Transforming the way we deliver healthcare

Indian healthcare will remember the year 2012 for two major policy changes; government's decision to increase the healthcare spending to 2.5 per cent of the GDP and its decision for a move to 'Universal Health Coverage' for all citizens. What the practitioners, providers and patients are missing out is the fine print or rather the blueprint of one major change that will follow during the implementation of this mega scheme. Let us scan the details.

The big change that will follow this year's development on healthcare by the government is the implementation of nationwide, patient wise IT-enabled systems. So, let us look at the two documents related to healthcare policy that touch upon this very important topic, ie, the use of IT.

Spurring growth

According to the High Level Expert Group Report (HLEG) on Universal Health Coverage for India, "We envisage that over time, every citizen will be issued an IT-enabled National Health Entitlement Card (NHEC) that will ensure cashless transactions, allow for mobility across the country and contain personal health information. Such a card will also help the state to track patterns of disease burdens across the country."

Recently, the 12th Five Year Plan document has been released and let us examine the fine print of this document.

According to the 'Twelfth Five Year Plan (2012–2017) Social Sectors, Volume III, which has a dedicated section on 'Information Technology In Health.'

20.97. Information Technology can be used in at least four different ways to improve healthcare and systems:
1. Support public health decision making for better management of health programmes and health systems at all levels.
2. Support to service providers for better quality of care and follow up.
3. Provision of quality services in remote locations through telemedicine.
4. Supporting education, and continued learning in medicine and health.

20.98. A composite Hospital Information System (HIS), when fully operational, would incorporate the following:
1. Universal registration of births, deaths and cause of death.
2. Nutritional surveillance, particularly among women in the reproductive age group and children under 6 years of age.
3. Disease surveillance based on reporting by service providers and clinical laboratories (public and private) to detect and act on disease outbreaks and epidemics.
4. Out-patient and in-patient information through Electronic Medical Records (EMR) to reduce response time in emergencies and improve general hospital administration.
5. Data on Human Resource within the public and private health system.

6. Financial management in the public health system to streamline resource allocation and transfers, and accounting and payments to facilities, providers and beneficiaries. Ultimately, it would enable timely compilation of the National Health Accounts on an annual basis.
7. A national repository of teaching modules, case records for different medical conditions in textual and audio-visual formats for use by teaching faculty, students and practitioners for Continuing Medical Education (CME).
8. Tele-medicine and consultation support to doctors at primary and secondary facilities from specialists at tertiary centres.
9. Nationwide registries of clinical

establishments, manufacturing units, drug-testing laboratories, licensed drugs and approved clinical trials to support regulatory functions of the government.

10. Access of public to their own health information and medical records, while preserving confidentiality of data.

11. Programme monitoring support for National Health Programmes to help identify programme gaps.

20.99. To achieve these goals, computers with Internet connectivity would be ensured in every Primary Health Centre (PHC) and all higher level health facilities in this plan period. Connectivity can be extended to sub-centres either through computers or through cell phones, depending on their state of readiness and the skill-set of their functionaries. All district hospitals would be linked by tele-medicine channels to leading tertiary care centres, and all intra-district hospitals would be linked to the district hospital and optionally to higher centres.

20.100. The role of the Ministry of Health and Family Welfare (MoHFW) would be to lay IT system standards, and define indicators which would be openly shared. States will be funded for their initiatives in this field at primary or secondary levels through the National Health Mission. Health surveys would be annually conducted to generate district level information on health status, which will also serve to verify the accuracy of routine health information system.

Having a close look at these two policy documents and taking into account the changes that Unique Identity (UID)– *Aadhaar* card has delivered for direct cash transfers, it is clear that next big change would be in healthcare. With an expected budget of ₹ 2.8 lakh crore for healthcare, it is very important that the government plans to spend about 2 per cent of the healthcare budget on IT (expenditure on m-Health & telmedicine excluded) & digitise healthcare.

Let us examine in detail the scope of digitisation in health.

Digitising healthcare

We know that all sectors, be it banking or railways are any other sector, has benefitted immensely by deploying IT. Using IT end to end - from centre to the village level, is the key to success of the 12th Five Year Plan targets for healthcare. IT will bring out transparency, which will lead to accountability in healthcare spending and better outcomes for providers. IT can be used for:

1. Setting the targets at the central , state, regional, district and village level
2. Timely review and corrective actions
3. Disease surveillance, epidemiology and planning
4. Instant disbursal of funds and online approvals to ensure that the decisions are taken with the speed needed in case of healthcare emergencies

> **No one will remain untouched from using IT in the next 3 years in healthcare. It is time to accept this reality and start adopting IT in daily practice starting with patient registration, EHR to prescription or even follow-ups.**

UID has already been allocated to 210 million people and cash transfers will be happening across 51 districts from this year. It is very likely that UHC will be based on National Health Entitlement Card (NHEC). This should serve as a wake-up call for our doctors who have till now desisted from using IT in their daily practice. They might be late, but for sure, no one will remain untouched from using IT in the next 3 years in healthcare. It is time to accept this reality and start adopting IT in daily practice starting with patient registration, Electronic Health Records (EHR) to prescription or even follow-ups.

Let the good 'IT' times roll…

The 12th Plan document also suggests all states to have an online procurement and supply system on the lines of Tamil Nadu medical services supply corporation. This is certainly going to digitise the supply chain in public healthcare system

"*Never too old, never too bad, never too late, never too sick to start from scratch once again,*" said Bikram Choudhury, and it is time Indian doctors start using IT in their daily practice.

It is also clear from the government documents that private sector will also provide healthcare facilities under public financing and would be reimbursed under various Public-Private Partenership (PPP) models. Insurance companies will demand real-time system for adherence to treatment protocols, online pre-approval, payment & accountability. This cannot happen without IT. Even individual doctors who have to reimbursed by the government will need to have the IT systems. It will not be a surprise if India also implements the 'accountable care guidelines' & 'meaningful use of IT' in healthcare, on the line of the US healthcare system.

"*All great changes are irksome to the human mind, especially those which are attended with great dangers and uncertain effects,*" said John Quincy Adams, and the IT adoption is not going to be easy but is unavoidable. The government must start a 'bridge course' (online 3–6 months duration) for healthcare professionals to enable a smooth adoption of IT for doctors. Also, the newly constituted National Commission for Human Resources in Health (NCHRH) must consider including IT (health informatics) in the medical curriculum for doctors and also for paramedics.

The first major change IT brought was in communication, next big change IT is bringing is in cash transfer for subsidies from the government and the next big change IT will bring would be in healthcare delivery. Wait for the good times to come! MM

(office@rajendragupta.in)

Rajendra Pratap Gupta
International Healthcare Policy and Retail Expert