

Universalizing Healthcare Coverage in Delhi: Strengthening Health System Preparedness with Monitoring-Framework of Population Health

Background: Going along the aim of ensuring affordable and accessible services to all Indians, as per the recommendation of the High Level Expert Group (HLEG) constituted by the planning commission in 2010; India embraced the policy on Universal Health Coverage (UHC). The aim of the UHC policy is vast and encompasses measures by the government to ensure equitable access to promotive, preventive, curative and rehabilitative healthcare services for all nationals, which shall also address the wider determinants of health. It is clearly mandated that the government acts as the guarantor and enabler of health and related services. This obviously calls for utmost preparedness for entire healthcare system run by the govt sector so to be efficient in reaching such broad goal, based on constant evidences on epidemiological and demographic transitions. The scope for applied demographic knowledge thus becomes enormous to make the country's health system geared for appropriate implementation of strategies. Recently, the National Capital Territory (NCT) of Delhi has released its report on the state of Human Development (HDR), focusing around the theme, 'Improving Lives, Promoting Inclusion'. The reports strives to bring out snapshots on perceived quality of life, capability, and well being of the residents of Delhi, through concurrent assessments of various forms. The authors of this paper as the contributors of the health chapter in HDR clearly identify, in spite of several of the recent achievement that accelerate Delhi's move towards UHC; among few of the major challenges, absence of facility-based disease surveillance system and an integrated electronic backbone- do hinder information flow on several service delivery aspects. This will be essential to gauge population health parameters, top measure achievements against goal posts, and to navigate through appropriate pathways, while hitting UHC for the state of Delhi.

Objective: the present paper aims to build up a monitoring-framework that collates information on demography, population health and mortality, across different government sources, so to enable development of a system of continuing monitoring and assessment on health status of the residents of Delhi. Following which it is suggested to develop a suitable mechanism for facility based disease surveillance system and an online platform for real-time information availability on population health parameters.

Data Source & Methodology: Data and statistics on population, health and mortality is triangulated from different existing sources on Delhi; including 2011 Census, Directorate of Economics and Statistics, Civil Registration System, Directorate of Health Services, Directorate of Family Welfare,

Employees State Insurance Corporation, Department of Labour, and National Sample Survey Organization. The framework on population health using useful statistics and information from the above source suggests few important indicators, which will be monitored by the health system on a regular interval. The indicators include straight-forward outcome oriented, process monitoring tools, and some indicators that will be required to compute using few-basic statistics from the above mentioned sources. The monitoring framework is devised as a worksheet for ease in operation and understanding.

Preliminary Analysis: Over the years, Delhi has created a wide network of primary to tertiary healthcare systems, which not only cater to its huge population but also attract large numbers of patients from the neighbouring states. One of the major problems in planning and delivery of services is faced with this large inflow of in-migrant healthcare seekers. Consequently the client base remains un-estimated or under-estimated to the system. This clearly is a hindrance while UHC is embraced as a target. Secondly, crucial indicator for Delhi's achievement i.e., Infant Mortality Rate etc, are severely affected by out-born infants, who often are from domiciliary deliveries, or other high-risk pregnancies, and arrive at the hospitals at an advanced, futile state. Since such deaths get recorded in Delhi, the available figures constitute an over-estimation of the real infant and neo-natal mortality scenario. Hence, an essential part of monitoring framework suggests to record and assess both out-born and in-born infant deaths separately, keeping an eye on population movement for the purpose of healthcare seeking.

It is also important that the burden of ill-health and pre-matured mortality across population sub-groups be assessed on a regular interval. The framework, borrowing methodologies from summary measures of population health devises mechanisms to estimate Potential Years of Life Lost (PYLL) and Disability Adjusted Life-Years (DALYs), to gauge the extent of health and life loss. It is observed based on a preliminary analysis that nearly 120 years per 1000 females are lost due to premature deaths, while males correspond to a still higher rate of 183 PYLL/1000, as per 2011-12 statistics in Delhi.

Conclusion: It is important to keep constant track on outcomes and processes of health and healthcare of a state like Delhi, if to ensure UHC for all its residents. The monitoring-framework is devised to collate information and to get results on an excel-worksheet application. While judicious use of existing official statistics seems feasible to produce a number of verifiable indicators suggested by the framework; it is recommended that some more useful service statistics be collected through facility based surveillance system to better supplement the existing. The

knowledge of demography is applied to its possible extent to assist evidence based policy making towards implementation of UHC in Delhi.