1.1 THE CURRENT HEALTH STATUS IN KARNATAKA

Karnataka, India’s eighth largest State in terms of geographical area (191791 sq.km) is home to 6.11 crore people (2011 Census) and 6.6 crore people in 2016. The State’s population has grown by 15.7% during the last decade, and population density has risen from 276 per sq. km in 2001 to 319 per sq. km in 2011. Karnataka has made significant progress in improving the health status of its people over the last few decades. However, despite the progress, the State has a long way to go in achieving the desired health goals. In the last 15 years, since the drafting of the first Karnataka State Integrated Health Policy and its adoption by the State Cabinet in 2004 (Order No. HFW(PR) 144 WBA 2002, Bangalore dated 10-02-2004), several changes have taken place in the State. There have been several gains in public health and healthcare, while new challenges and opportunities have also emerged. Administratively, three new districts have been added. The State has achieved several Millennium Development Goals (MDGs) in varying degrees.

In the years to come, healthcare facilities would have to gear up and appropriately utilize technological advancement to meet different types of challenges relating to lifestyle/environmental/genetic/critical/epidemics diseases etc. and these will have to be appropriately addressed, which will necessitate changes in the health services system, to which we need to be in the state of preparedness, and the healthcare services of the future could be much different from that of the present.

Table 1: Comparison of Karnataka’s socio-demographic indicators between the 2001 and 2011 census with national figures

<table>
<thead>
<tr>
<th></th>
<th>Karnataka 2001</th>
<th>Karnataka 2011</th>
<th>India 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>5,28,50,562</td>
<td>6,10,95,297</td>
<td>1,210,854,977</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.4</td>
<td>1.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Sex ratio (Female per 1000 male)</td>
<td>965</td>
<td>973</td>
<td>940</td>
</tr>
<tr>
<td>Child sex ratio (Female per 1000 male)</td>
<td>946</td>
<td>948</td>
<td>914</td>
</tr>
<tr>
<td>Crude Death Rate (per 1000)</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Crude Birth Rate (per 1000 mid-year population)</td>
<td>19.3</td>
<td>18.3</td>
<td>21.4</td>
</tr>
<tr>
<td>Total Literacy rate (in percent)</td>
<td>66.64</td>
<td>75.60</td>
<td>74.04</td>
</tr>
<tr>
<td>Female Literacy rate (in percent)</td>
<td>56.87</td>
<td>68.13</td>
<td>65.46</td>
</tr>
</tbody>
</table>
SOURCE: Economic Survey of Karnataka 2015-16

Karnataka has accomplished the projected twelfth five-year plan fertility rate of 1.9 children per woman in the year 2013. However, the infant mortality rate of 31 in 2013 and 28 in 2015-16 (NFHS 4) is higher than the eleventh five year plan target of 24 set for the year 2012.

The State’s major achievements in public health as shown by indicators are -

- Fall in Infant Mortality Rate from 47 to 28 per 1000 live births between 2007-2016
- Fall in Maternal Mortality Ratio from 178 to 133 per 100,000 live births between 2007-2015
- Total Fertility Rate reduced to replacement level (2 children per couple).
- Rise in people opting for institutional delivery (upto 99%).

Table 2: Achievement of the Family Welfare Programme in Karnataka

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</tr>
</thead>
<tbody>
<tr>
<td>Birth Rate (for 1000 Population)</td>
<td>19.5</td>
<td>19.2</td>
<td>18.8</td>
<td>18.5</td>
<td>18.3</td>
<td>18.3</td>
<td>18.3</td>
</tr>
<tr>
<td>Death Rate (for 1000 Population)</td>
<td>7.2</td>
<td>7.1</td>
<td>7.1</td>
<td>7.1</td>
<td>7.0</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Total Fertility Rate</td>
<td>2.0</td>
<td>2.0</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Maternal Mortality Rate (for every 100000 live births)</td>
<td>178</td>
<td>-</td>
<td>178</td>
<td>144</td>
<td>144</td>
<td>144</td>
<td>133</td>
</tr>
<tr>
<td>Infant Mortality Rate (per 1000 live births)</td>
<td>41</td>
<td>38</td>
<td>35</td>
<td>32</td>
<td>31</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Under-five Mortality Rate (per 1000 children)</td>
<td>50</td>
<td>45</td>
<td>40</td>
<td>37</td>
<td>37</td>
<td>37</td>
<td>35</td>
</tr>
<tr>
<td>Average life expectancy (years)</td>
<td>Male</td>
<td>63.6</td>
<td>-</td>
<td>63.6</td>
<td>63.6</td>
<td>63.6</td>
<td>63.6</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>67.1</td>
<td>-</td>
<td>67.1</td>
<td>67.1</td>
<td>67.1</td>
<td>67.1</td>
</tr>
</tbody>
</table>

SOURCE: Economic Survey of Karnataka 2015-16

1.2 KARNATAKA HEALTH SYSTEM ANALYSIS

According to WHO, the six building blocks identified as components of a strong health system include: Health Services, Human Resources, Health Financing, Medicines and Technologies, Health Information and Governance. A systematic analysis of the State’s health achievements, as well as an analysis of current gaps and challenges is an important step in choosing broad policy directions for the State.
1.2.1 HEALTH SERVICE DELIVERY

Good health services are those which deliver effective, safe, quality, individual and population based health interventions to those who need them, as and when required, with optimal use of resources, at a cost that the individual and community can afford. Similar to the rest of the nation, Karnataka has a mix of health service providers; private, public and not for profit institutions, practitioners of AYUSH systems and local health practitioners.

The health outcomes in Karnataka still lag behind neighbouring States like Kerala and Tamil Nadu. For example, the Maternal Mortality Ratio reported by the Sample Registration Survey (2010-12) for Karnataka is 144 per 100,000 live births (and 133 in 2015). Although this represents close to a 20% reduction in two years, it continues to be the highest among the four southern States. Though, Karnataka has achieved the India-specific Millennium Development Goal of a target of <38 per 1,000 live births, its IMR which stands at 28 per 1,000 live births, is higher than rates in Kerala and Tamil Nadu which is 12 and 22 respectively. Inequity in health outcomes and access to healthcare services, as evidenced by indicators disaggregated for vulnerable groups and different geographies, continues.

- Regional disparity in health infrastructure and services

  The distribution and level of functionality of these health centers varies across the State. While southern districts of the State such as Mysuru and Hassan have 81 PHCs in excess of the recommended Indian Public Health Standards (IPHS). The sub-centre population coverage in districts such as Raichur and Gulbarga has deteriorated over the years. There are urban-rural inequities and regional inequities within the State. The seven districts of north Karnataka namely, Yadgir, Gulbarga, Raichur, Koppal, Ballary, Bidar and Bagalkot and one district in south Karnataka, namely Chamarajanagar have poor health indicators, compared to other districts. For example, the average population coverage of a PHC in Raichur is 41,842 as against 30,000 prescribed by IPHS, whereas in Tumkur it is 19,027. There also exist regional disparities in the distribution of the infrastructure at the secondary and tertiary levels. While in Tumkur, a First Referral Unit (FRU) is available for a population of 297,938, in Raichuru, there is one for a population of 384,954 population (PIP 2011-12, Karnataka). In line with infrastructural issues, variation in the services can be seen across the State. For instance, the institutional delivery rates vary from 98.9 percent in Udupi to 70.8 percent in Koppal district and; coverage of full immunization varied between 93% in Tumkur to 56% in Yadgiri. In addition, there are tribal areas and Naxal-affected areas which need special focus. Vulnerable communities and population with poorer economic quintiles continue to have poor access to health services.

- Severe gaps in secondary and tertiary care infrastructure

  The situation is similar within secondary and tertiary level health facilities in the government sector. The introduction of National Rural Health Mission (NRHM) in the State in 2005 resulted in the strengthening of infrastructure at the secondary
and tertiary levels. However, while infrastructure is indeed upgraded, several functional deficiencies remain. According to the District Level Household and Facility Survey – IV (DLHS 2012-13) 5% of CHCs do not provide 24x7 normal delivery services, 30% of CHCs do not have operation theatre facilities and only 23% of CHCs offer Comprehensive Emergency Obstetric Care (CEmOC). Critical facilities such as blood banks and storage units, intensive care units, dialysis and trauma care, counselling services and enhanced laboratory facilities are still lacking, and are not in line with Indian Public Health Standards or other national norms in most government secondary and tertiary care facilities, especially in northern Karnataka.

○ **Poor quality of care**

The quality of care delivered is a matter of grave concern and this seriously compromises the effectiveness of care. For example, though over 98% of pregnant women received one antenatal check-up and 87% received full TT immunization, only about 68.7% of women received the mandatory of three antenatal check-ups. For institutional delivery, standard protocols are often not followed during labour and in the postpartum period. Only 76% of children (12-23 months) have been fully immunized. There are gaps in access to safe abortion services and in the care of sick neonates. Issues related to people’s perception of quality of care in government hospitals remains an area of concern. Data on patient satisfaction and safety of care in government hospitals are neither monitored nor available.

○ **Private sector growth**

The private sector has grown exponentially in the State in the last decade with people choosing care more often from the private sector, often due to inadequacy of care, medicines or services in the government sector. According to DLHS-4, for acute illnesses more than 60% of the population preferred treatment from the private sector and for chronic illness this number further rose to 70%. On the contrary, according to the 71st National Sample Survey Organization (NSSO) Survey (2014), Karnataka is the only State other than Andhra Pradesh, which has seen a decline in the utilization of public health services in the last decade from 34% to 26%.

○ **Gains in maternal health but stagnation in child health**

The population coverage of health services in the State has seen an increase in the last decade. Institutional deliveries increased from 65% in 2008-09 to 89% in 2012-13, women receiving three or more ante-natal checkups increased from 81% to 86% and women receiving post-natal care increased from 68% to 92%. However, in terms of certain indicators such as children receiving full vaccination, Karnataka has stagnated at just above 75% during the last decade.
1.2.2 HUMAN RESOURCES FOR HEALTH

Karnataka has the highest number of medical colleges and third highest number of doctors trained in the country. Despite this increase in the number of doctors, it is unclear as to how many of these doctors are entering the public sector, how many are going to the private sector, and how many leave the State/Country. There is a dire need to recruit and retain doctors and health workers within the State, and especially within government services through improvements in recruitment and retention of the health workforce.

○ Distributional disparities of health workers and severe shortage of specialists

According to Rural Health Statistics, the shortfall of Junior Health Assistant – Female commonly called as ANMs at the Health Sub-Centre (HSC) level increased from 13% in 2005 to 28.5% in 2015; the shortage of total number of specialists went up from 32% to 39%. The distribution of health workers is also highly skewed in favor of urban areas and private health sector.

○ Partial integration of AYUSH into the health system

To overcome these shortages and also to integrate other systems of medicines into one ambit, NRHM proposed the co-location of AYUSH doctors with allopathic doctors. However, this has only been partially achieved and several gaps remain in administratively and financially integrating AYUSH into mainstream health services in line with the National Health Policy and internationally accepted guidelines.

○ Neglect of public health management

Karnataka had the Mysore State Public Health Act which led to formation of a public health department which achieved the highest reputation in the country. After independence, with Indian Medical Service (IMS) being disbanded, changes in the public health system cadre and the dilution of skill-sets amongst staff, there has been a decline in the quality of the public health system in the State. In spite of being trained clinically, and with the introduction of DPH curriculum into undergraduate medical education, the current staff in the public sector lack the necessary ability needed to understand and tackle complex and increasingly challenging public health issues, thereby necessitating a public health cadre of staff trained specifically to address these issues. Despite a strong recommendation of the Karnataka Health Task Force, 2001 for establishment of a public health cadre, it is yet to be operationalized.
o Poor career pathways and inter-professional exchange

There are several other issues that are currently affecting the human resources in the State public health system. These include but are not limited to a lack of inter-professional education opportunities and mobility across health worker cadres and across systems of medicines, an increasing number of contractual workers who are paid far less than regular workers for the same tasks. Issues related to sanctioning of posts and recruitment, Proper Implementation of policies relating to promotions, transfers and postings should be followed, staff should be motivated to effectively utilize the opportunities available for career advancement, and incentives. The future of our health systems relies heavily on tackling these issues effectively.

1.2.3 HEALTH INFORMATION SYSTEMS

o Poor use of data for decision-making

A well-functioning health information system is one that ensures proper capturing, analysis, dissemination and use of reliable and timely information on health determinants, health systems performance and health status. The current information system in the State leaves much to be desired. There is a clear discrepancy in the type of data available and the data needed by public health managers, researchers and policy-makers. The data available is not sufficiently disaggregated to relevant socio demographic parameters, is not specific; (for example, paucity of cause specific mortality) and is often not real time. The Health Management Information System (HMIS) currently is designed to capture routine monthly reporting from the peripheral facilities to the district and national levels. This data is often supported by programme specific surveys conducted periodically. While most of the data collected is now available in one HMIS portal several new programmes such as NPCDCS have not yet been integrated into the HMIS.

o Outmoded information systems

The staff in the public health sector is often overburdened with maintenance of multiple registers and many forms that need to be filled each day. The existing health workers lack sufficient training in data collection, reporting and submission of the reports for most health programmes. Most of the reporting still occurs manually with a lot of duplication of work. Technological advances achieved by the State in the last decade have not been leveraged to transform hospitals, health centres and patient records into digital format.

At present, there are nearly 34 registers maintained at each sub-centre. From these registers, a single programme like Reproductive and Child Health (RCH) programme produces more than 30 reports monthly. Currently only NRHM-HMIS, MCTS (Mother to Child Tracking System) and NACP-SIMS (Strategic
Information Management System) have the provision for internet based reporting, which involves real time data entry and feedback from the level of PHC. For the rest it is paper-based and largely vertical. The utilization of available data is very minimal and limited to administrative aspects such as indenting drugs, consumables and budgets. There is a need for strengthening inter-sectoral sharing of data, coordination etc. between various departments and various wings of the health department and also lack of integration with other population based surveys such as the census, DLHS etc. There is also poor integration of the public health sector with AADHAR and other social protection schemes.

- Private sector information unavailable

There is lack of information available from the private sector. Systematic and complete data on the health infrastructure, human resources, service provision and patient information is not available for formulating any public health strategies. It is currently extremely difficult to even ascertain the number of private practitioners providing services in the State. Although attempts like the KPMEA Act have been made in the last decade to bring in some aspects of private medical facilities under government regulation, it still remains unsatisfactory and fragmented.

### 1.2.4 MEDICINES AND HEALTH TECHNOLOGIES

A well-functioning health system ensures equitable access to essential medical products, vaccines and technologies of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use.

- Drug procurement in Karnataka

Karnataka started the Karnataka Drug Logistics & Warehousing Society (KDLWS) in 2002, which is responsible for the procurement and supply of medicines to the government health system in the State. This scheme has resulted in improved availability of drugs in the government sector compared to the previous system which was the provision of drugs through Government medical stores. The current system procures drugs through a process of e-bidding with quality control of the medicines as a part of the procurement process.

- Supply chain inefficiency

An electronic Drug Distribution Management System helps in effective management of stocks at the warehouse level. However, the efficiency reduces as one reaches the PHC level which witnesses frequent stock-outs of drugs. The supply is based on the previous year’s consumption which is often inaccurate due to inadequate maintenance of the OPD and drugs issue registers at the PHC, resulting in insufficient dispensing of drugs from the warehouse.

- Regular stock-outs
Stock-outs of drugs were seen at all levels of the public health system. On the day of assessment only 23% of all items were available in all the warehouses and the assessment of selected drugs showed stock-out of 89% of the drugs at the level of facility in Chamarajanagar district while they were available at the warehouse level (Karnataka, Pharmaceuticals in healthcare delivery, mission report – 2013).

- **Inadequate expenditure on medicines**

Public spending on drugs remains low in the State and has decreased from 7.9% of total health expenditure in 2001-02 to 6.3% of total health expenditure in 2011-12. This is nearly half of the national average of 13% and the least among the four southern States. Considering that more than 60% of the expenditure in both inpatient and outpatient care is incurred on medicines, the non-availability of drugs in the public sector due to low government expenditure, poor forecasting and poor supply chain management has a major impact on the out-of-pocket expenditure of households in the State.

1.2.5 HEALTH FINANCING

Health expenditure in the State has seen an increasing trend in the last 15 years. Although the total expenditure on health increased over the years, the proportion of health expenditure to the GSDP has decreased from 1.46 (2000-01) to 1.0 (2013-14) while the percentage of total State expenditure spent on health has remained stagnant.

**Figure1: Per Capita Health Expenditure in Karnataka from 1990 – 2014**
A large part of the expenditure on healthcare continues to be out-of-pocket which takes place at the time of illness, thus imposing a huge burden on families. It is estimated that about 70% of per capita expenditure on health was incurred by households, while public sources covered only 23.2% of this expenditure. This puts an undue financial burden on the population leading to catastrophic situations.

Karnataka is a pioneer State that started the Yeshasvini scheme, a health insurance programme that provided insurance cover to 2.2 million farmers for an annual premium of Rs 60. This scheme was shown to have resulted in increased utilization of health services and reduced out-of-pocket expenditures. Together with the central government the State also started the Rashtriya Swasthya Bhima Yojana that currently covers 35 million families living below poverty line. The Government of Karnataka has also launched the Vajpayee Arogyashri scheme to provide super specialty services to families below poverty line.

However, the schemes are fragmented; many families are not covered by any of the schemes and the State is still far from providing universal healthcare to its citizens. Also, evidence shows that in a particular year, a few households may need hospitalizations, but the majority of healthcare needs came in the form of outpatient care and medicines, which are not covered.

1.2.6 HEALTH GOVERNANCE

Leadership and governance involves ensuring that strategic policy frameworks exist and are combined with effective oversight, coalition-building, provision of appropriate regulations and incentives, attention to system-design, and accountability. Karnataka was one of the first States in the country to adopt a State-level health policy in 2004. This policy aimed at
“improving access to good quality healthcare” and would “endeavor to provide quality healthcare with equity, which is responsive to the needs of the people, and is guided by principles of transparency, accountability and community participation”. However, even in the current scenario the effective implementation of the principles of accountability and transparency remain a problem in the health sector within the country and the State. According to the Karnataka Lokayukta, 25% of the health budget in the State is lost to corruption at various levels in the health system. They also identified several instances of corruption from areas including recruitment, transfers, promotions and so on. Some reforms, for example, the introduction of the Karnataka State Drugs Logistics Society, have improved the procurement and stocks of essential drugs in the peripheral health facilities.

The quality of healthcare is another aspect of governance where the State must improve. While recommendations like IPHS exist, there are no mechanisms that ensure that the quality standards laid down are being followed. In particular, the large private sector which provides 70-80% of healthcare needs standardization and adherence to quality care. Although attempts have been made by the introduction of the Karnataka Private Medical Establishment Act which covers certain aspects of quality in private health facilities, the implementation of this act remains slow and mostly ineffective. Improving accountability and prevention of corruption involves strong community participation. However, the community largely remains as mere recipients of the services and are often not actively involved in the functioning of health system. There are also no effective grievance redressal mechanisms that can aid in identifying patient-related issues and addressing them.

Regarding the improvement of community participation in health services, several positive steps have been taken up under the “communitisation” component of the National Rural Health Mission/ National Health Mission through the setting up of Village Health Sanitation, Nutrition and Health Committees and Arogya Raksha Samitis at various levels, along with training of ASHAs (Accredited Social Health Activist). However, in many instances these platforms have not resulted in adequate participation, ownership or empowerment of communities in managing or monitoring health services. Karnataka has also pioneered community-based monitoring of health services through pilot projects, but these have never been properly scaled up across the system.

1.3 THE RATIONALE FOR UPDATING THE KARNATAKA HEALTH POLICY, 2004

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 Karnataka, in the context of changes that have taken place over the past 12 years. The assumption is that this document will enable Karnataka to further institutionalize its commitment to improve the health of the public and translate it into stronger action, with positive health outcomes and impacts.
Karnataka formally adopted an integrated health policy combining health services, systems and social determinants of health on 10th February, 2004. The Karnataka Jnana Aayoga Mission Group on Public Health document “Towards a community oriented public health system development in Karnataka”, 2013 also provided guidance to the State. Since the adoption of the State integrated health policy, there have been several policies and programmes to improve healthcare delivery and promote health both at the national and State level. Some of these programmes have transformed the health infrastructure, incorporated new cadres of health workers and improved access to various services across the State. There have also been several changes in the financing of health services and with respect to governance of health. Many of these developments have resulted in important lessons that need to be incorporated within the State health policy framework. Some of the developments that have driven the need to update the policy include:

- Issues related to the quality of healthcare delivered in government and private health centres and hospitals
- Gaps in integrated services and a lack of skilled health workforce in government health services through the National Health Mission
- The poor integration of AYUSH into mainstream health services
- The pluralistic aspirations of the community evidenced in their health-seeking behaviour
- The continuing need to strengthen comprehensive primary healthcare
- Improving access to medicines and diagnostics especially in government health services
- Re-thinking the financing of health services to ensure affordable health services for all
- Concern over ineffective regulation of health services
- Increasing focus on non-communicable diseases, mental health, palliative care and care of the elderly
- Continuing urban-rural disparity in the availability of doctors and health workers in rural and tribal areas
- Need to update the technological capacity of health services especially with respect to electronic medical records and health information systems

In light of these developments, and in order to ensure that the latest technological and policy developments are within the policy focus of the State, a new updated State Integrated Public Health Policy has been initiated through the Karnataka Jnana Aayoga (KJA) based on a request by the Government.

1.4 THE UNDERSTANDING OF ‘HEALTH&POLICY’ IN THE POLICY

Definitions are important and it is of practical value towards developing a shared understanding of public policy processes for health, with use of consistent language, facilitating comprehension of issues by all stakeholders. It helps to promote and guide the exchange of ideas with and among policy promoters, practitioners/implementers and the public. For the purpose of this policy document, we reiterate the World Health Organization
definition of health, i.e. “Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity”. However, Indian definitions of health date back to early Ayurvedic texts framing health in a much broader sense. The Sanskrit word *swasthya* means “to be in equilibrium with the self”. It implies equilibrium at six levels viz., physiological, tissues, metabolism, excretory function, senses and the mind. “*Svasmin stite iti svasta*” meaning “those who are in equilibrium in the above manner are considered to be healthy” is the full meaning for the Sanskrit word *Swasthya*.

This policy document seeks to widen the conceptualization of health with the broader definition of health as a dynamic equilibrium between an individual, and his/her environment and society. This is in consonance with the thinking regarding the social determinants of health, and enhancing the strength and resilience of individuals and communities to sustain and improve their health and well-being.

The term “policy” is defined as “…decisions made within government that are intended to direct or influence the actions, behaviors, or decisions of others pertaining to health and its determinants. These decisions can take the form of laws, rules and operational decisions…Policies can be allocative or regulatory in nature”. A health system is sum total of all the organizations, institutions and resources whose primary purpose is to improve health (WHO).

### 1.5 THE GOAL OF THE POLICY

The attainment of the highest possible level of good health and well-being of all people in the State will be realized through a preventive, promotive, curative and rehabilitative healthcare orientation, with universal access to quality and affordable healthcare services to all, and inclusion of health in all developmental policies.

### 1.6 THE PURPOSE OF THE POLICY

The purpose of the Karnataka Integrated Public Health Policy, 2016, is to specifically have a written policy document to provide clear direction for:

- Long-term, outcome-oriented directions and priorities (‘what to do’) for population health, within the resources that the State can mobilize, and identifying strategies (‘how to do it’) based on scientific and ethical norms;
- Ensures commitment and continuity over time and promotes standardization;
- Formalizes decisions already made, legitimizes existing guidelines, and institutionalizes strategies and interventions;
- Commits financial and human resources and helps in strategic thinking and planning;
- Brings together all [health] elements in one document which ensures consistency and maximizes the use of available resources, reducing chances of misinterpretation;
- Clarifies the roles and responsibilities of staff, defines lines of communication and identifies coordination mechanisms and structures;

- Serves as a reference for all partners, and establishes directions for their involvement.

- Reflects system views, going beyond individual diseases/health problems;

- Adds a new dimension of health education for community empowerment.

- Ensures operational mechanisms for community participation in decision-making, building on the NRHM and NHM Guidelines.

- Allows for optimal growth and development of plural health systems (including AYUSH).

1.7 GUIDING PRINCIPLES AND VALUES

The following principles, values and commitments will guide the State Health Policy:

- **Equity and social justice**: Public expenditure in healthcare should prioritize the needs of the most disadvantaged due to prevailing inequalities in health and healthcare across caste, socio-economic groups, gender and other social vulnerabilities. The State’s health policy and programme shall be guided by the principle of achieving equitable health and healthcare in the spirit of social justice. This implies greater attention to access and financial protection measures for the poor and disadvantaged.

- **Respect for the dignity and personhood of all people.**

- **Universality**: Systems and services should be designed to cater to the entire population—not only a targeted sub-group. Care must be taken to prevent exclusions on social, cultural or economic grounds.

- **People-centred quality services**: Health services should not only be delivered through institutional structures, but also designed, managed and monitored, keeping in mind the aspirations, rights and entitlements of patients and communities. Health services should be effective, safe, and convenient, provided with dignity and confidentiality with all facilities across all sectors being assessed, certified and appropriately incentivized to maintain the quality of care.

- **Inclusive partnerships with public orientation**: The task of providing healthcare for all cannot be undertaken by the Government acting alone, though it would lead the process and be accountable within its mandate. It would also require the participation of communities, families and individual persons—who view this participation as a means to a goal, as a right, as a responsibility and a duty. It would also require the widest level of partnerships with academic institutions, not-for-profit agencies, AYUSH practitioners and private sector and other healthcare industry actors, to achieve these goals.
- **Pluralism**: Patients who so choose and when appropriate should have access to AYUSH care providers based on validated local health traditions. These systems will be provided with Government support and facilitation to contribute to the overall goal of meeting national health goals and objectives. Research, development of models of integrative practice, efforts at documentation, validation of traditional practices and engagement with such practitioners would form important elements of enabling medical pluralism.

- **Subsidiarity**: To ensure responsiveness and greater participation, decision-making should be transferred to a decentralized level as is consistent with practical considerations and institutional capacity. (Nothing should be done by a larger and more complex organization which can be done as well by a smaller and simpler structure within this organization)

- **Accountability**: Financial and performance accountability, transparency in decision making, and the elimination of corruption in healthcare systems, both in the public systems and in the private healthcare industry, is essential.

- **Professionalism, integrity and ethics**: Health workers and managers shall perform their work with the highest level of professionalism, integrity, ethical conduct and trust and be supported by systems and a regulatory environment that enables this.

- **Learning and adaptive system**: The health system should be a constantly improving dynamic organization of healthcare which is knowledge and evidence-based, learning from the communities they serve and from national and international knowledge partners.

- **Affordability**: As the costs of care rises, the focus settles on affordability. When the healthcare cost of a household exceeds 10% of its total monthly consumption expenditures, or 40% of its non-food consumption expenditure, it is designated as catastrophic health expenditure and declared as an unacceptable level of healthcare cost. Impoverishment due to healthcare costs is, of course, even more unacceptable.

- **Life-course approach**: Child survival that recognizes the continuum from pre-conception, pregnancy, neonatal period through childhood, adolescence to old age would avoid duplication and the verticalization of health services and health problems.

- **Sustainability**: This should be promoted at all levels through participation, an adaptive systems approach and the involvement of all stakeholders as advocated in NRHM and in line with the global sustainable development goals.

### 1.8 DURATION OF THE POLICY

This policy document could guide the strengthening of health systems in Karnataka for the next 10 years. Monitoring and evaluation needs to be incorporated every year to assess the
progress of implementation of the policy. The Department can review and revise the policy depending on dynamic epidemiological and demographic profile of the population in the State.

1.9 THE SCOPE OF THE POLICY

The Karnataka Integrated Public Health Policy interventions broadly comprise three dimensions:

- Healthcare strategies that promote health
- Social policy initiatives that address the social determinants of health and inequities
- Individual factors / life style determinants/community empowerment

Firstly, it proposes healthcare policy directions aimed at strengthening existing health system capacities to provide good quality healthcare and health services in a sustainable manner.

Secondly, it proposes social/public policy interventions to address the social determinants of health by establishing and maintaining linkages with political, social-cultural and economic sectors. The social determinants of health are an important element of public policies that facilitate health at population level. Therefore, health policy dimensions should develop cross connectivity with public policies in order to reduce social inequalities as a part of State health policy. Finally, it identifies the individual/group-level interventions that promote healthy behaviors by addressing individual and group-level modifiable risk factors for ill-health in a cost-effective and sustainable manner.

Matrix that shows the SCOPE of Karnataka Integrated Public Health Policy

| I- Healthcare interventions that promote health (Proximal determinants of health) |
|-----------------------------------------------|-----------------------------------------------|
| Health care policy interventions | Political |
| • Health care services | Robust human resources management in terms of size, composition and distribution |
| • Human resources | Strengthened health information system (e-hospitals, e-records, e-disease information-logistics, e-HR, e-office, telemedicine, e-referral info system) |
| • Health information system | Comprehensive medicines/vaccines/equipments assessment of requirement, procurement strategic approaches |
| • Health technologies/medicines | |
- **Health financing**
- Robust sustainable single payer/pooled financing mechanisms for secondary and tertiary care

- **Health governance and leadership**
- Build robust processes with checks and balance and methods to mediate differences that are immune to interferences. Lay process to identify leaders within departments at different levels

### II-Social policy intervention that promote health
(social determinants of health that reduce inequality)

<table>
<thead>
<tr>
<th>Social policy interventions</th>
<th>Housing</th>
<th>Water and sanitation</th>
<th>Working conditions</th>
<th>Income status</th>
<th>Education</th>
<th>Agricultural production</th>
<th>Employment status</th>
<th>Transport/OTHER depts.</th>
<th>Convergence of multiple departments keeping the health of the public as the hub, designing policies and management decisions around it</th>
</tr>
</thead>
</table>

- Political
- Economic
- Legal framework

### III-Individual factors/life style determinants

<table>
<thead>
<tr>
<th>Non-modifiable</th>
<th>Lifestyle factors amenable for health promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, sex, genetic factors</td>
<td>Lifestyle factors</td>
</tr>
</tbody>
</table>
II – SOCIAL POLICY INTERVENTIONS THAT REDUCE INEQUALITY

III – PUBLIC POLICY ENCOURAGING HEALTHY LIFESTYLES

2.1 I - HEALTHCARE POLICY INTERVENTIONS THAT PROMOTE HEALTH

This section contains healthcare policy interventions that promote public health and impact the entire population. The policy operates multi-dimensionally both within medical/healthcare services as well as with various other sectors related to health promotion. The policy interventions are organized in line with the WHO health system framework which identifies six building blocks of health systems (health services, human resources, health information systems, medicines/vaccines/health technologies, health financing, governance
and regulation). It also builds on socially embedded effective local health traditions and AYUSH systems. In addition, policy directions across some cross-cutting themes are also presented in the following chapters.

### 2.1.1 HEALTHCARE SERVICES

#### 2.1.1.1 Universal HealthCare

The State of Karnataka is committed to ensuring quality healthcare services that are affordable and accessible, to all people living in the State. The government’s focus is on improving the health status and reducing health inequities by expanding access to social safety networks and promoting affordable primary, secondary and tertiary care services for every household. For the poor and vulnerable, existing safety nets will be further improved and consolidated to ensure wider access to public healthcare services. Thus, the key objective of healthcare service delivery is attainment of universal care of high-quality health services by

- Scaling up the utilisation of a well-defined and comprehensive primary, secondary and tertiary care health interventions;
- Redefine the existing service delivery levels and delineate types of health services for each of these levels of the healthcare to ensure continuity and harmonized referral and supervisory functions with use of information technology;

A comprehensive set of essential health services with special emphasis on health promotion and preventive healthcare, using well-articulated and transparent criteria based on the epidemiological, technological, geographical, economical and socio-political situation of the State shall be put forward. Efforts will be made to involve community based groups in order to ensure effective demand for health services; and to promote community participation in the planning and delivery of health services.

The department of health shall from time to time refine the comprehensive health services including promotive, preventive, curative and rehabilitative healthcare. These shall be provided free of charge to citizens in all public health facilities with partnerships involving not-for-profit private providers.

2.1.1.2 Strengthen primary healthcare

Primary healthcare is the foundation of the State’s health system. Universal access to good quality comprehensive primary healthcare services is a pre-requisite for achieving health for all. The State shall invest in strengthening primary health centres for integrated care with compassion spanning curative and rehabilitative services, preventive healthcare and health promotion. In view of mal-distribution of primary health centers, the State shall rationalize services as per norms and guidelines. Specific recommendations for strengthening primary healthcare are listed in Part 2. Communitisation of health is an important aspect.

2.1.1.3 Accredited Social Health Activist (ASHA): The ASHA is a link between the Health system and the society. There is one ASHA for every 1000 population and for lesser population in hard to reach areas and Tribal areas. The Govt of Karnataka has motivated them by providing matching grant to ASHA through which she will get matching grant according her work done every month. Further it is apt to consider raise in her earnings, motivation and life security through career progression policies.

2.1.1.4 Establish Health and Wellness Centres at sub-centre levels

The existing health sub-centers shall be converted into Health and Wellness Centres (HWC) not just in name but in spirit and practice. The goal of HWCs would be to address the Social Determinants of Health such as poverty, gender-based inequalities, water and sanitation, child under-nutrition and others, and seek convergence at the village level across all departments, rather than merely following an illness-based approach. Person centred approach and community participation is the cornerstone for this to be accomplished. The State shall develop a policy framework for implementation of HWCs and implement this over a period of time. The HWCs shall also be an interface across all systems of medicine including nurse health practitioners, AYUSH practitioners and local traditional healers, focusing on health promotion.

2.1.1.5 Improve the offer of services at secondary care levels
The State shall commit to strengthening the quality of services and availability of specialty and super-specialty care in its, taluka hospitals, district hospitals and various specialty hospitals run by the government. All taluka hospitals shall be upgraded to provide comprehensive emergency obstetric care and blood bank facilities. A list of services and norms related to strengthening CHCs and hospitals are included in the Part 2.

2.1.1.5 Expand government-provided tertiary care

In keeping with the growing population in Karnataka and the need for good quality referral services, tertiary care institutions, specialty and super-specialty hospitals shall be strengthened and where necessary established equitably across the State and operationalized in close association with all district hospitals and government medical colleges (without disturbing existing facilities and staff of district hospitals). Special provision should be made for metropolitan centers and large cities in other parts of the State. As a part of super-specialty care strengthening, facilities in all the district hospitals should be upgraded in order to facilitate organ transplantation. All district hospitals and taluka hospitals shall be upgraded to have intensive care units with Blood Bank and Blood component separation unit facility.

2.1.1.6 Preventive, promotive and curative mental health services

The State shall expand its offer of mental health care within the existing PHCs, CHCs, taluka hospitals and district hospitals to organize primary healthcare and community-based mental healthcare in an integrated manner. This will be in keeping with the revised District Mental Health Programme, 2012, the National Mental Health Policy, 2014, and the National Mental Health Act, 2016. Existing health worker capacity shall be enhanced to improve early detection, continuous care and management of mental health problems (including substance abuse and de-addiction) within communities, health centres and hospitals. Wherever needed specialized centres at various district hospitals shall be established in close coordination with the State mental health authority. Person with mental illness and care givers will be the primary stakeholders, who together with health providers will work towards recovery and social integration. Parenting skills, life skills education, school and college mental health programmes with counselors, help lines for suicide prevention will be strengthened or initiated.

2.1.1.7 Four-tier system

Though a four tier system was discussed it was concluded that at the present time the State shall continue with the present three tier system. The Government should enhance its efforts in promoting the Individual/family with defined roles in taking responsibility for their own (health lifestyle/behavioural modification+ redefined traditional home remedies/AYUSH for primordial prevention);

The State shall establish a Provider’s Charter of rights and responsibilities outlining the obligations and responsibilities in the provision of healthcare as well as their rights in protecting patients’ health and privacy, besides the Citizen’s Charter of Health Rights and Responsibilities.
2.1.1.8 Integrate AYUSH into mainstream healthcare services

Various international resolutions passed by WHO member States urge National (and State) Governments to respect, preserve and widely communicate traditional medicine knowledge while formulating national policies and regulations to promote appropriate, safe, and effective use; to further develop traditional medicine based on research and innovation, and to consider the inclusion of traditional medicine into their national health systems. The State shall strive to create a pluralistic health system in keeping with people’s preferences and aspirations for pluralistic healthcare. Government health services shall provide care under all systems of medicine. Operational guidelines for co-location and integrated provision of AYUSH care within the formal health system shall be prepared and implemented. Adequate and fair financial allocations for AYUSH shall be integrated into the health budget and protocols. Guidelines for treatment under AYUSH, similar to standard treatment guidelines in modern medicine shall be prepared.

The department of health shall ensure the provision of a comprehensive set of health services through an Integrated Health Services Plan. The emphasis should be on co-location of AYUSH dispensaries in taluka, district and referral hospitals.

The Government shall provide the regulatory framework for Allopathy and AYUSH medical practice and create an enabling environment for effective involvement of traditional practitioners as well as exploring traditional medicinal plants.

The State will strengthen the Swasthya Vritta Programme. It will also draw upon the health promoting traditions of other systems of health. The State will strengthen community health and knowledge practices related to food and dietary practices using traditional knowledge and practices for promoting a healthy nutritional status.

2.1.1.9 Centres of excellence in service improvement

The Government will establish Centres of Excellence to maximise health efficiency and effectiveness in specific health-related fields such as on communicable diseases, non-communicable diseases, social determinants, health systems, AYUSH, community health, health promotion etc.

2.1.1.10 Sustainable low cost diagnostic services

The department of health shall strengthen the public health laboratory services to support disease control programmes including emerging and re-emerging diseases. Developing low cost accredited diagnostic centres in all taluka, district and State headquarters and operating through a professionally managed autonomous body on a not-for-profit basis, they could charge the actual fee to recover running costs instead of wholesale privatization. Each diagnostic centre/facility will organise and manage the delivery of expected services, based on its level.
2.1.1.11 Treatment protocol, referral protocols and management

Karnataka will move towards the adoption of standard operating procedures and standard treatment guidelines to ensure quality and transparency in health, both in allopathy and AYUSH systems of medicine which shall be periodically updated.

2.1.1.12 Urban and rural healthcare services

Historically, Indian policy has been rural-centric based on the urban-rural ratio of earlier decades; this has changed significantly in recent years. But now, the State’s healthcare challenge has substantially grown to include the needs of urban healthcare. Because of shifting demographics caused by continuously increasing rural-to-urban migration, there needs to be a change in the thinking on urban health. Rapid urbanization and the significant growth of the urban poor population in absolute numbers have made new demands on the available infrastructure and service delivery mechanisms. The urban poor are a mix of people living in slums, those who are homeless and several others in higher socio-economic groups (including affluent groups), resulting in areas with high inequities in health and development. Urban poverty is characterized by food insecurity, varied morbidity pattern, poor access to drinking water and sanitation, high costs of living and job insecurity.

Karnataka has established its own Urban Health Mission. An integrated inter-sectoral framework of services and action campaigns, with an increased focus on the urban poor and the vulnerable sections of urban society needs to be developed, to address these challenges, keeping in mind the diversity of urban areas – metros, cities and towns in the State. With increasing urbanisation and rural to urban migration, this is an urgent policy imperative.

2.1.1.13 State-managed emergency services entity

Karnataka has in place a very efficient emergency service (Aarogya Kavacha) on a PPP model. It is recommended that the number of ambulances with advanced life support system be increased as per requirement. Availability of Emergency Ambulance service within the radius of 20Km of every Village in the State will ensure a much faster reach of emergency transport across the state.

2.1.1.14 Strengthen epidemic surveillance, preparedness and disaster/outbreak response using the One Health approach

The Integrated Disease Surveillance Programme is in operation in the State, but needs to be strengthened to include more health conditions that should be systematically monitored. There is a need to strengthen early detection of outbreaks, and institute protocols for appropriate response with teams at the district level. Integration of data from the private sector into disease surveillance and involving all stakeholders including private sector and communities in the response to outbreaks is crucial. In keeping with international efforts at an integrated approach towards human, veterinary and wildlife health (the One Health approach), the State shall strive for greater coordination within and across these three agencies. Mechanisms shall be identified for better harmonization between district and State
level disaster response agencies and health services to ensure a coordinated response to outbreaks and natural disasters.

2.1.1.15 Identify sustainable and health service-based screening services

Screening for diseases and other health problems is an important measure of primary prevention. The State shall ensure availability of good quality screening services for health conditions that are amenable to early detection. Instead of a camp-based approach, the State shall ensure availability of such services through the wide network of primary, secondary and tertiary care services. Guidelines for choosing health conditions amenable for screening shall be prepared and implemented through the government health services.

2.1.1.16 Chronic conditions and the care of the elderly

The elderly, that is, the population above 60 years, are a vulnerable section among which those above 75 years are most vulnerable. The State needs to develop its own cost-effective and culturally appropriate solution to address the health and care needs of the elderly, in line with the national programme for the healthcare of the elderly (NPHCE). A community-centred approach where care is provided in synergy with family support, with a greater role for community-level caregivers with good continuity of care with higher levels shall be the focus. A closely-related concern is the growing need for palliative care, where in life-threatening illness or in end of life contexts, there are active measures to relieve pain and suffering, and provide support to the patient and the family. Increasing access to palliative care would be an important objective, and continuity of care across levels will play a major role. Existing health services will be carefully upgraded to ensure sufficient availability of beds and infrastructure for palliative care and geriatric care, and wherever needed, specialised geriatric care facilities shall be set up in an integrated manner linking with the existing health services. The State shall seek to leverage support from the private sector and the community in improving the care for the elderly.

2.1.1.17 Facilitate home-based care

Specific services that require home-based care may be identified and guidelines enunciated and the same shall be considered for operationalization through the existing primary healthcare services. If needed, capacity building of existing health workers for this purpose may be undertaken.

2.1.1.18 Improve the quality of healthcare in public facilities and monitor quality and safety in the private sector

The State commits to improving and sustaining high quality health services within the government health services, as well as monitoring and facilitating high quality health services in the private sector, in the interest and safety of the State’s population. The State shall implement a quality assurance strategy and a programme to monitor, improve and sustain the quality of healthcare (effective care delivered in an efficient manner, is accessible, acceptable and patient-centred, equitable and safe). In addition, the State shall ensure suitable mechanisms to monitor quality (including safety) of care in the private sector through
strengthening existing rules and regulations, as well as by improving grievance redressal pathways for both public and private sector. The State shall implement credible and voluntary graded accreditation systems such as NABH to ensure that government hospitals and private healthcare services comply with an acceptable quality standard.

2.1.1.19 Strengthening mortuary facilities

Mortuaries shall be strengthened at all taluka and district hospitals. Necessary transport facilities to the mortuary from all PHCs shall be provided.

2.1.1.20 Airport/international travel surveillance

In view of emerging and re-emerging diseases, the state should continue cooperation with appropriate authorities at the port of entry.

2.1.2 HUMAN RESOURCES

The key objective for human resources for health is to ensure an appropriately skilled, motivated, well distributed and productive workforce for the provision of effective and efficient quality health services to all the people living in Karnataka. The health workforce constitutes those persons recruited primarily for health and related service provision and management who have undergone a defined, formally recognized training programme. The policy’s aspiration is for an adequate and equitable distribution of a productive health workforce.

2.1.2.1 Establish human resource cell and public health cadre

The health workforce of the government is one of the largest government workforces and needs a committed and dedicated human resources management team to ensure timely recruitment, appropriate induction training of all health workers, efficient management during their tenure, sustaining and enhancing their skill-set and performance during their service and a responsible exit after their services. For this purpose, the State shall establish a human resources cell to manage the large health workforce in government health services -
strategically plan the health workforce development for the sector, develop and continuously review recruitment and retention strategies for the health workforce; and strengthen management of human resources through development and implementation of performance standards and norms for efficient service delivery.

The directorate of health shall strategically forecast the HRH needs, taking into account the multiplicity of professions and skills; service delivery facilities and providers; population health needs and their growth; and geographical distribution every year; harmonize the recruitment and deployment criteria of the health workforce to reduce turnover and ensure continuity of care.

2.1.2.2 Reforms related to recruitment, deployment and transfers

There is a need to revise and improve policies related to recruitment, deployment and transfers of health workers in keeping with efficient management and improving performance. The State shall commit to instituting reforms to improve these processes. The relevant cadre and recruitment rules shall be periodically reviewed and revised to ensure efficient and prompt recruitment and task shifting and task sharing across health worker cadres wherever needed.

2.1.2.3 Implement strategies to improve the retention of doctors and health workers in government health services

Karnataka State shall strive to be a model State for best practices in health workforce management. The government commits to implementing innovative strategies to improve recruitment and retention of doctors and health workers into government services. Effective, and timely promotions and postings of all cadres under their control, shall be made an important measurable performance indicator for appropriate administrative authorities. The State shall also invest in creating good quality and comfortable quarters for all doctors and health workers to improve retention and performance.

The human resources management cell under the directorate of health shall periodically review the conditions of service (professional advancement, contractual obligations, involvement in decision making, recognition of staff contribution and other incentives) and develop appropriate recruitment and retention strategies both for specialists, public health cadre, paramedical staff and administrative staff at State, district and taluka and PHC level within the public sector. The directorate of health shall ensure that all data generated in pre- and in-service training, recruitment, deployment and migration of health workers is captured, stored in a database, analysed, and interpreted for decision-making to inform future State policy direction.

The Government shall review from time to time, the norms and standards as far as human resources for health are concerned. The Government shall put in place the necessary health department customized policies to attract and retain the workforce such as high pay, working environment etc.
2.1.2.4 Improve the relevance of public health and medical education

All public health courses must have provision of a specific time frame for skill building at undergraduate and postgraduate levels. All public health training institutes must have a close collaboration with the district health system in order to provide student with exposure to public health practices. The State shall promote inter-professional education through short-term courses across medical systems.

2.1.2.5 Health workforce training

While identifying training needs and providing opportunities for training the organizations needs to ensure the appropriate redeployment of health workers on completion of their training, in addition, appropriate human resource training and continuous professional development and career progression (Ex: public health, medical education, DNB courses, laboratory training, nurse anesthetist) should be present; there should be an increase in equitably distributed health worker specialists with the goal of ensuring equitable access to health specialist services. The human resource cell under the directorate of health shall be responsible for various cadres and will continuously ensure that all health workers undertake continuous professional development and provide the required accreditation, in line with state training policy.

Post-graduate training is a part of capacity building and will remain a State function. To improve retention of health workers in hard-to-reach areas, affirmative action shall be applied in the following areas: a) Promoting multi-skilling and multitasking of the health workforce; b) Ensuring that health personnel interact in a professional, accountable, and culturally sensitive way with clients; and c) Improving management of the existing health workforce by putting in place attraction, retention, and motivational mechanisms for the workforce.

The State government will maintain a database for all registered health workers providing services in the entire State and in every district. The State government, in consultation with the districts, will develop a comprehensive training policy and implement schemes of service for all health workers. Health workers providing services in corrective facilities and other institutions will be managed by the governments where such institutions are located. The State government will put in place systems to measure the performance and competencies of health workers, which will be informed by the health service beneficiaries.

2.1.2.6 Evidence-based human resource management

The sector shall focus on evidence-based human resource management by reviewing and applying evidence-based health workforce norms and standards for the different tiers of services delivery; facilitating rational capacity development of the health workforce through alignment of curricula and training to needs, based on the above-mentioned policy objectives ensuring that health personnel interact in a professional, accountable, and culturally sensitive way; and improving management of the existing health workforce by putting in place attraction, retention, and motivational mechanisms, especially in marginalized areas.
2.1.2.7 Right skill in the right place and the right number of staff

The directorate of health shall incorporate the Health Workforce Strategic Plan outlining that the right number of staff, with the right skills, is in the right place to deliver the health services. The directorate of health shall develop and periodically update staff norms/skills-mix by care level based on research including users’ views to ensure well informed pre-service training, efficient recruitment and deployment of the health workforce and to ensure uninterrupted provision of health services.

2.1.2.8 AYUSH workforce integration

The Government shall develop guidelines for optimal utilization of AYUSH /Alternate Medical practice, preferably in preventive, promotive areas and, safeguarding against malpractice and misconduct. The State will promote Public Health Orientation and Training for all AYUSH Health Personnel starting with the government sector and later offering it to private registered medical practitioners as well as including community-supported LH practitioners on a voluntary basis.

2.1.2.9 Professional associations and health human resource

The Government shall promote the formation and strengthening of professional associations

The Government should take initiative to periodically review various Acts contextually as laid down.

2.1.2.10 Innovative approaches to medical specialist courses

In order to address the severe shortage of specialist doctors in secondary and tertiary care, innovative courses to upgrade skills and qualifications of government doctors working in rural areas shall be undertaken. The State shall implement new courses prioritizing placement of specialists in rural areas, including DNB courses in rural surgery. Also, the government may consider promoting diploma courses under College of Physicians and Surgeons (CPS) institute Mumbai and also similar courses and course in family medicine under Rajiv Gandhi University of Health Sciences, to address immediate requirement of in-service government doctors and provide legal and administrative framework for practitioners of such degree holders in the state. Due precautions should be taken to maintain quality of trainees.

2.1.2.11 Development of paramedical work force training, courses, research across medical systems

Paramedical and health worker training and courses shall receive greater priority to ensure that all health worker cadres are equally improved, and not only doctors. The State shall improve paramedical health worker cadres across medical systems including AYUSH.

2.1.2.12 Public health nurse practitioners

The State shall provide advanced training and career advancement opportunities for nurses to function as nurse-practitioners providing comprehensive healthcare services in the
community as well as in hospital ICU settings, in line with national and internationally acceptable guidelines by setting up nurse-practitioner cadres.

2.1.2.13 Public health education

The State shall strengthen public health education, research and training to carefully select motivated staff at different levels to support health program management as well as hospital management. The State shall provide appropriate career paths for public health administration, medical practice, health system research and training to all staff.

2.1.3 HEALTH INFORMATION SYSTEMS

Health information concerns the availability, completeness and timeliness of data that is used for evidence-based policy, planning and implementation. Data collection, collation, analysis and interpretation require norms, standards and guidelines for efficient utilization. For effective monitoring and evaluation of health services and programmes a viable information system is essential. Thus, a key objective is to ensure the timely availability, accessibility, quality and use of health information for sustainable improvement of the health status of the people living in Karnataka.
2.1.3.1 Implement electronic medical records and smart cards for efficient healthcare information

In this digital age, healthcare needs to undergo a digital transformation to enable the seamless flow of information which in turn can result in better care delivery and co-ordination. This can be achieved through an Electronic Medical/Health Record (EMR/EHR) which is a single record that contains complete and accurate information of a patient. EMRs can also flag potentially dangerous drug interactions (to help prescribing doctors explore alternatives before a problem occurs), verify medications and dosages (to ensure that pharmacists dispense the right drug), and reduce the need for potentially risky tests and procedures. A common electronic health record platform coupled with smart cards will also improve the exchange of information between healthcare providers and improve and strengthen referral. The State shall begin a plan to upgrade medical and health information into electronic health records and patient-held smart cards.

2.1.3.2 E-Hospitals

The State shall digitize and upgrade digital infrastructure in its hospitals to improve information flow and facilitate good quality care and management within hospitals. All hospitals in the State can be linked with each other to facilitate information sharing, patient referral and easy monitoring of quality and patient outcomes.

2.1.3.3 E-Referral system

This can be achieved by setting up networks either through dedicated optic fibre system for hospitals or through wireless systems to ensure a dedicated health system based hospital network and referral system. This will enable the seamless flow of health information across geography, hospitals and health administrators for efficient referrals and delivery of services.

2.1.3.4 E-Offices (directorates office/district/taluk/PHCs/CHCs) and e-logistics management

Management of offices and supply chains including drugs, medicines and other consumables shall be digitized in order to ensure smooth functioning and transparency in procurement and supply. This will enable the collection and analysis of health information about diseases, services, finances, health workforce, medicines and medical products, infrastructure and equipment from all stakeholders of the health sector. It clarifies the roles and functions of different stakeholders in data management in order to minimise duplication and maximize the optimal utilization of resources and ensures timely, wide and need-based dissemination of data to all stakeholders.

2.1.3.5 E-Human resource management system

The current human resources management system needs to be overhauled to ensure transparency and fairness in terms of performance monitoring and career progression of government health staff. A transparent human resources management system that takes into
consideration staff performance, as well as enabling performance-based career progression within the health services shall be implemented.

2.1.3.6 E-Disease surveillance system and HMIS

The State shall enable the effective use of information collected through disease surveillance as well as monthly routine data collected at all health centres for efficient management and performance monitoring of all government health services. The data shall also be made openly available to enable independent monitoring and assessment of government health services by researchers and communities. The department of health shall ensure that all relevant health information regarding population dynamics, diseases, health services, health financing, health workforce, medicines and vaccines, infrastructure and equipment is collected from all sources. The directorate of health shall develop capacity and tools, including a web-based observatory, to ensure effective data collection, collation, analysis, interpretation and timely feedback and dissemination for improved evidence based decision making at all levels. The directorate of health shall establish an institutional/organisational arrangement that will harmonise and link all the data management units with the aim of reducing duplication and wastage of data and maximising its effective use through prompt reporting and feedback.

2.1.3.7 Telemedicine

A strategy shall be prepared for the effective use of telemedicine wherever geographic considerations require the application of this technology, especially in remote rural and forested tribal areas. The use of telemedicine shall especially be encouraged to form a community of practice among government doctors, build their skills and improve exchange and communication between specialists based in urban centres and doctors based in rural areas, especially in radiology, dermatology, cardiology and psychiatry.

2.1.3.8 Health help-line

The existing health helpline (104) shall be strengthened as per need.

2.1.3.9 Health information for monitoring and regulatory purpose

The department of health in consultation with all stakeholders shall develop indicators for measuring performance in different policy areas and programmes. The department of health shall develop a regulatory framework (norms, standard operation procedures, policy directives and laws) that will ensure that all data is collected and reported to the relevant data management units and shared with all the concerned stakeholders. Regulations regarding mandatory reporting of defined information requirements should be developed and implemented.

2.1.3.10 Research information for health programs improvement

The department of health, in collaboration with research institutions shall develop a comprehensive research agenda to streamline areas that require new knowledge and provide
guidance to the State Health Policy, plans and programmes. The department of health shall setup an autonomous State Health Research Council which will be responsible for ensuring adherence to scientific and ethical standards in the conduct of health research.

2.1.3.11 E-Health portal

The State will adopt and enhance e-governance within the public health system at all levels. The collaboration between State Health Department and the evolving State GIS platform will enhance the development of an effective health GIS.

2.1.3.12 E-Health Governance System

**E-Health information governance conceptual frame**

This relates to the process of generating and managing adequate health information to guide evidence-based decision making in the provision of health and related services at State levels. All healthcare providers shall therefore be obliged to report on information from their activities through established channels in a manner that meets safety and confidentiality requirements, and according to the health research and information policies, regulations, and standards that will be developed in consultation between the State government and stakeholders. The key stakeholders include health managers, policymakers, patients and all other actors in the health sector, with a view to guiding their decision-making processes.
2.1.4 MEDICINES/VACCINES AND HEALTH TECHNOLOGIES

Medicines, vaccines and other medical products are fundamental resources in the provision of healthcare. There is already a comprehensive essential drugs (medicines) list addressing areas such as selection, procurement, storage, etc. This State Health Policy will focus on areas that need further improvements and clarity of functions. The main objective of the health policy, with regard to medicines and health technologies is to ensure the availability of medicines, vaccines and other medical products to those who need them at the time they need, which is of acceptable safety, efficacy and quality and to ensure rational use of the medicines, vaccines and blood products. This could be achieved by ensuring that there is universal access to essential medicines, vaccines, laboratory reagents and other medical products by the people of Karnataka. Also to ensure the use of safe, efficacious and quality medicines, vaccines, laboratory reagents and other medical products; adhering to norms and standards related to use, prescription, and dispensing.

2.1.4.1 Antimicrobial resistance stewardship in health

Increasing antimicrobial resistance is a global problem due to distortions and irrational use of antibiotics. The State shall improve the use of evidence-based medicine and promote rational use of antibiotics in all hospitals and health centres through hospital/health centre based antibiotic stewardship platforms. The State shall implement improved awareness and regulate the use of antibiotics in animal farms and in agriculture through inter-sectoral coordination.

2.1.4.2 Generic drugs medical stores across State

The Government and department of health shall setup medical stores for generic medicines in all secondary and tertiary care centres and make selected ones operable 24x7. An appropriate autonomous structure/organization to monitor manage and organize pharmacy stores should be in place.

2.1.4.3 Web based drug/medicine procurement and supply management system

The directorate of health shall develop a web-based tracking system for the drug/medicine management, Essential Drug List (EDL), its procurement and stock-outs. The directorate should also look into advancements in medical technology and the levels of resistance to available medicines and ensure the selection, forecasting and quantification of medicines and vaccines in collaboration with districts, facilities and other relevant stakeholders to reflect the needs of the health services. Should also have in place effective and reliable procurement and supply systems which leverage public and private (not for profit) investments to advance patient access to essential health products and technologies and deliver value for money across the system.
2.1.4.4 Evidence-based standard treatment guidelines

The State shall define and apply evidence-based essential health products/medicines/diagnostics and technologies. This shall be judiciously applied in acquisition, financing, and other access-enhancing interventions. It will incorporate essential medicines, health products and diagnostics, treatment protocols, and standardized equipment. The directorate of health shall develop and periodically review a medicine formulary and Standard Treatment Guidelines, impart training to encourage rational use by the health service providers at all levels in the health sector; lead the review of the medicines and introduction of new medicines and medical products in the State; explore and promote the evidence-based utilisation of AYUSH/herbal and other alternate medicines through mutual collaboration with AYUSH/alternate health practitioners and institutionalization of the regulatory framework for regulation of alternate medicine practice; strengthen documentation of clinical outcomes in the AYUSH sector by introducing a standardized system and rationalize investment in the management of health products and technologies. This will ensure the most effective management of patients in line with established standards and incorporate cost-effective prescription and other interventions to improve the rational use of drugs and other health products.

2.1.4.5 Allopathy and AYUSH essential drugs procurement

The State shall commit to a centralized drug procurement method in order to benefit from the economies of scale and, achieve minimum cost per unit thus reducing the financial burden on public resources. The use of information technology to upgrade supply chains of medicines and vaccines shall be taken up to improve efficiency, transparency, responsiveness and adequate respond to demand. The State shall ensure the identification of inexpensive, good quality generic medicine suppliers and facilitate their availability through its hospital pharmacies, or set up generic medicine outlets of its own in close association with its hospitals.

2.1.4.6 Health technologies, diagnostic equipment assessment and procurement

The State will ensure the availability of affordable, good quality health products and technologies. This shall be done through the full application of all options (promoting the use of generics and exploiting all provisions in the trade-related aspects of intellectual property rights) and public health safeguards relating to health products and technologies, through multi-sectoral interventions on trade, agriculture, food, and related sectors. The department of health will establish a State appraisal mechanism for health products and technologies. This will provide guidance on the clinical and cost-effectiveness of new health products, technologies, clinical practices, and procedures. Local production, research, and innovations of essential health products/AYUSH, traditional medicines and technologies shall be promoted in a manner that advances universal access and promotes competitiveness.
2.1.4.7 Drug regulatory measures

The State will strengthen regulatory measures to prevent drug misuse and abuse. The Government, through re-engineering the existing Drug Regulatory mechanisms specific to Karnataka State, shall setup an autonomous independent body as the medicine regulatory authority to institutionalise pharmaco-vigilance both for allopath and AYUSH so as to ensure universal access of quality, efficacious and safe medicines, vaccines, reagents and other medical products through regulating manufacture, import, export, distribution, sale and dispensing of medicines and the sale of related substances including cosmetics in coordination with the national ministry of health. The department of health shall develop and strengthen the State Drug Quality Control Laboratory and ensure that medicines, vaccines, reagents and other medical products produced, distributed, exported, procured and used in Karnataka are tested for conformity to the standards of quality. A harmonized State regulatory framework for health products and technologies shall be put into place to advance quality, safety, and efficacy/effectiveness based on sound science and evidence. The regulatory framework shall be autonomous in its operations and shall encompass human drugs, blood and its products, diagnostics, medical devices, technologies, food products, tobacco products, cosmetics and emerging health technologies.

2.1.4.8 Medicinal plants promotion

The directorate of health in collaboration with the Department of Forest and Agriculture, Department of Transport and Communications, Department of Infrastructure, Science and Technology, Department of Environment, Wildlife & Tourism, Health Universities, and Department of Commerce and Industry shall explore the possibility of encouraging the transformation of locally available medicinal plants into industrialized medical products.

2.1.5 HEALTH FINANCING

The way in which resources are raised, pooled and allocated, and the way services are paid for, all have a major impact on access to healthcare and, in turn, on the efforts to alleviate poverty through attainment of the highest level of health status. Thus, health financing is about raising and allocating sufficient resources and putting in place appropriate payment arrangements to ensure that all people living in Karnataka have access to a range of cost-effective health interventions at an affordable price regardless of their economic status.

2.1.5.1 Integrate multiple social health insurance schemes into single health assurance plan

In line with the commitment to achieve universal healthcare for the State’s population, all the fragmented social insurance schemes shall be merged into a single health assurance plan to improve efficiency. The State shall develop robust and sustainable financing mechanisms while strengthening the public sector and harnessing private services (not-for-profit) to
ensure that public services of highest quality are maintained, keeping the public health interest in mind, whenever needed. This can be done by integrating multiple social health insurance schemes into a single health assurance plan. Thus ensuring that the tax payers’ contribution and other resources are pooled into a single entity for health financing and for raising sufficient funds to meet the health needs of the people in a sustainable manner; ensuring efficiency in the collection and pooling, as well as cost effectiveness in utilisation of funds. Periodic determination and reviewing of the costing of health services according to levels of healthcare and mobilizing and managing the required finances to ensure the uninterrupted provision of health and related services. The policy’s commitment is to progressively facilitate access to services for all by ensuring social and financial risk protection through adequate mobilisation, allocation, and efficient utilisation of financial resources for health service delivery. The primary responsibility of providing the finance required to meet the right to health lies with the State government. This will be attained through ensuring equity, efficiency, transparency, and accountability in resource mobilisation, allocation, and use.

2.1.5.2 Towards universal healthcare

The State should commit to ensure universal access to healthcare by all people in the State irrespective of caste, socio-economic group, religion or any other consideration. Towards this end, the State commits to begin by covering all government employees and public sector staff under a comprehensive social insurance scheme. A strategy to broaden coverage to include all of the population in a phased manner under a State-run social protection scheme shall be formulated. Innovative measures should be objectively undertaken to ensure social protection and universal access to comprehensive health services. The Government shall ensure the availability of financial resources for incremental primary, secondary and tertiary care services so that all citizens of Karnataka receive services free of charge at the service delivery point. The department of health shall promote not-for-profit oriented public-private partnerships in order to achieve universal coverage of the healthcare services.

2.1.5.3 Innovative health financing approaches

The Government shall introduce and periodically revise taxations and levies from cigarettes, alcohol, etc. to fund promotive and preventive activities. The health department shall formulate and periodically review and revise resource allocation formulae for the equitable and timely disbursement of funds to all districts and health facilities as well as National health programmes. The government shall evolve new innovative fund pooling and allocation to promote single payment mechanisms. The Government shall ensure an increase in per capita allocation and expenditure of funds to health.

Efforts shall be made to progressively build a sustainable political, State and community commitment with a view towards achieving and maintaining universal health coverage through increased and diversified financing options. This will be achieved by establishing a social health protection mechanism to progressively facilitate attainment of universal pooling
of resources to increase efficiency in utilisation of health resources; and developing and implementing diverse sustainable healthcare financing models.

2.1.5.4 Financing the State health system and policy research

All schemes, services and programmes in health shall be subject to the highest quality of monitoring, evaluation and supervision. At the same time, relevant research on appropriate and people-oriented health policies and research to strengthen the State’s health system shall be an important priority. The State shall set a goal of committing at least one percent of its overall health budget to monitoring and evaluation and relevant health policy and systems research.

2.1.5.5 Health finance orientation towards health infrastructure

Health infrastructure relates to all the physical infrastructure, non-medical equipment, transport, and technology infrastructure (including ICT) required for the effective delivery of services by the State government. The goal of this policy is to have adequate and appropriate health infrastructure. There shall be a network of functional, efficient, safe, and sustainable health infrastructure based on need.

2.1.5.6 Incremental infrastructure development in line with IPHS

The State shall facilitate the development of infrastructure that progressively moves towards the prevailing norms and standards and update electronic infrastructure details both available and future needs in line with Indian Public Health Standards (IPHS); develop norms and standards to guide the planning, development, and maintenance of health infrastructure; invest in health infrastructure to ensure a progressive increase in access to health services; provide the necessary logistical support for an efficiently functioning referral system; promote and increase the not-for-profit private sector in the provision of health services through infrastructure utilization.

2.1.5.7 E-infrastructure and inventory portal

The State shall develop guidelines on e-portals for purchases of vehicles and medical equipment, and for the disposal of the same; adopt evidence-based health infrastructure investments, maintain an electronic inventory and infrastructure portal, and replacement through utilization of norms and standards in line with IPHS; and strengthen the regulatory framework to enforce health infrastructure standards.
2.1.6 HEALTH GOVERNANCE AND LEADERSHIP

The performance of the health sector is dependent on the quality of leadership and governance. In the context of Karnataka, leadership includes: the stewardship role; inter-sectoral collaboration and coordination; harmonization and alignment; and clarity of the roles and the relationships between the department of health and local authorities and other departments and stakeholders.

Governance relates to: setting a strategic vision with a timeframe; inclusive participation and consensus around policy and its implementation; health legislation, regulation, standard setting and enforcement mechanisms including oversight and supervision; transparency; responsiveness; equity and inclusiveness for social protection and universal access; effectiveness and efficiency through sound stakeholder involvement in strategic planning, priority setting and budgetary frameworks; accountability; information and intelligence; and ethics. Thus health governance relates to how the oversight of the delivery of health and related services shall be provided. The policy aspiration is for a comprehensive leadership that delivers on the health agenda.

The State government will provide overall policy direction, strategic leadership and stewardship aimed at defining the strategic vision of the health agenda in Karnataka. This will also aim at setting the pace for good governance in the delivery of health services which will be attained by focusing on the following strategies:

2.1.6.1 Management systems and functions

The health governance and management structures will ensure: oversight for implementation of a functionally integrated, pluralistic health system; mechanisms for engaging with health-related actors; jointly developed operational and strategic plans and undertaking review processes; partnership and coordination of healthcare delivery;

2.1.6.2 Oversight to regulate and assess standards and quality of services

The Government can form a State Health Council (SHC) to ensure strategic guidance and oversight chaired by an Eminent Health Professional of Karnataka and attended by the departments of Health, Finance and Development Planning, Local Government and representatives of development partners, NGOs, private sector, professional associations,
notable health professionals as individuals and the community. The Cabinet, through the
State Health Council, shall clarify the roles between different key players to ensure
complementarities and synergies in the provision of continuous and sustainable health
services for better health development. The State shall consider integrating the SHC into
existing legislation towards regulation of the private sector such as the KPMEA or similar
national legislation.

2.1.6.3 Ombudsman and grievance redressal

The State recognises the important role of ombudsman for health in the State and recognises
that the Karnataka Lokayukta is playing this role in terms of addressing public grievances.
The State shall strengthen the capacity of the Lokayukta in dealing with healthcare
grievances as well as establish effective grievance redressal systems within government
health services. According to the Karnataka Lokayukta Act, 1984, the Lokayukta has
authority to investigate complaints from citizens about mal-administration and to initiate
prosecution. It is headed by a sufficiently high judicial authority. In addition, there are other
forums to take disputes or complaints regarding healthcare services, including the Karnataka
Health Adalat, the Karnataka State Human Rights Commission, the implementation of the
RTI Act, innovations in the area of Public Interest Litigation, as well as forum for grievances
against medical practitioners or medical institutions, such as the Karnataka Medical Council
and complaints under the Consumer Protection Act. The Government may take necessary
steps to revive and make more effective the office of the Vigilance Director (under the Health
Directorate).

2.1.6.4 Provide a comprehensive legal and regulatory framework that guides sector
actions

The department of health shall facilitate the formulation of a Public Health Bill/Act and
ensure its implementation and regulation. The Public Health Bill/Act will also incorporate the
necessary and relevant Health Regulations. The department of health shall review, revise and
develop norms, standards, legislative documents to harmonize and protect the quality of
health services provided by all stakeholders in the health sector.

2.1.6.5 Accreditation of medical colleges, hospitals both in the public and private sector

The State shall ensure that all hospitals, both public and private, shall undergo a process of
accreditation in order to ensure that the standards of care at these hospitals are of an expected
level.

2.1.6.6 Strengthening public participation in hospitals through committees

While the National Health Mission has created hospital management and welfare committees
in all public hospitals, people’s participation in health continues to be weak. A decentralized
health system needs effective participatory environments and platforms for open dialogue and
discussion between the health services and the community. The State shall strive to invigorate
community participation platforms at all levels of health services.
2.1.6.7 Decentralization and health

Since the State is still continuing decentralization in health, support structures need to be developed at the block, district and State levels to take up a lead role in effective implementation of decentralization. The proposed Public Health cadre at all levels may be made responsible to shoulder this responsibility through appropriate HR development.

2.1.6.8 Monitoring and evaluation

The State Health Policy will be monitored using a comprehensive monitoring and evaluation framework based on the objectives set out in the policy. This needs data collection, collation and analysis on diseases, health services, health finances, health workforce, medicines and medical products, health infrastructure and equipment from all stakeholders of the health sector.

In this connection, the SHC conducts bi-annual reviews (that involve all stakeholders) to assess performance. At the first review, priorities for the year will be identified while the second review mission will assess the progress being made. At the middle of each Strategic Plan period, a mid-term review will be undertaken to assess progress made towards set goals and to inform intervention measures for the remainder of the plan period. In the last year of the Strategic Plan, the final evaluation of the plan will be undertaken, as well as development of the new Strategic Plan.

The department of health shall adopt sector-wise approaches to harmonise and align planning, financing, implementation monitoring and evaluation of the health sector. The State shall from time to time review and revise its organisation and management structures to respond to new developments and challenges in order to gain and maintain high efficiency in the provision of healthcare. The Government shall encourage partnerships and the Department of Health shall lead and coordinate all partnerships in the health sector through the creation of different bodies for coordination at State and local levels.

2.1.7 CROSS CUTTING ISSUES

2.1.7.1 Public private partnerships

The State Policy recognizes the role of the voluntary and private sectors (not-for-profit) in providing healthcare. Though already existing, in an ad hoc and often informal manner, public, private and voluntary partnerships will be further developed in a planned, systematic manner in order to develop in spirit and practice for better healthcare and also for the optimal utilization of health resources, always keeping larger public health interest in mind and ensuring the effective monitoring of such partnerships. Areas for partnerships will be carefully identified to ensure the maximum public health benefit. The State shall also ensure that public and private entities (not-for-profit) in such partnerships are mutually beneficial
and are able to keep public health interest as the goal. Private sectors (not-for-profit) entities involved must be accompanied by transparency along with defined programmes, standards and accountability.

2.1.7.2 Environmental health and medical waste disposal

The policy recognises that health is intricately linked to the environment within which people live, both within households, as well as with respect to the air, water, noise and the larger climatic variations. Unplanned industrialization, inadequate monitoring and control and excessive use of chemical pesticides, can and do have serious health effects on people. Air pollution through vehicle and factory emissions, as well as water pollution through untreated sewage is an important problem in our cities. Various international bodies have also urged to take into account the problems imposed by climate change, especially on vulnerable communities and geographies. The State shall strive for identifying linkages and coordination with pollution control boards, transport departments and city planning authorities to ensure mitigation of health impacts of environmental factors.

The State will establish a healthcare waste management infrastructure to ensure proper treatment of biomedical waste not only in large cities, but also in all districts and select talukas, either through Public–Private partnerships, or with the assistance of Pollution Control Boards.

2.1.7.3 Health systems research

Research and evidence are important inputs into State policy, programmes and practice. The State recognizes the importance of investing in cutting-edge biomedical research on one hand, but also in socially relevant health policy and systems research on the other. The State has established a health system resource centre under National Health Mission, which shall be empowered and strengthened to establish a research cell in that organization with the support of public health institutes supported by State government. The department of health shall enter into strategic partnerships with resource centre as a link, with public health research institutes. At least 1% of the State’s health budget shall be allocated as a norm for monitoring, evaluation and research on health policies and systems research. This shall include research on modern medicine, healthcare and AYUSH systems.

The State department of health prioritizes health policy and system research in order to support evidence based policy and intervention formulation, identifying gaps and critical factors for special needs for vulnerable groups. Particular attention will be given to how research can be used to guide the development and implementation of health systems, health promotion, environmental health, disease prevention and early diagnosis and treatment. The health sector shall take the lead in formulation of the agenda for operations research while other institutions such as public health institutes shall be more involved in the execution of research. This will be achieved through the: development of a prioritized State health system and policy research agenda; effective dissemination of research findings; harnessing development partners’ and government funds to implement the State health research agenda; promotion of research to policy dialogue in order to ensure that research is relevant to the
needs of the State; strengthening of health research capacity in institutions at all levels and developing quality human resource and infrastructure. Some of the action points in setting the strategic direction for health research in Karnataka are as follows:-

- Develop and implement a comprehensive research agenda for health incorporating, epidemiological, clinical and health systems research together with sociological, ethnographic and other multi-disciplinary methods, with recognition of the role of diverse disciplines and methodologies including participatory research methods.
- Commit equitable funds for promoting health research, with a target consistent with the burden of health problems in the State.
- Invest in building research capacity in state health system resource centre and research both through existing institutions and developing new institutions focused on niche areas.
- Foster partnerships between public health institutions, Medical College Departments of community medicine with the District Health officer and State officers, and with appropriate NGOs and research institutions to implement priority health research.
- Develop sites in different regions of the States, around such partnerships, to monitor population health and evaluate health programs.
- Develop and facilitate mechanisms for dissemination of research findings and for translating research findings into action at the service delivery level.

2.1.7.4 Differently abled-friendly health system

All hospitals in the State shall undertake necessary modification to be differently abled-friendly and improve access for people who are physically and mentally challenged. They will also have a dedicated centre/facility with a person trained and assigned to ensure comprehensive care for such individuals in the hospital.

2.2 II – SOCIAL POLICY INTERVENTIONS THAT PROMOTE HEALTH (ADDRESSING SOCIAL DETERMINANTS OF HEALTH TO REDUCE INEQUALITY)

Population’s health (before falling sick) is largely determined by the social determinants of health such as good housing, agricultural productivity and food availability, affordable-accessible multimodal transport system, employment rates, education services, safe water and sanitation, efficient garbage disposal services, safe working conditions, public parks, play grounds and many more. The health of the population comprises social determinants as well;
therefore, State health policy should have convergence in articulation and cross-connectivity to facilitate other public policies keeping the population’s health as the center of focus in line with the health in all policies approach advocated by the WHO.

2.2.1 Food security, hunger and malnutrition

Convergence shall be sought between health and all related departments ranging from agriculture to women and child development to promote health, and tackle hunger and malnutrition. Convergence between health services and the ICDS system shall be an important focus. Early detection and management of malnutrition and establishment of nutrition rehabilitation centres at secondary and tertiary care shall be an important component. Strategies to improve nutrition shall also lean on traditional diets and AYUSH approaches rather than expensive private sector driven nutritional supplements.

Affordability and access to fruits, vegetables, cereals and pulses is very important in ensuring health promotion and nutrition especially for the elderly and for people with non-communicable diseases. The AYUSH tradition especially focuses on improving health through diet recommendations and hence accessible and affordable fruits and vegetables and investing in efficient supply chains in these sectors will also have public health benefits.

2.2.2 Water and sanitation

Water and sanitation are known to be one of the earliest known drivers of ill-health. The incidence of water-borne diseases and disease outbreaks correlate to gaps in safe water and sanitation at the local level. Joint inter-sectoral response to address these outbreaks and prevent future outbreaks would be developed. Anganwadi workers and ASHAs supported by Village Health, Sanitation and Nutrition Committees (VHSNCs) and ICDS structures would be trained and supported to address safe water and sanitation. VHSNCs capacity for collective action to protect water sources and promote sanitation would be built. The health system shall work in close coordination with water supply and sanitation systems towards local strategies for solid waste management and protection of water sources from contamination with sewage and other chemical waste. All hospitals and health centres shall ensure safe drinking water availability for all patients and attendants. Similarly, hygiene and sanitation facilities in all government hospitals shall be given utmost importance to improve the quality of healthcare, and also to address the failing trust and credibility of public services.

2.2.3 School health program

The State shall promote the concept of every school and pre-school being a primary healthcare facility for all relevant screening, health education, health promotion, dietary supplementation, and ensuring continuity of healthcare in some contexts and even the management of common illness. This requires a school health programme organised by the department of schools and supplemented by the health department. The State will leverage and strengthen the school mid-day meal programmes by identifying and correcting child malnutrition and adding to it, other nutrition related interventions like weekly iron and folic
acid supplements, de-worming etc. Again this is organised by the school department with support by the health department. The school and its environs itself should be a site of behaviour change that encourages safe health practices- including hand washing, use of sanitary latrines, menstrual hygiene etc.

2.2.4 Food safety quality monitoring

Ensuring the quality and safety of food in canteens, hotels and private enterprises is an important health and safety measure. The health department shall be capacitated with more training and human resources to discharge this function.

2.2.5 Road traffic accidents prevention and management

Road traffic injuries are an important contributor to morbidity and mortality in the State. In the interest of people's health, close and effective cooperation shall be sought with road transport and public safety agencies and health advisory to these agencies to strengthen road safety. Within the health system, all district hospitals and select taluka hospitals shall be upgraded to provide trauma care.

2.2.6 Nutritional interventions

The State shall leverage the potential of public agencies such as HOPCOMS and KMF to improve the nutritional rehabilitation and canteen facilities in all its hospitals, so that patients in public hospitals receive a balanced diet.

2.2.7 Gender, caste and socio-economic groups

All policies, programmes and schemes shall take into consideration gender, caste and socio-economic status as important social barriers preventing universal and equitable access to healthcare. While universality will be a guiding principle rather than charity-based approaches, there shall be a strong focus on equity in all health and related policies, programmes and schemes to ensure that societal barriers in the form of caste, socio-economic groups, gender and other social vulnerabilities do not hinder access to these schemes, services and programmes. In order to ensure equitable allocation of resources, the regional and inter-district disparities would be factored into the mechanisms of allocation of resources among the regions and districts.

Disadvantaged groups: The Scheduled Castes and Scheduled Tribes will receive priority attention. Besides primary care, access to complete treatment, follow up and referrals, to secondary and tertiary care services at subsidized costs will be assured. For indigenous people, a package commensurate to their needs will be developed, offered and implemented.

Gender: The poor status of women’s health, the declining gender ratio and lack of total coverage and quality of mother and child health services (including instances of disrespect and abuse during delivery) are areas of concern. Measures to improve women’s health status and access to care will be implemented and closely monitored. Efforts will be made to increase the number of women doctors, senior and junior health assistants, male / female
(Lady Health Visitors and Auxiliary Nursing and Midwifery) by providing adequate reservations for women in health educational institutions and appointments and providing better residential facilities and relation to emergency obstetric care and personal security. Widely prevalent conditions affecting women, such as anaemia, low backache, cancer of the cervix, uterine pro-lapse and osteoporosis will be addressed. Services for psychosocial problems and emotional distress will be developed. Empowerment of women for management and monitoring of health services will be encouraged and supported. Programmes for the special needs of adolescent girls and boys will be developed in collaboration with the Department of Education. In addition to Strengthening of Enforcement of Prenatal Diagnostic Techniques (Regulation and Prevention of Misuse) Act social interventions to welcome the girl child through, promotional measures is to be taken to correct the declining gender ratio.

**Other Vulnerable Groups:** Innovative, flexible and collaborative approaches would be adopted for meeting the health needs of street children, out-of-school and working children, persons with disabilities and other vulnerable groups in the community.

**2.2.8 Environment and health:**

Efforts will be made to increase community awareness about the inter-linkages between environment and health. The impact of climate change on health and methods to mitigate them or adapt with children and youth in schools and colleges through health promotion initiatives, building on existing knowledge. Steps to make all health institutions (public, private, voluntary) environmentally friendly through adoption of policies and practices will be introduced.
2.3 III – POLICY ENCOURAGING HEALTHY LIFESTYLES
(INDIVIDUAL/GROUP LIFE STYLE FACTORS/DETERMINANTS)

As mentioned above, modifiable lifestyle factors are desired to be an important integral part of health policies. This is primarily because it demands fewer resources and brings perceivable changes. But, there is a limitation to this intervention - modifiable lifestyle factors constantly change and responsibility is vested in individuals for population’s health instead of public institutions to address structural determinants of health. While recognizing that the responsibility for ensuring and protecting health of the population rests equally with the State, the policy shall identify broad directions towards interventions that promote and protect health at an individual level such as:

- Reduction of smoking/tobacco consumption regulations
- Reduction of alcohol consumption regulation
- Reduction of risky sexual behavior
- Reduction of consumption of unhealthy junk food
- Promotion of balanced diet
- Promotion of physical activity

2.3.1.1 Strengthen tobacco control and reduce industry interference

Nearly one in two men and one in five women in India consume tobacco in one form or another. Directly or indirectly, tobacco kills one million adult Indians every year. At the family level, expenditure on tobacco crowds out spending on education and essential items such as food. At the societal level, we are yet to come to terms with the ecological impact, through deforestation and environmental degradation, of large-scale tobacco farming and manufacturing processes. However, Karnataka is one of the pioneers in effective implementation of tobacco control legislation. The State shall continue to ensure that the new and young population shall be offered healthy choices through school and society-based programmes, and thereby limit recruitment of new smokers through tempting advertisement and endorsement of tobacco products. The policy also encourages a progressive system of increasing tobacco taxation in line with international commitments made by the Indian government, as well as the health burden imposed by tobacco consumption in various forms. The State shall invest in a tobacco cessation infrastructure at all district levels in order to help people seeking help with addiction to tobacco use.

2.3.1.2 Regulation and Reduction of alcohol consumption

Alcohol dependence (and the related psychological and social impact) is a complex medical and social problem, affecting several sections of the society, and especially having indirect ill-effects on children, women and poor households. Irresponsible and harmful alcohol use is
also closely linked to road traffic injuries and violence. The State shall ensure sufficient geographical spread of alcohol de-addiction infrastructure in its district hospitals, as well as invest in a primary healthcare and school based programme to promote healthy choices among adolescents. Existing regulations and taxation shall be used to limit harmful consumption of alcohol.

2.3.1.3 Reduction of risky sexual behaviour

The policy shall invest in effective adolescent and reproductive health education at schools and PHCs.

2.3.1.4 Reduction of unhealthy food and promotion of balanced diet

In line with the need for improved nutrition and health, the policy encourages all government departments and schemes to promote traditional diets drawing from local food over multinational pre-packaged junk food.

2.3.1.5 Promotion of physical activity

Physical activity is an important determinant of various lifestyle-induced disorders as well as a contributor to population health. The State shall pursue a policy of promoting physical activity through the establishment of parks, playgrounds and public spaces for exercise and physical activity.

2.3.1.6 Community empowerment for self-reliance of households in improving and promoting health

Traditional health culture of the Indian households includes hundreds of eco-system specific practices for management of common ailments, nutrition, prevention, safe drinking water, ethnic diets and so on. This policy commits to validate and disseminate health education through building upon these practices. The policy encourages the use of ICT for this purpose in order to achieve the desired scale. Certification and accreditation of community-supported village-based traditional health practitioners shall be pursued. It is anticipated that this policy intervention will result in an innovation towards establishing a new dimension in the definition of the health system by introducing a non-institutional tier for health delivery and promotion.

3 OVERARCHING IMPLEMENTATION AND REVIEW FRAMEWORK FOR KPHP

The implementation of the policy aims at ensuring harmony, improving efficiency, clarifying roles of relevant stakeholders and effective involvement of communities, non-governmental organizations and development partners through the proposed structures. The State health policy will be implemented through a ten-year State integrated strategic plan with agreed goals/targets that respond to the needs of essential health programmes and the population.
There are a number of stakeholders whose policies and activities will directly or indirectly impact on the implementation of this Policy.

**STAKEHOLDERS’ SUGGESTED ROLE IN STATE HEALTH POLICY IMPLEMENTATION**

<table>
<thead>
<tr>
<th>Depts./key policy actor/s</th>
<th>Role</th>
</tr>
</thead>
</table>
| **Chief Minister**       | - Clarify and set mandate to the department of health.  
- Ensure the implementation of health policy through inter-sectoral coordination |
| **The Cabinet**           | - Ensure adequate legislative, legal and administrative support/framework.  
- Review the performance through the legislative committee on health. |
### I- HealthCare interventions that promote health (Proximal determinants of health)

<table>
<thead>
<tr>
<th>Department</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Department</td>
<td>Oversee and provide leadership in health policy implementation. The department shall also lead the process of agenda-setting on various issues identified with other related departments</td>
</tr>
<tr>
<td>Department of Finance</td>
<td>Support the department of health in developing the health sector wide comprehensive sustainable health development pool of funds and health financing approaches as specified in the health policy</td>
</tr>
</tbody>
</table>

### II- Social policy interventions that reduce inequity (social determinants of health)

<table>
<thead>
<tr>
<th>Department</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Education</td>
<td>Ensure health education, communication for community empowerment</td>
</tr>
<tr>
<td>Department of Agriculture</td>
<td>Ensure food safety, security, affordable nutritious food to all especially to the vulnerable.</td>
</tr>
<tr>
<td>Department of Public Distribution System</td>
<td>Ensure accessible, balanced food grains to all vulnerable populations in the State. Establish monitoring and evaluation through e-portal to monitor the indicators.</td>
</tr>
<tr>
<td>Department of Labour</td>
<td>Ensure safe working conditions through proper regulations and implementation of those regulations. Develop monitoring indicators and improve vital information related to labour health and welfare services</td>
</tr>
<tr>
<td>Department of Forest, Environment</td>
<td>Collaborate with department of health and develop OneHealth disease and environmental risk factors surveillance. Implement environmental improvement programs to reduce health risk factors.</td>
</tr>
<tr>
<td>Department of Transport</td>
<td>Priority could be given to develop healthcare centers accessibility by expanding road networks.</td>
</tr>
<tr>
<td>Department of Water Resources</td>
<td>Provision of safe drinking water to all, more specifically to all healthcare centres in the State.</td>
</tr>
<tr>
<td>Department of Energy</td>
<td>Provision of sustainable renewable energy for all</td>
</tr>
<tr>
<td>Department of Youth Empowerment</td>
<td>Create an environment for youth behavioral change communication.</td>
</tr>
<tr>
<td>State Health Council</td>
<td>Oversee and advise the health sector on policy promotion, policy implementation monitoring and possible legislation to health issues wherever necessary.</td>
</tr>
<tr>
<td>Department of Science, Technology and IT/BT</td>
<td>Promote State relevant health science/molecular science research in collaboration with the department of health. Promote research in AYUSH, traditional medicine practices, traditional plants to preserve and promote local health healing options.</td>
</tr>
<tr>
<td>Small and Medium Scale Industries</td>
<td>In collaboration with the department of health develop State relevant pharmaceutical production and supply at affordable prices.</td>
</tr>
<tr>
<td><strong>Department of Commerce and Industries</strong></td>
<td>In collaboration with the department of health, develop food price market monitoring-surveillance systems. Conduct of Food quality assessment and use appraisal system.</td>
</tr>
<tr>
<td><strong>Department of Rural Development and Panchayati Raj</strong></td>
<td>In collaboration with the department of health, develop taluka and district level autonomous professional managed healthcare trusts with adequate funding to monitor, manage, organize and address local health service requirements.</td>
</tr>
<tr>
<td><strong>Department of Women and Child Development</strong></td>
<td>In Collaboration with the department of Health, to oversee the welfare and development of women, children, elderly and disabled of the state</td>
</tr>
<tr>
<td><strong>Department of Urban Development</strong></td>
<td>Manage solid, liquid and bio-medical waste management, as derivatives of health have a bearing on health outcomes for which department of health is responsible</td>
</tr>
</tbody>
</table>

### 4 CONCLUSION

This policy enunciates a commitment towards improving the health of the people of Karnataka 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. 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 Karnataka. 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.