Vision 2030 of the Planning Commission of Pakistan – strategic health imperatives

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This paper has been configured to serve as the health section of the document, which will capture the key directions of the Vision 2030 forecasting exercise of the Planning Commission of the Government of Pakistan. The Vision 2030 exercise envisages projecting into the future so as to identify, which of the many alternative futures are possible for Pakistan taking into account both global transformations as well as many aspects of our own societal changes with particular reference to demographic and epidemiological transitions and population aging. The purpose of this health section is to articulate the health related challenges that the health system of Pakistan is forecasted to face over the next two decades based on the evidence relating to the currently available burden of disease projections and the demands these will impose on health systems both in quantitative terms and configurationally. Within this framework, the paper outlines:

1. The background to set the overarching context.
2. The health systems configuration of Pakistan so as to set the health systems, policy and operational context to which the subsequent discussion needs to be extrapolated.
3. The current health status with reference to key health indicators and the trends over time. This section also includes progress if any in health outcomes.
4. The key health systems challenges which are contributing to the observed intransigency of key health indicators.
5. The envisaged paradigm shift in the health sector. This section will focus on population dynamics; changes in burden of disease as is evidenced by forecasted shifts in epidemiological trends, changing landscape of public-private roles consequent to liberalization of trade and opening of markets and the emerging role of the private sector in the delivery of services.
6. The last section will propose a way forward.

1. Background

The planet earth’s environmental and ecological transformation is a subject of much ado as are the contemporary concerns around the power dynamics, which will determine the global epicenter economically, militarily and politically over next two to three decades. This is justifiably a subject of critical thinking and planning. But sadly, the implications of this makeover for the social sector remain largely unrecognized. In the health sector more specifically, the thinking that health needs to be delivered as a public good – modeled on the Alma Ata ethos – still holds ethical merit backed by constitutional legitimacy and state

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commitment as in many developing countries; this model is also being followed in Pakistan where the delivery of health is seen as a State prerogative with the State attempting to provide health for all. How the booming market dynamics play into this calculation, how vested interests, profit margins and the omnipresent role of the private sector cut across this paradigm, how a globalized world impacts access and affordability issues in health and how urbanization and an aging population necessitate new demands for health care is seldom a focus of attention.

It is here that the responsibility for redefining the ‘rules of the game’ fall on initiatives such as the recently launched Vision 2030 – a valid foresight exercise of the Planning Commission of Pakistan designed to assist in defining the needs of a future Pakistan. The program gives due prominence to health through its ‘prosperous society sub-theme’ on health care and social sector. This initiative will articulate, strategic directions to address the aforementioned issues. In a broader national context, the initiative is also structured to assist the social sector with reaping the benefits of economic growth on which, Pakistan appears to have set forth, recently.

2. The configuration of Pakistan’s health system:

There are several health systems operating in Pakistan. By way of a definition a health system is an arrangement where a non-overlapping population is served by a system, which raises and allocates funds for sustaining its own health service providers and delivers services through a service delivery infrastructure which may also be sustained through this funding mechanism. By this definition some health systems in Pakistan are truly systems in their own right. For instance health services provided by the armed forces, parastatals such as Sui Gas, WAPDA, Railways, Fauji Foundation and the Employees Social Security Institution. Of these the latter two pool for insurance functions and therefore health insurance becomes a mode of financing whereas in the former it is the allocation of general revenues earmarked for health services. However, these collectively cover about 10% of the population and the rest of the population of the country is served by a mixed arrangement. The State provides care through a three tiered service delivery infrastructure governed by the Federal Ministry of Health, the Provincial departments of health and the districts administrators and a range of healthcare providers serve in these establishments in different cadres. However, dual job holding is ubiquitous and almost all moonlight in the private sector due to the differences in incentives. As a result of this, the private sector provides more than 70% of the personalized curative care – a sector which remains poorly regulated. Constitutionally, health is a provincial subject in Pakistan; however the Concurrent and Federal Legislative lists of the 1973 Constitution outline the roles and responsibilities of the federal and provincial governments. More recently the Local Government Act of 2000 has devolved service delivery prerogatives to a district level, albeit with some administrative and fiscal lapses. In a nutshell therefore, the Federal Government plays a normative role whereas the provinces and districts are more operationally involved in the delivery of care.

With reference to financing, the Government of Pakistan spends around 0.5% - 0.8% of its GDP on health with general revenues being a major mode of financing. However, if the out-of-pocket payments which are the major source of health financing of the country are taken
into account this increases to around 3% of the GDP. The Government spends 3.2%,¹ of its expenditure on health and although in absolute terms allocations for health have increased significantly over the last 10 yrs, utilization issues, poor governance, and leakages from the system abound as a result of which the question relating to the efficiency of allocation is always valid. Moreover, despite the evidence that alternate modes of health financing can make services more equitable and efficient there have been limited attempts in the country to mainstream those given that these would require long term changes with major structural arrangements at the institutional level.

Pakistan’s health sector goals – those that are drawn on the Poverty Reduction Strategy Paper, the Millennium Development Goals (MDGs) and others that are part of the Medium Term Development Framework 2005-10 (MTDF) ‡ – focus on achieving specific programme-related targets and a number of programmes have been structured to achieve these targets. Broadening the base of the programs to hepatitis, NCDs and blindness reflect expanding the focus to what can be termed as an ‘local MDG+ agenda’. However despite the existence of a number of health systems and new initiatives, critical challenges still remain to be addressed.

3. Health outcomes in Pakistan – a snapshot

The following key indicators provide a snapshot of the status of health indicators in Pakistan. These have also been summarized in Table 1.

**Burden of disease estimates** for the year 1998, expressed as a percentage of total number of DALYs lost according to the causes of diseases shows that an equal burden can be attributable to infectious vis-à-vis non-communicable diseases (38.4% vs. 37.7%); the latter clearly surpassing if the burden of injuries (11.4%) is added.

**Maternal and child health:** the current Maternal Mortality Ratio stands at 350, which is one of the highest even by south Asian regional standards. In addition, a wide variation is seen within the country; MMR is reported at 290 in Karachi and 690 in Balochistan.§ At an intermediate outcomes level however, improvements have been seen in maternal health indicators. The percentage of pregnant women who receive at least one ante-natal consultation has increased from 30% to 50%; the percentage of women receiving post-natal consultations has increased from 11 to 23% and the proportion of births attended by Skilled Birth Attendants has increased from 18% to 31% over a ten year period (from 1996/7 to 2005/6) and Skilled birth attendants have increased from 18% in 1999/2000 to 31% in 2003. Contraceptive prevalence also improved in the last five years from 12% in 1991 to the reported levels in 2001 which stood at 27.6%.

In relation to child health, the Under Five Mortality Rate of 107, Infant Mortality Rate of 74.6, and Neonatal Mortality Rate (NMR) of 43.1, and Pakistan ranks high in terms of child

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¹. Data for the year 2005/06
§. Planning Commission, Government of Pakistan, Planning and Development Division, Government of Pakistan, 2002
mortality with respect to regional comparisons.**†† A wide provincial variation is seen in Infant Mortality Rates with IMRs of 71, 104, 77 and 79 per 1,000 live births reported for Sindh, Balochistan, Punjab and NWFP, respectively.‡‡§§ At an intermediate outcomes level, a mixed picture is seen. This includes a positive trend with respect to immunization as is evidenced by the increase in overall immunization coverage from 44% in 1995-96 to 77% as reported for the year 2004-05. However on the other hand, the situation is not as positive with respect to malnutrition – another strong determinant of child health, with 36.8% of children stunted, 38% underweight and 13% wasted.***

In relation to **communicable diseases**, infectious diseases contribute significantly both to adult as well as child mortality and morbidity in Pakistan; estimates indicate that they account for approximately 38% of the total burden of disease within the country. The child mortality spectrum in Pakistan in particular is dominated by diarrhoeal diseases and Acute Respiratory infections. In certain cases, as with diarrhea and dysentery, the burden has remained static over the last 5 years whereas in other instances as in the cases of measles and whooping cough, proportional morbidity has reduced all over the country.

In relation to tuberculosis, the incidence is estimated to have fallen from 177 per 100,000 population in 2001/2 to 160 in 2004/5 and improvements at intermediate outcomes and process level have been shown.††† However as opposed to this many clinicians believe that the burden of Tuberculosis which is captured through these systems represents the tip of the iceberg; it is also believed that the natural history and pattern of tuberculosis is likely to change significantly in the country – if it has not already – given the increase in immune deficiency states and the emergence of drug resistance. The malaria indicators – both at outcomes and process level – have remained static over the last 5 years. Furthermore, the estimated prevalence of chronic carrier state of Hepatitis B amongst high-risk groups ranges from 6-12% whereas prevalence of Hepatitis C in the high risk population is much higher – ranging from 15-25%.‡‡‡

With respect to Poliomyelitis, the number of confirmed cases of Poliomyelitis based on AFP surveillance data from across the country has declined from 1155 in 1997 to six in 2006. However the trends show that despite taking much longer, Pakistan has come to a stage where the transmission of polio virus is at its lowest compared to the situation in the 1990s and if the present trend continues, the eradication of polio is a likely reality over the next three years. In relation to HIV, Pakistan was considered at a ‘low level’; however, recent data show high prevalence among some vulnerable groups which shifts the entire epidemic scenario of the country to a higher stage – at a ‘concentrated level’. Notwithstanding, lessons from global

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‡‡. Government of Balochistan. District-Based Multiple Indicators Cluster Survey 2003-04; Quetta: Planning and Development Department; 2004
***. National Health Survey of Pakistan 1994, Health profile of people of Pakistan, Pakistan Medical Research Council in collaboration with Federal Bureau of Statistics and department of Health and Human services, Islamabad 1998
†††. National Tuberculosis Control Programme; Ministry of Health, Government of Pakistan, Islamabad, May 2006.
experiences coupled with the large element of denial in Pakistan are instructive and indicate that the current momentum needs to be built upon, even further. §§§§

Amongst the **non-communicable diseases**, incidence data are available only for cancers. The Age Standardized Incidence Rates (ASIR) for all cancers except cancer of the Urinary Bladder and Skin have increased as evidenced by ASIRs in 1998-2002 in comparison to data in 1995-97. A high burden of the risks for non-communicable diseases is evident in these indicators. More than 24.3% of the population over the age of 18 years is reported to have high blood pressure. †††† More than 76% males and 73% females consume less than one serving of fruit a day and more than 91% of the population does not engage in leisure time physical activity; moreover, 30.7% males and 40.7% females are overweight according to international standards. On the other hand, data on prevalence of smoking shows improvements; 11.8% of the population in the urban and 19.7% in the rural areas currently smoke whereas the earlier population based data from the National Health Survey in 1994 yielded a much higher prevalence.

A considerable burden of mental illnesses is also evident with a 34% prevalence of anxiety and depressive disorders in the general population and with prevalence as high as 66% in females in the rural areas. Similarly, more than 1% of the population is reported to be blind within the country.

### 4. Envisaged systems challenges:

The following challenges exist at a health systems level within the country

**Area no 1: Evidence and its utilization:** paucity of locally-applicable evidence pertinent to many aspects of decision-making, issues with utilizing existing evidence and lack of commitment to take appropriate policy decisions based on evidence act as impediments to the utilization of evidence. This is compounded by limited rational accountability of the decision-making process. Evidence generally points to the need for long-term remedial measures; however, a combination of factors – lack of institutional maturity, career structures that foster short-sightedness and therefore orientation around short-term outputs – prevent evidence-based enduring actions from taking root

**Area no 2: Lack of an inter-sectoral approach to health:** It is widely recognized that factors, which determine health status range much broader than those that are within the realm of the health sector and that modern healthcare has less of an impact on population health outcomes than economic status, education, housing, nutrition, sanitation, population dynamics, human development and improvements at a governance level. As opposed to this, health is viewed in a *healthcare system* rather than a *health systems* context

**Area no 3: Lack of attention to health systems:** decades of focus on programme-based service delivery and emphasis on infrastructure have led to probably an inadvertent neglect at

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the health systems level; ironically, all these lines of service delivery require systems-level solutions. Gaps in meeting programmatic goals and objectives can, therefore, only be amenable to bridges at the systems level.

**Financing issues:** although spending has been increased recently, issues of fund utilization still prevail and alternate mechanisms of financing health have not been mainstreamed into the delivery of care – some of which have the potential to make financing patterns more equitable and efficient. Furthermore disparities in the spending patterns have been noted – with regard to the preventative vis-à-vis curative allocations in clear violation of stated policies. The consecutive 5-Year Plans shows that clinical services have consistently consumed more than 45% of the total health budget.‡‡‡‡

**Service delivery challenges:** Pakistan has one of the largest public sector owned service delivery infrastructures in the world at a primary health care level; however these remain underutilized, which question the validity of investments made in them. Furthermore, public health interventions also suffer from implementation challenges – largely owing to issues at a governance level.

Financing and service delivery challenges have also manifested themselves as rural urban disparities. Seventy percent of Pakistan’s population lives in the rural areas; however health indicators in the rural areas are considerably worse compared with urban areas. Recent surveys have also reported significant rural-urban disparities in child health status. The Under-5 Mortality Rate in the rural areas of the province is 117 compared to 68 in the urban areas whereas the Under-5 Mortality Rate in the city of Karachi has been reported at 55 per 1000 live births.§§§§ Stark disparities have also been reported between the rural (45%) and urban (30%) prevalence of malnourished children in various parts of the country.

**Governance and implementation:** policies and legislative and regulatory frameworks remain poorly implemented due to generic issues inherent to the implementation of laws. Administrative bottlenecks, decision-making delays and onerous financial and administrative procedures are known to undermine programme implementation.

**Human resource:** the country’s focus on producing more doctors has led to marked improvements in the doctor-to-population ratio; conversely, challenges relating to quality and capacity and the effective and equitable deployment of health-related human resource still loom large. These issues are further exacerbated by poor regulation of the private sector, amongst an array of challenges.

**Area no 4. Federal-provincial-district level systems interface:** over the years, overlapping services have created ambiguities between federal and provincial roles and responsibilities and administrative authority; these issues have been compounded by conflicts over sharing of resources and financial arrangements – a problem, somewhat complicated further after the passage of the Local Government Act of 2002.

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**Area no 5: Untapped public-private interface:** more than 50% of the care is provided by the private sector and out of pocket payments are known to be the major contributor to financing health care within the country. The role of the private sector becomes all the more important in view of the need for alternative service delivery arrangements to make Government owned health facilities viable and sustainable. Mainstreaming the role of the private sector would also necessitate careful attention to a number of other regulatory considerations relating to institutional arrangements, performance assessment, credentialing of doctors, continuing medical education, licensing and accreditation of service delivery facilities and quality assurance mechanisms.

**Area 6: Disease burden disparities:** non-communicable diseases contribute significantly to adult mortality and morbidity and impose a heavy economic burden on individuals, societies and health systems within Pakistan. However this remains largely unrecognized and manifests itself as a disparity in resource allocations – communicable diseases vis-à-vis non-communicable diseases. These diseases have clearly emerge as major contributor to costs of care in a recently reported population-based cross-sectional survey, which has shown that 37.4% of the households spend an average of Pak Rs. 405 on the treatment of communicable diseases whereas 45.2% of the households spend an average of Pak Rs. 3935 on the treatment of non-communicable diseases. These data show that a significantly higher percentage of households spend more on treatment of non-communicable diseases compared with communicable diseases, hence serving as a proxy indicator of the double burden of disease. Furthermore, projections indicate that the ratio will continue to reflect a progressively shifting burden towards NCDs.

**Area no 7: Limited attempts to innovate:** the public sector model in health care delivery does not provide the flexibility to innovate.

5. The forecasted challenges in the next 4 decades:

There are several reasons why the health sector needs conceptual restructuring. These are articulated hereunder:

1. **The epidemiological transition** in health is known to reshape the way disease patterns will affect populations and the manner in which population subgroups will be affected. Pakistan currently bears the doable burden of disease; infectious diseases are still rampant whereas non-communicable diseases have also become epidemic and already according to the burden of disease estimates for 1996, the burden of infectious and non-communicable diseases was equal (38% vs. 37%). Future projections on epidemiological trends within the country indicate that as life expectancy will increase and as populations urbanize and take on western lifestyles, their risk for non-communicable diseases will increase. This paradigm shift in disease patterns has implications for resource allocations and service delivery capabilities, which will have

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to be reconfigured from being ‘acute care orientated’ as for infectious disease control to ‘long term chronic prevention and care’.

2. **Population growth and demographic shifts:** Pakistan is the sixth most populous country in the world, and although the Population Growth Rate has declined from over 3% in the 1960s and 1970s to the present level of 1.9% per annum; this is still an unacceptably high rate of growth.\(^{\text{++++}}\) Increasing population size has a number of implications for health. Firstly, within the context of service delivery in general, the issue of coverage will have to be addressed. Secondly, maternal and child health related services in particular will have to be responsive given that 4 million children are added to the population each year and 4-5 women go through the reproductive process. And lastly, service delivery arrangements will have to cater to population dynamics in terms of rural to urban migration trends, for which there is evidence.

3. **Emerging role of the private sector:** on issue of the viability of the state-delivery-of-care-model, it must be understood that broader changes in the macro-economy and the emergence of the private sector as the engine of growth have also led the private sector to offer what is regarded as ‘social services’ by the State – albeit at a cost. As already mentioned, the level of incentives to offer care in the private sector have led to the institutionalization of dual job holding by health professionals; these considerations have systematically undermined the State’s health service delivery infrastructure: basic health units do not function because of a lack of motivation to operate them and hospital high tech equipment is often out of use because of lack of incentives to operate them. On the other hand, quality issues notwithstanding, we see the private sector – infrastructure as well as human resources – booming and delivering care in the market for a cost in an environment which is largely unregulated. This is likely to grow even further in the next 2-3 decades as the role of the private sector increases owing to the governments liberalization policies.

4. **Globalization:** globalization has brought in its wake many contemporary challenges. The technology boom and the speed and access to interconnectedness has created a huge opportunity for capacity building, streamlining quality and efficiency in the delivery of care and management, and knowledge sharing but on the other hand also the risks of spurring costs as a result of over-utilization especially in the unregulated private sector. Liberalization of trade under WTO in a globalized community brings its own access and affordability issues particularly in terms the affordability of newly discovered medicines and under GATS, the mainstreaming of the market mechanism in the delivery of care in a manner that is detrimental to the interests of the marginalized, is a potential threat. In a globalized world, pandemics are known to spread with relative ease as have the SARS and Avian flu epidemics shown and mass damage by biological weaponry and humanitarian crises as a result of conflict and acts of terrorism are known to have health implications. These considerations will require responsive solutions over the next two to three decades.

5. **The scope of health itself:** over the years, evidence has shown that health is not all about what the health sector can deliver. For instance, the most successful intervention to reduce child mortality is not related to the number of hospitals or doctors but investments in the mother’s level of education; the most effective intervention to reduce tobacco related morality is tax, tariff and price related and the

most effective intervention to reduce childhood diarrhea is in the municipal and not the health domain. The health sector will have to increasingly look at solutions within the intersectoral scope.

6. The way forward:

These data included herewith in section three provide evidence of both attempted efforts as well as impediments. Drawing inferences from the data presented herewith and the challenges outlined in section 4 and the extrapolation of these considerations to the foresighted challenges articulated in section 5 has led to the following recommendations for further action:

Area no 1: Evidence and its utilization: Developing a sustainable mechanism for evidence generation, generating evidence for policy and fostering the linkage of evidence with policy for decision making should be a priority within the health sector. Fortunately work in this direction has already begun through the collaborative work between Heartfile, the Federal Bureau of Statistics and the Ministry of Health to establish a system for the periodic reporting of health indicators within the country – the first publication of which is scheduled to be released shortly.

Area no 2: Inter-sectoral approach to health: the aforementioned considerations around the intersectoral scope of health underscore the need for developing alternative policy approaches to health within its inter-sectoral scope with careful attention to the social determinants of health and several contemporary considerations that influence health status and redefining targets within the health sector in order to garner support from across various sectors and setting these targets within an explicit policy framework in order to foster inter-sectoral action.

Area no 3: Health Systems challenges:

Financing issues: in addition to the continuance of sharper increments in allocation, there is a need to address allocation disparities, improve utilization and develop alternate approaches to health financing – some of which have the potential to make financing patterns more equitable and efficient – particularly with reference to insurance mechanisms and social protection. There is also the need to build conscious safeguards in order to offset the risk of creating access and affordability issues for the poor in the new service delivery arrangements. This includes the establishment of social health insurance as part of a comprehensive social protection strategy that scopes beyond the formally employed sector, providing a widely inclusive safety net for the poor and strengthening of waiver and exemption systems in order to provide subsidies to treat poor patients.

Service delivery challenges: the currently prevailing service delivery challenges need to be addressed by developing alternative service delivery and financing options at the basic healthcare and hospital levels. Options for the former include community co-management.

and contracting out arrangements, maximizing efficiency in the same system or transferring management to lower levels of government – an option complementary to the administrative arrangements within decentralization – whereas the latter involve granting autonomy at a management level and the introduction of cost-sharing at the level of financing. In this respect there is also the need for reconfiguring and re-strengthening the role of the State as the principal steward of the health system in these new models of service delivery.

**Governance and implementation:** administrative bottlenecks, decision-making delays and onerous financial and administrative procedure, which are known to undermine programme implementation need to be the focus of concerted measures. In particular there is the need for institutionalizing civil service and public service reforms centered on good governance, accountability, crackdown on corruption, factoring in of performance-based incentives, mainstreaming managerial audit and building safeguards against political and external interference.

**Human resource:** building the capacity of and effectively deploying human resource, establishing a conducive and rewarding working environment and initiating measures to redress imbalances with regard to the existing staff should therefore be a priority for health systems interventions.

**Area no 4: Federal-provincial-district level systems interface:** clarifying roles and responsibilities and developing an institutional consensus on federal and provincial and prerogatives and administrative authority should also be one of the areas of concerted effort.

**Area no 5: Public-private interface:** establishing a legal, policy and operational framework for fostering public-private partnerships is a structural imperative in order to bring together organizations with the mandate to offer public good on the one hand, and those that could facilitate this goal through the provision of resources, technical expertise or outreach, on the other. Mainstreaming the role of the private sector also necessitates careful attention to a number of regulatory considerations relating to institutional arrangements, performance assessment, credentialing of doctors, continuing medical education, licensing and accreditation of service delivery facilities and quality assurance mechanisms.

**Area no 6: Disease burden disparities:** the current estimated burden of NCDs vis-à-vis non-communicable diseases (37% vs. 38%) is instructive to the current resource allocations in public health and highlights the need to bring allocations for NCD prevention, control and health promotion at par with allocations for infectious diseases.

**Conclusion:**

It is clearly evident that as a result a number of considerations the people of Pakistan as well as the health system needs within the country will change over the next 20 yrs. The major contributors to these changes will be the epidemiological disease patterns shifts currently underway, the population growth trends, and the demographic shifts. On the health systems side the emerging role of the private sector and the access and affordability issues that it will pose and the several contemporary considerations in view of globalization and the widening inter-sectoral scope of health would be contributing to these trends. In view of these considerations, it is also evident that without quantum changes the health system would be
both, unable to provide services as well as will be unable to ensure their provision to cater to the needs of a population which will double today’s size and in an environment where health will be increasing sold for a cost. These challenges are only amenable to a system solutions set within a broad base vision which regards health in its inter-sectoral scope and one that is cognizant of local needs and demands. These considerations underscore the need for an evidence-based approach to a health reform process; the first step in this direction should be the creation of a new health policy which forms the bedrock for these reforms – a policy with a systems rather than a program orientation and one that factors societal or social measures into the planning process. Fortunately, work has already been initialized to develop the Gateway Health Policy which will pay attention to all these considerations; however, as always the challenge will be in its implementation.

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