 pop = 1.44/1000 (2019)	1.5/1000	2/1000	2.5/1000	3/1000	Expansion of beds in already established hospitals	Expansion of hospitals in time to care approach (commensurate with 3.1and 3.2)	Increasing bed strength in Medical Colleges as well as establishing new medical colleges.
3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks								
3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness								
*NTDs include Dengue, Rabies and Lymphatic filariasis etc. Since max no. of population needed to be covered would be not more than those needed to be covered under Dengue we r taking no. needed to be covered under dengue as no needed to be covered Under NTD								

This policy enunciates a commitment towards improving the health of the people of Uttarakhand by significantly reducing ill health. The policy proposes a comprehensive and innovative approach to addressing the health agenda, which represents a radical departure from past approaches to addressing the health challenges in the State from Health for all to Health in All through approach of Wellness and Well Being. This policy was developed through an inclusive and participatory process involving all stakeholders in the health sector and related sectors. The policy defines the health objectives, principles, orientations, and strategies aimed at achieving the highest standard of healthcare in Uttarakhand. It also outlines a comprehensive implementation framework to achieve the stated policy, vision and objectives. It delineates the roles of the different stakeholders in the sector in delivering the health agenda and details the institutional management arrangements under the devolved system of government, taking into account the specific roles of the various State ministries. It therefore provides a structure that harnesses and gives synergy to health service delivery at all levels of government.

Finally, the policy defines the monitoring and evaluation framework to enable tracking of the progress made in achieving its objectives. The monitoring of progress shall be based on the level of distribution of health services; responsiveness of health services to the needs of the people; progress in respective disease domain areas, including both proximal and distal determinants of health and the policy interventions of health-related sectors.