



National Health Conclave

CHRONIC CARE – INNOVATIONS, OPPORTUNITIES & CHALLENGES

White Paper-Post National Health Protection Scheme Announcement

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Contents

03	•	Executive Summary
05	•	Introduction
09	•	Session 1: Policy and Regulations in Quality of healthcare
13	•	Session 2: National Health Policy
17	•	Session 3: Innovations in Healthcare
21	•	Session 4: Innovations and Technology in NCD care
25	•	Session 5: Quality improvement in NCD care. Why and How
29	•	Session 6: The role of political will and media in health policy in India
32	•	The role played by the National Health Protection Scheme to accelerate the move to Universal Healthcare
35	•	Conclusions
36	•	Acknowledgements
37	•	Appendix
38	•	Glimpses of the National Health Conclave

Executive Summary

Health care is emerging as one of the largest as well as the most challenging service sector industries in India. India is working aggressively to achieve the goal of Universal Health Coverage (UHC) for all its citizens, beginning with efforts aimed at individuals living below the poverty line. In this regard the National Health Conclave (NHC) aimed to be the first step in a multi-sectoral collaborative approach to strengthen healthcare systems in India. The conclave endeavored to be a national level think-tank for paving a road-map to address the issues related to non-communicable diseases (NCDs) in India. It served as a platform for premier academic institutions and other organizations in the health sector to discuss and deliberate on the various issues that affect the national health scenario, particularly the strategies to improve quality of care for NCDs. The conclave served as an ideal stage for health and non-health sectors to share and learn from experiences and imbibe best practices for health system strengthening.

Diversified issues concerning public health were deliberated during various sessions at the conclave. Throughout the conclave 'policy and regulation for quality health care' was one of the major themes, with focus on affordability and quality of health care. Several programmes of Government of India including a national health protection scheme (NPHS - Ayushman Bharat Scheme) was also discussed as one of the strategies to achieve affordable quality health care. Awareness about the quality of health care among patients and doctors was cited as an important factor to achieve the stipulated goals. Further, it was emphasized that a consistent regulatory framework is required to reduce the burden of NCDs in particular and other diseases in general. National Health Policy (NHP) was also discussed widely at the conclave. The panellists discussed key strengths of the policy and also discussed the limitations of the policy. It was noted that NHP deals with every aspect of the public health system and noted that government is working towards revamping all the available tools and institutions to achieve the stipulated targets. Innovation in health care was also discussed during the conclave and wide range of innovative approaches in different areas of health care spanning from child surgery to kidney health and health systems were presented in the session. The rapid technological advancements and an ever-increasing domain of communication and connectivity underscored the need to explore new approaches to integrate technology in the healthcare sector. With special reference to NCDs, it was suggested that the problem should be identified and technology should be customized according to that.

At the conclave the panellists underlined the urgent need of quality care for NCDs not only in terms of treatment but also in terms of preventive strategies. The pressing need of maintaining quality at the micro levels by formulating quality standards/indicators specific to NCD care and implementing them at each level of care in every region was emphasised by the panellists. The role of political will and media in shaping health policy in India was also discussed with special focus on the need to integrate different health insurance schemes that currently exists and that might become a part of national health protection scheme in an expanded format in the national health policy, in order to have a single payer system.

Non-communicable diseases are the leading cause of morbidity and mortality in India and advances in primary health care will impact the chronic disease outcomes. Thus, a consistent regulatory framework is required to reduce the burden of NCDs along with providing financial protection to individuals through comprehensive health insurance and subsidies for treatment of major NCDs. Technology can also play a greater role in bridging the urban-rural divide for health care delivery pertaining to the NCDs. Finally, to realize gains in reducing NCD burden with the National Health Protection Scheme (NHPS), which is a giant step towards Universal Healthcare to Indian citizens, there is a need for a "community well-being" approach. We propose the integration of NHPS with the Wellness Centers initiative – with the latter providing the primary care and continuum of prevention care approach, to offset the low budgetary provisions for NHPS implementation.

National Health Conclave

Theme: Chronic Care – Innovations, Opportunities & Challenges

Introduction

ealth care is emerging as one of the largest as well as the most challenging service sector industries in India. India is working aggressively to achieve the goal of Universal Health Coverage (UHC) for all its citizens, beginning with efforts aimed at individuals living below the poverty line. With a number of government health insurance schemes in the offing, it is estimated that approximately 50% of the population would have some form of health insurance. While government share in healthcare spending remains around 1.2% of gross domestic product (GDP), it is encouraging to note that private sector has been pitching in with a healthy 3.8% of GDP as investment in healthcare. However, there is a need for incentivizing to attract higher private investments towards affordable healthcare, and synergizing the efforts of the government and private health care sector to realize the ambitious goal of UHC for Indian population.

The budget 2018-19 announced two Flagship programs of the government of India - the National Health Protection Scheme (NHPS) and the setting up of 1,50,000 health and wellness centers. The NHPS will cover 10 crore families or approximately 50 crore people with a coverage up to Rs. 5 lakhs annually for a family (without a cap on family size) for secondary and tertiary care hospitalizations. The health and wellness centers will be set up to provide comprehensive care (including noncommunicable diseases, maternal & child health services, medical check-up, medicines and tests). This is a very ambitious goal and will test the ability of different stakeholders to collaborate, execute faultlessly, set standards, monitor and prevent abuse. The NHPS highlights the government's commitment to Universal Health. The stated objective of reaching 50 Cr people, the coverage limits and the aggressive timelines (the government appears to be committed to an October '18 implementation) all assure of a clarity of intent. There is, however, much to be done to translate this intent into delivery on the ground.

The world faces no greater challenge in the 21st century than arresting the rapidly increasing epidemic of chronic non-communicable diseases. Non-communicable diseases (NCDs) are the leading cause of death worldwide, accounting for 39.5 million (70%) of the 56.4 million global deaths in 2015. According to the World Health Organization (WHO) estimates, 48% of NCD deaths in low- and middle-income countries (LMICs) in 2015 occurred before the age of 70 years. It is estimated that 80% of premature heart disease, stroke and diabetes can be prevented. Almost three quarters of all NCD deaths (28 million) and the majority of premature deaths (82%) occur in LMICs such as India.

India too is experiencing a rapid health transition with a rising burden of NCDs. In the 21st century, where India is making marked economic progress, it faces an ever-increasing burden of NCDs while the fight against communicable diseases still continues. According to the WHO, the burden of NCDs have increased alarmingly all over the world and India is a major contributor to this burden. Overall, NCDs are emerging as the leading cause of deaths in India, accounting for over 42% of all deaths (Registrar General of India). NCDs not only have a serious impact on human health, but also on economic growth. Most non-communicable conditions are chronic and it can lead to significant morbidity and mortality both in urban and rural population groups, with a huge loss in potentially productive years (aged 35–64 years) of life. NCDs have been known to cause catastrophic health expenditure at an individual level as well as a macroeconomic loss at the national and international level.

Although, India's healthcare sector has made impressive strides in recent years, it is critical to strengthen its capacity to tackle the chronic disease epidemic both efficiently and effectively. While entry of corporate or private sector has greatly improved access to tertiary care services in urban India, greater focus on primary care is needed so as to effectively institute preventive measures, early diagnosis and to bring about continuity in care for NCDs remains the foremost priority for government. It is of utmost importance to comprehend the various steps that need to be taken and develop a road map to address the NCDs through the network of primary health centers (PHCs) in the government sector supplemented with efforts from the private health sector.

Objectives and expected outcomes of the National Health Conclave, 2017

The National Health Conclave aimed to be the first step in a multi-sectoral collaborative approach to strengthen healthcare systems in India. The conclave endeavored to be a national level think-tank for paving a road-map to address the issues related to NCDs in India. It served as a platform for premier academic institutions and other organizations in the health sector to discuss and deliberate on the various issues that affect the nation's health scenario, and in particular strategies to improve quality of care for NCDs. The conclave served as an ideal stage for health and non-health sectors to share and learn from experiences and imbibe best practices for health system strengthening.

This white paper explicates both a rationale and an outline for beginning a more comprehensive public-private partnership in the health sector based on the conclave proceedings and is expected to aide in synergizing efforts of the public and private sectors in combatting the NCD epidemic in India. We believe, this white paper will catalyze the formulation of strategies and recommendations to inform policy development and implementation.





ssues relating to quality of healthcare and what policies and regulations can do to improve healthcare quality depends on the concerns surrounding the root causes of chronic diseases. The main aspects in curtailing the growing burden of non-communicable diseases are prevention, early detection and regular treatment and follow-up care and prevention of deadly and costly complications. Over 60% of all deaths are attributable to non-communicable diseases (5 - 6 million deaths), and 80% of these NCD deaths are premature i.e. occurs in people aged less than 65 years.

In 2010, the Ministry of Health & Family Welfare, Government of India made considerable efforts and further significant initiatives were taken in 2012 - 2013 based on the evidence generated through myriad studies conducted in India and the reports submitted to the Government of India, which lead to the launch of the landmark National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) across 100 districts in India. Another outcome of such government initiatives, was related to curbing the indoor air pollution and the target set was to control indoor air pollution by about 25% by 2025 and 50% by 2030, which is accomplished now through two million gas connections being distributed by the Prime Minister through government schemes. This initiative is expected to reduce the major cause of breathing diseases and respiratory illnesses.

Furthermore, in union budget 2018-19 the government of India has announced a national health protection scheme (NPHS – Ayushman Bharat Scheme) of five lakh rupees cover in secondary and tertiary care institutions to poor and vulnerable households. In this regard experts are of the opinion that there is an urgent need for partnership between public and private sector to bridge the gaps in chronic disease care delivery and also to expand the access, and affordability of NCD care by covering all sections of the population to achieve universal health coverage goals.

In general, accessibility to quality health care in India is poor and equally concerning is the affordability of health services. These issues are affected by policy decisions, international binding, and the domestic laws and the huge gap between the government and private sector involvement in decision making process. Combined efforts of the government and private sector is the need of the hour in developing effective health care models and schemes to promote health care innovation.

Creation of electronic health data banks by maintaining utmost sensitivity on the protection of privacy of health data was proposed to study the NCD burden and related quality/process indicators for NCD care in India. As digitalization of health data enables in readymade access to health information thus easing the process of understanding and analyzing most complex scenarios.

Along with improving the accessibility to healthcare there is a prerequisite of increasing awareness amongst the patients seeking healthcare facility and also of the physicians providing quality healthcare to make the patients aware of quality healthcare services. Awareness of both the doctor and patient lead to the initiative of PPP model which is Provider Patient Partnership. Further, the best practices of care amongst the vulnerable group of healthcare seekers including pediatric care, mentally and physically challenged children, young patients with chronic diseases involving facets such as early diagnosis, early treatment and early intervention need to be promoted widely and integrated in the training manual developed for primary care doctors.

Notably, the Air Force MAT Net system of connecting individual within an internal network through a program called "I REACH" involves resource experts, who then train and enhance skills of community head on providing basic care and continuity of care which is important in chronic disease care. This program enabled in filling the knowledge gap and keeping abreast with the day to day applications in healthcare delivery as every patient has a right of quality healthcare along with the best and updated medical facilities.

A sophisticated health care system can only be established with standard treatment guideline based on available resources and capability to provide quality healthcare, wherein, health insurance can also be easily available to promote better healthcare facilities, as the patients can avail relief from financial burden of the health care cost. In the Indian Health Insurance Regulation of 2016 notified in July 2016, the norms were prescribed for encouraging the insurer to introduce the wellness and preventive feature as part of the health insurance policy. This regulatory initiative helps insurers to encourage the policy holder for adopting healthy behavior by offering health specific services such as outpatient, consultation, treatment and health check-ups including discount on all the health specific network provider.

While regulation provides an enabling environment for offering a comprehensive health coverage, it is essential that a suitable health care infrastructure should be in place to effectively deliver the quality of healthcare. Towards this direction there is a platform called ROHINI which is a register of hospitals in the network of insurer, where a unique identity number is provided to the hospital. This unique identity number is provided based on validation of actual physical presence of the hospital and so the process minimizes the possible abuse. The regulation also specifies that the network provider shall meet with the pre-accreditation level of standard. It is envisaged that these norms will help in promoting quality check for insurance providers.

The health regulation has certain enabling provision to let insurer design product for promoting healthy lifestyle for promoting innovation in product development which is backed with global regulation framework. Now certain health insurance products are in the space to encourage the policy holder to adopt and maintain a healthy lifestyle, such as following regular exercise regimen and healthy behavior. It is expected that the wellness and preventive feature of insurance policy will help in reducing the incidents of lifestyle related chronic diseases. As part of insurance policy benefits some products are also offering disease management program which either offers coverage of regular treatments, products or reward the policy holder for strictly following such disease management program.

On the other hand, it is observed that the high financial burden associated with the outpatient treatment results in avoidance of seeking health care in case of earlier symptoms of disease which may later on complicate the health condition. Thus, to encourage seeking for early treatment which is generally more of outpatient consultations, some health insurance products are also providing coverage for Out Patient Department (OPD) treatment which help in early diagnosis and better health management. Insurers are also utilizing the technology platform by governing OPD appointments being provided at empaneled service provider. Further, insurer is also trying to engage the policy holder by continuously providing the value-added services/features like doctor on call, medicine practitioner or chat service, wellness for tobacco related services, weight management, nutrition and mobile chat service or contact service and condition management reward program. Many insurance products are also offering periodic health check-up irrespective of claim incident. Such benefits encourage the policy holder to undergo periodic health check-ups which helps in early detection of chronic disease such as diabetes and hypertension.

In conclusion, the advances in public health care directly impact chronic disease outcomes. A consistent regulatory framework is required to reduce the burden of NCDs along with the comprehensive health insurance and subsidies for treatment of major NCDs. Other policies which can affect the health outcomes concerning NCDs are policy related to promotion of food preference or cessation of tobacco products, and taxation of medicines for NCDs. Additionally, continuous promotion of health education through various media, awareness of doctors about the early detection of complications to reduce disability and associated health care costs, policies related to the continuous medical education to keep the doctors updated about changes in the medical field are all important aspects to improve overall quality of healthcare.

Key recommendations

- A consistent regulatory framework is required to reduce the burden of non-communicable diseases (NCDs) along with financial protection of individuals, comprehensive health insurance and subsidies for treatment of major NCDs. These include development of disease specific protocols for prevention, early diagnosis and simplified management of chronic diseases.
- While regulation provides an enabling environment for offering a comprehensive health coverage, it is essential that a suitable health care infrastructure should be in place to effectively deliver the quality of healthcare. Health infrastructure also includes development of a robust health management system, surveillance, strengthening of Indian public health standards and expansion and inclusion of simple generic drugs in the essential medicines list.
- The NHPS is a huge step towards Universal Healthcare in the country. The focus should now
 be on implementing it to the fullest extent in a few states that will then serve as role models
 for others. The NHPS needs to be integrated with the Wellness Centres initiative for early
 detection and effective post hospitalization care with the latter providing the primary care and
 continuum of care approach.
- Effective collaboration between multiple stakeholders is key to the successful implementation
 of the NHPS. The principal stake-holders in question are the Central Government, State
 Governments, Hospital Providers, the Public Health system, Insurance companies, IT vendors
 and Supply Chain vendors. Interests of these stake-holder groups are varied and aligning
 incentives towards the common purpose is important. There is a need to appoint credible
 external agencies that help facilitate the dialogue and play the role of an unbiased, trusted
 advisor to help develop the processes, forge the relationships and manage implementation
 timelines.
- Continuous promotion of health education through various media, awareness of doctors about
 the early detection of complications to reduce disability and associated health care costs, policies
 related to the continuous medical education to keep the doctors updated about changes in the
 medical field are all important aspects to improve overall quality of healthcare.





he National Health Policy (NHP) 2017 aims for accountable, affordable and acceptable healthcare. The first NHP was formulated in 1983 and further updated in 2002.¹ Attempts have been made periodically to appraise and update the NHP as per the change in the health priorities. The current NHP has acknowledged that the maternal and child mortality has declined but burden of non-communicable and some infectious diseases is increasing.² The overarching goals of the NHP include: 1) increasing access to healthcare, 2) improving the quality of healthcare and, 3) lowering the cost of healthcare delivery.

In order to achieve the goal of increasing access to healthcare, experts suggested various strategies, such as assuring free comprehensive primary health care covering geriatric, palliative and rehabilitative care services and implementation of the critical "Golden Hour rule", which places emphasis on delivering healthcare within the first hour of need. Enhancing outreach of public healthcare through mobile medical units, establishing partnerships through the strategic purchasing of secondary and tertiary care as a short-term measure and encouragement to the voluntary service by healthcare professionals in under-served areas on a pro-bono basis were also underlined as important ways to achieve access to health care.

MoHFW|National Health Policy 2017 [Internet]. MoHFW, Gol, Ministry of Health and Family Welfare; 2017.[cited on 2018 Mar 21]. Available from: http://cdsco.nic.in/writereaddata/National-Health-Policy.pdf

² Ibid.

Multi-sectoral collaboration to ensure standard health care delivery and development of evidence based guidelines of care for public and private sector were also highlighted as important ways to improve the quality of care. Proper monitoring and evaluation will also be required to bring about change in the existing practice and ensure compliance to the change.

The NHP also proposed for free delivery of health care including free drugs, diagnostics and emergency and essential services. The policy aims to reduce the price of generic drugs by periodically revising National List of Essential Medicine and promote indigenously developed medical devices. To achieve all the above- mentioned goals NHP recommends for investment in the field of research and development in all the areas of public health.

The other major underlined goals in the policy are transparency, accountability, governance with an aim to keep patients at the center of the health system. To ensure transparency the policy emphasizes on the quantification of targets and mandatory disclosure of treatment by the hospital. Similarly, a responsive regulatory environment is proposed to bring accountability in the system. To achieve the goal of governance and development of leadership, the policy proposes for equity of distribution of responsibility between the centre and states and also strengthen the leadership with the help of capacity building and skill development of human resource for health. NHP also underscores the role of technology in public health and calls for the digitization of health services in order to link primary, secondary and tertiary level of health care.

However, there are certain areas which need attention at the policy level including quality of medical education, role and responsibilities of Medical Health Councils. The current policy also needs to define the existing challenges clearly in the times when the private sector is playing a major role in the health care in India.

The NHP was also discussed among the panelists participating in the session. Some of the major suggestions by the panelist while reviewing the NHP was need of the development of a framework for women's health with definite targets both at urban and rural level. The framework should have all the components of a women's health from Obstetrics and Gynecology, family planning, adolescent to the burden of non-communicable diseases like cancer.

The other suggestion concerning the NHP highlighted the role of armed forces in the health care. Armed forces' health system provides comprehensive care to the army personnel and their families. Thus, the NHP also needs to focus in that area and encourage for better training right from the Paramedics, medical officers, specialists and super specialists, to non-medical personnel such as Battle Field Nursing Assistant (BFNA), who provide healthcare on the battlefield. Almost all the panelists suggested to strengthen human resource for health, ensure quality of medical education, strive towards reproductive health and create a conducive environment for research and development.

The chair of the session gave the concluding remarks and mentioned that the current NHP deals with every aspect of the public health system and noted that government is working towards revamping all the available tool and institutions to achieve the stipulated targets. In the concluding remarks it was also noted that the health system needs to embrace new technologies and the country needs to build its capacity in the area of health economics and health care financing.

Key recommendations

- Development of a framework in the National Health Policy for providing extensive care to women and adolescent.
- Need to develop an adequate mechanism to enable armed forces to provide optimum health care to armed personnel and their families.
- Need for the development of an institutional framework to support capacity building for health economics and health care financing.



Session 3 Innovations in Healthcare

he focus of discussion in this session was on innovative approaches demonstrated by different professionals towards a public health issue in a series of work done by them. The speakers presented their work and suggested how innovative solutions such as integration of technology, introducing training programs, accreditation of healthcare deliveries could help in improving the health scenario worldwide.

The first innovation titled "Benefits of Quality accreditation: financial impacts and the perspective of the owners" aimed at exploring the financial structural indicators of the hospital and evaluated the impact of accreditation on the financial outcomes of hospital. Accreditation of the hospital exerted a direct impact on the improvement in documentation, medical safety, healthy working environment and reduction in clinical and non-clinical errors. In the long run it led to an improved patient care and increased patient satisfaction. The work showed that initiatives such as accreditation promotes the quality healthcare of the patients and in turn will be beneficial to the owners as well. This work also provided an innovative approach towards accreditation by showcasing the benefits of accreditation to the owners financially. The chair of the session emphasized on the fact that accreditation should be seen as mandatory and the medical community needs to foresee its benefits for themselves as well as for the community.

Second, a novel training program for improving the surgical care of child population in the country to counter the shortage of children's surgical specialists, a global initiative for children's surgery described the Hub and Spoke model in which 5 teams (each comprising of an anesthesia, Surgeon, orthopedic, nurse) were trained for managing the early stage diseases in children at the district hospitals (spokes) and there were telemedicine portals and other networks for referring advanced cases to training centers (hubs). This model puts an innovative approach towards managing childhood health problems by providing skills and knowledge to surgeons, increasing the access of these services to rural and remote areas and in the long it run would decrease the financial implications from the disease. A strong political will and commitment from the government can help improving the child health scenario by implementing this at the national level, drawing policy for children's surgery and by providing financial aid for the surgical teams for training. The chair encouraged the program and called for proper implementation and adoption of such mature ideas at the national level.

Third, a new approach towards innovation in kidney health care underlined that the delivery of public health interventions more efficiently, that is not technologically oriented, is also a form of innovation. In addition, an emphasis was needed for community level interventions as compared to the individual level efforts with interventions for kidney diseases focused more on behavior change, patient-provider interaction and interdependence of healthcare departments. A severe gap in the data for kidney diseases exists globally. The 2016 global burden of study report highlighted that enough data for kidney diseases is lacking and it will majorly impact the Sustainable Development Goals achievement. Integration of kidney diseases into the healthcare delivery system is important because more often than not kidney diseases gets neglected as it doesn't develop as a primary issue but as a result of complication from other diseases such as diabetes and hypertension. A strong financial aid and proper data management for kidney diseases is required to manage the disease.

Finally, a health systems approach for healthcare innovation through capacity building of primary care physicians was presented. There is a need for primary care physicians' active role in chronic disease care as they are the first point of care as well as the channel for the referral system. Several challenges faced by the country in terms of health systems such as shortage of trained professionals, unavailability of healthcare professionals at peripheral locations, absence of a referral network from primary healthcare level to specialists and absence of standard teaching protocol for NCDs were highlighted. A strong pan India training program of the primary care physicians will facilitate improved management of NCDs at the Primary level, thereby reducing patient load at the tertiary care centers, timely referral will create linkages between specialists and primary care physicians working at the periphery. These programs have proven to be crucial for decreasing the knowledge gap and is facilitated with a number of national and international collaborations such as PASCAR and Department of Health, Philippines. However, there is a need for impact evaluation of these programs in order to monitor its effectiveness.

In summary, a wide range of innovative approaches in different areas of health care spanning from child surgery to kidney health and health systems were presented in this session. With the rapid technological advancements and an ever-increasing domain of communication and connectivity, we need to explore new approaches to integrate technology in the healthcare sector such as use of smartphones for increasing the coverage, reducing the human data entry error and improving scope for on-job training of health workers.

Key recommendations

- Integration of technology into healthcare such as smartphones based service delivery, 3-D
 printing, wearables such as smart watches, genome based personalized medicines to develop
 innovative approaches in managing global and local health challenges.
- Strengthening of health systems by providing skill training programs to healthcare [professionals at the primary level for management of chronic conditions]. This will aid in reducing the pressure on tertiary level facilities and will improve the scenario in terms of chronic conditions.
- A strong need of a regulatory and monitoring network in order to monitor the interventions in the healthcare programs. It will help in identifying the gaps and improving the quality of care.

Session 4 Innovations and technology in NCD care



he focus of the session was on the role of technology and innovation in the arena of public health. Technology was described as a facilitator to bridge the gap between national clinical guideline and the practices at the local level. The role of technology becomes more important in the management of non-communicable Disease (NCD) burden by strengthening the surveillance and screening of diseases and its risk factors. One of the examples of the important role of technology in health care is the development of a robust Health Management Information System (HMIS). Technology will also help physicians and nurses in task shifting with the development of an electronic support system. Use of technology can help in forming an adequate guideline and bring changes in the existing guidelines for clinical management of the diseases drawing from the challenges at local level.

The major role of technology can be seen in the areas of surveillance/big data collection; screening and diagnosis; disease management and pharmaceutical innovations for NCDs. Innovation and technology were highlighted to be very useful in understanding population level risk factors, health care delivery and improved health care quality and diagnostics devices. One of the examples of innovation and technology in this field is AINA - Mobile Blood Monitoring System (validated)- novel hardware sensor that plugs into any smartphone and an array of proprietary dry-chemistry strips to test six basic blood parameters.

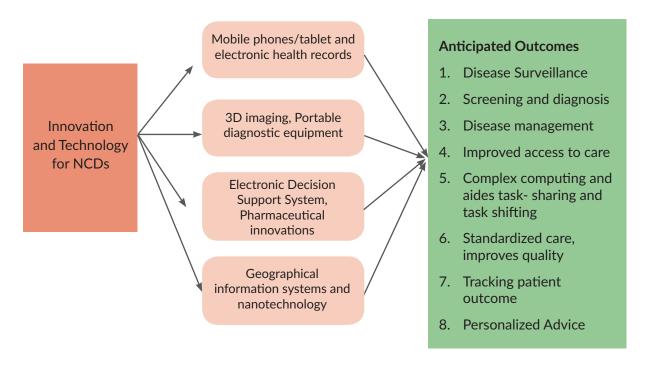
The discussion during the session also revolved around the prospective role of technologies and innovation. The emphasis was on the use of technology on creating virtual clinics to bridge urbanrural health care divide, health Kiosks to measure the risk of cardiovascular disease among adults as well for surveillance, diagnostics and drug development. The need for action to make the innovation and technology for NCDs affordable, accessible, appropriate, adaptable and adjustable was also discussed at length. To encourage interdisciplinarity to achieve the stipulated goals, various measures including the development of a low cost HMIS system, development of big platform for data, collaboration with google survey and the creation of virtual classroom were discussed.

Some panellists also proposed that the problem should be identified and technology should be customized according to that. The panellists also opined that an administration based on common sense is important and not only the technology. It was suggested that the technology should be used in a way to help patients to reach at the appropriate level of health care through a process of structured referral, which is only possible if basic structure is there in place. Technology was also cited as a facilitator of decision making for physicians with the help of artificial intelligence. Technology companies and health care communities will have to work towards decentralization and standardization of technology. Role of Public-Private Partnerships was highlighted as a mechanism to reduce the cost of diagnostics and therapeutic care for poor patients. The need of a platform where all the stakeholders including policy makers, government officials and start-up companies and academicians could discuss and share their experiences, was also highlighted.

Key recommendations

- Technology can play a greater role in bridging the urban-rural divide for health care delivery pertaining to the NCDs.
- There is a requirement of need based technologies, which are accessible, affordable and adaptable.
- Technology must be used as a facilitator in order to help patients to enter an appropriate level of health care through structured referral.

Figure 1: Conceptual framework to demonstrate application of innovation and technology to improve non-communicable disease care



Theme: Chronic Care-Innovations, Opportunities & Challenges

Session 5 Quality Improvement in NCD care. Why and How?



his session of the conclave emphasized on the importance of ensuring quality in different aspects of chronic disease care. The discussion initially highlighted the growing advancements in medical technology and modernization of various aspects of the healthcare services. The on-going developments in the technological sector of the healthcare services need to be paced with the quality of these services. The transition of quality of healthcare from a "want" to a "need" was underlined with reference to a study conducted by Institute of Medical Science (IOM). The evolution of quality in healthcare was drawn, which dated back to 1918 when the American college of surgeons set up the minimum standards of hospital care for its hospitalization standardization program. A special attention was paid to the quality of care model given by Avedis Donabedian in 1966, who postulated that information about quality of care can be drawn from three categories: "structure," "process," and "outcomes, and there is a necessary interdependence between these three.

The discussion moved forward focusing on the key issues and the need of quality management in non-communicable disease (NCD) care. As the chronic diseases entails a long-term impact on the quality of life of patients and involves continuous care management, quality becomes an essential component of the healthcare services. Prevention of chronic diseases and health promotion through a community based approach was identified as a key focus area to ensure quality of care in the management of chronic diseases. This involves community based screening and control of chronic conditions such as hypertension, diabetes, heart diseases and others so that they can be identified at early stages and can be managed through quality health care. Different components of the healthcare services such as medicines quality, reliable diagnostic testing and quality of wearable devices need to be the focus areas for effective screening and should not be compromised, per se, for affordability. Ensuring universal health coverage in the NCD care was put forward in order to safeguard affordability, accessibility and quality of NCD care. The quality of care can be ensured through research and development so that globally acceptable standards can be set by which the quality can be measured. It was also proposed that the accreditation and certification should be incentive based rather than regulatory based to motivate the concerned organizations to obtain these and improve the quality of NCD care.

The session came to a conclusion with the Chairperson's remarks. The session chair pointed out at the increasing importance of healthcare quality in the NCD care, not only in terms of treatment but also in terms of preventive strategies, such as population screening and health promotion in order to reach both the diseased and non-diseased population. The chairperson focused on the pressing need of maintaining quality at the micro levels by formulating quality standards/indicators specific to NCD care and implementing them at each level of care in every region in order to measure the quality of care. The formulation of the indicators should be transparent and practices such as regular audits of facilities, facility check and incentive based reporting should be encouraged in order to better monitor the quality standards. Training of the healthcare providers beginning from the nurses, doctors to the level of data entry operator is required to inculcate the quality practices at each level of healthcare. At last, a regulatory mechanism is required in the system in order to monitor the quality of care that is being provided at different levels and it is the only mechanism by which government can enforce quality. In conclusion, it was highlighted that a strong political will to enforce a regulatory mechanism and willingness from the provider to adhere to it is the need of the hour in order to manage the chronic diseases by improved quality care.

Key recommendations

- Quality standards for quality assurance and quality improvement of NCD care are required both
 in screening of NCDs and for NCD care. These standards should fall in line with the government
 guidelines for NCDs chalked out in "NPCDCS program." A collaborative approach is required
 with organizations working in this direction to work together for establishing standards of
 quality NCD care.
- Quality accreditation and certification should be made incentive based and should be regulated so that involved parties are self-motivated to deliver not only NCD care but "Quality NCD care".
- Strengthening of the regulatory framework of NCD care.

Figure 2: Quality improvement goals in healthcare

Quality in healthcare

- Need for balance between technological advancements and quality of services.
- Transition from "want" to "need" of quality.

Quality in NCD care

- Chronic disease long term impact on quality of life and involves continuous care management.
- Need for improving quality of care of chronic disease.
- Quality in terms of population screening, health promotion and treatment is required.

Need for Universal health coverage

- Need to safeguard affordability, accessibility and quality of NCD care.
- Along with affordability micro aspects like preventive measures, patient education, generating awareness should be focussed for improving quality.

Monitoring quality and regulatory mechanism

- Monitoring by formulating quality indicators specific to NCD care.
- Implementation of these indicators at each level of care.
- Accreditation incentive based rather than regulatory based.
- Need for regulatory mechanism to monitor and evaluate the quality of care.

Session 6

Parliamentarian and Policy makers session - The role of political will and media in health policy in India



his last session of the national health conclave deliberated on the role of political will and media in shaping health policy in India by covering important issues such as access to essential medicines, availability of essential medicines in the public health sector, and emphasis on adopting healthy lifestyle and introducing mid-level non-physician health worker to improve NCD care delivery.

India exports medicine all over the world to the maximum countries whether developed, under-developed or African sub-continent. India is one of the largest suppliers of pharmaceuticals and the world is looking towards us as a favorable destination for health tourism. Also, there is an openness towards India's alternative medical therapies such as Ayurveda, Unani, Homeopathy, which have emerged as centers across the world. However, Indian health system is performing poorly in terms of availability of drugs through the primary health center where there is shortage of required medicines. There is 20% shortage health care professionals in primary health center, 22% to 30% in community health center and about 20% to 30% of them suffer with very low standards of facilities of regular needs such as electricity, and water connection.

The out of pocket medical expenditure in India as compared to other countries is very high, with nearly 72% out of pocket medical expenditure being spent on medicines alone. In comparison to many of the other countries, India also has one of the lowest vaccination coverage. Thus, there is a need for increased awareness about the lifestyle diseases (non-communicable diseases) amongst the citizens. The policy-makers need to look into two things – that they not only represent on behalf of people but work with them and can show them the path, so that people can be made aware of the need for healthy lifestyle. It's necessary to increase health awareness, as there is a need for centralizing rules and regulations on products that are hazardous for our health and strike balance by increasing taxes on such products (e.g. tobacco products).

Further, NCDs have become one of the major challenges across the country not only in urban area but also in rural area as well, and it requires long-time care for life. The facility for NCD care may or may not be available in all the district hospitals or especially in hospital of rural area. In order to tackle this issue a mid-level health provider could be introduced instead of doctor centric approach to solve this problem. This was achieved by couple of states in India through launching of mid-level health provider which could benefit the rural area where health workforce is very scarce.

Some of the significant measures, which impacts on the better functioning of the healthcare sector, are by – starting of healthy lifestyle clinic specially keeping in mind the NCDs. Some of the initiatives of Government in this line are – the Prime Minister's BAL MADHUMEY YOJNA – a diabetic insulin scheme where the kids have to take insulin till they are nine years. Further, the SANJEEVANI SAHAYATA KOSH by which around 31 types of diseases are covered in which even cancer and heart related diseases are covered. The need for creating public awareness about NCD and importance of healthy lifestyle in order to achieve better health prospects – especially of the vulnerable class of children and women who need utmost care and attention in this line was emphasized. As instead of curative we have to think more of the preventive aspect and most of the NCD issues can be addressed by preventive care and adopting healthy lifestyle practices.

In conclusion, the intentions of the National Health Policy (NHP) as an element with a strong political commitment was underlined to increase the gross domestic product (GDP) of 2.5% on public healthcare financing by 2025 – as today the healthcare expenditure is around 1% of India's total GDP. There is a need for integrating different health insurance schemes that exists presently and that might become the national health protection scheme in an expanded format in the NHP, in order to have a single payer system.

Key recommendations

- Increasing awareness to adopt health lifestyle to prevent non-communicable diseases by starting healthy lifestyle clinic.
- Introduction of mid-level non-physician health worker to facilitate care for patients with chronic conditions.
- Need to integrate different health insurance scheme along with the national health protection scheme as part of the National Health Policy in order to have a single payer health system.

The role played by the National Health Protection Scheme to accelerate the move towards Universal Healthcare in India

The budget 2018-19 announced two flagship programs of the government of India under the Ayushman Bharat umbrella:

- 1. The National Health Protection Scheme (NHPS) will cover 10 crore families or approximately 50 crore people with a coverage upto Rs. 5 lakhs annually for a family (without a cap on family size) for secondary and tertiary care hospitalizations. Delivery will be based on a paperless, cashless and Aadhaar-linked (though not mandatory) model. The NHPS replaces the Rashtriya Swasthya Bima Yojna (RSBY) that was launched in 2007 and provided coverage up to Rs. 30,000 to below poverty line (BPL) families. The limit was enhanced to Rs 1 lac in the NHPS announced in budget 2016-17.
- In addition, 1,50,000 health and wellness centres will be set up to provide comprehensive care (including non-communicable diseases, maternal & child health services, medical check-up, medicines and tests).

The NHPS will be partly funded from the 10 per cent long-term capital gains tax and partly by the 1 per cent increase in education and health cess. The central government outlay will be supplemented by contributions from interested state governments. In the words of the honourable Health minister, Mr JP Nadda "Rs. 2,000 crores have been allocated for the scheme and the states will have to implement it with help from the Centre. The Centre will bear 60 per cent of the cost while 40 per cent will be borne by the states." While this is a very bold first step, experts are questioning the adequacy of the budget provision to address such a large problem. Mr G Srinivasan of New India Assurance offers a more pragmatic view that an outlay of Rs 50,000 Cr (Rs 5000 per family) will be required to implement the scheme effectively.

Sources in the Health Ministry told NDTV that most states are on board with the scheme. States that already have their own health insurance scheme will have an option to subsume the center's. Each state will also have an option to choose between the Insurance Company model and the Trust Model.

Under the NHPS scheme, most of the secondary and tertiary treatments at all public and empaneled private hospitals will be covered. As per NITI Aayog, rural private hospitals will be encouraged to become a part of the scheme and hospitals will be incentivized for improving quality of healthcare. Health Ministry sources cited that a major component would be to strengthen the IT structure of the scheme that will automatically detect fraud and trigger an alert against any malpractice. "Corporate and private hospitals will have to maintain high standards of professionalism and change with the times. Malpractices like what we have seen in the past will not be acceptable," said a senior health official.

The NHPS might well be a giant step towards Universal Healthcare to Indian citizens. It is clear though that the scheme should be implemented at unprecedented efficiency levels to offset the low budgetary provisions. This further brings out the need for a community well-being approach to support NHPS's insurance based hospital cover model. It is our view that the NHPS has to be integrated with the Wellness Centers initiative – with the latter providing the primary care and continuum of prevention care approach.

From an implementation stand-point, several issues must be ironed out if the NHPS is to succeed. Most of these concerns the primary stakeholders and the need to address potential conflicting positions. Some of the conversations and agreements that need to be reached are:

- Between the central and state governments in terms of commitment to funding, sharing of credit, last mile implementation, reconciliation of pay-outs and prevention of misuse,
- Between state governments and various vendors to examine the current system capability to handle NHPS, identify gap areas and implement solutions that can address these gaps. This could be in clinical processes, supply chain, IT etc.
- Between State governments and providers (hospitals) to agree on dispensation of care, service level agreements, quality norms, pricing /costs and viability,
- Between State governments and the public health infrastructure on dovetailing community care and primary care
- Between Government (Central and State) and insurance companies to decide on implementation plans, policy details and viability,
- Address concerns around migration, portability and inclusion into the program to make it transparent and reach out to the largest possible number of needy people

All these point to the need for credible external agencies that can play a facilitative role as a trusted advisor and unbiased observer – to help set up the conversations, develop the processes, forge the relationships and contracts and manage implementation timelines.

Conclusions

Non-communicable diseases (NCDs) are the leading cause of morbidity and mortality in India. The advances in primary health care directly impacts chronic disease outcomes.

A consistent regulatory framework is required to reduce the burden of NCDs along with financial protection of individuals, comprehensive health insurance and subsidies for treatment of major NCDs. Also, policies related to promotion of food preference or cessation of tobacco products, and taxation of medicines for NCDs, continuous promotion of health education through various media, awareness of doctors about the early detection of complications to reduce disability and associated health care costs are all important aspects to improve overall quality of healthcare.

With the rapid technological advancements and an ever-increasing domain of communication and connectivity, we need to explore new approaches to integrate technology in the healthcare sector such as use of smartphones for increasing the coverage, and improving scope for health care delivery. Technology can play a greater role in bridging the urbanrural divide for health care delivery pertaining to the NCDs. To improve quality of NCD care, quality accreditation and certification should be made incentive based and should be regulated so that involved parties are self-motivated to deliver not quality NCD care. To address huge shortage of health professionals, there is an urgent need to integrate mid-level non-physician health worker to facilitate care for patients with chronic conditions.

Finally, to realize gains in reducing NCD burden with the National Health Protection Scheme (NHPS), which is a giant step towards Universal Healthcare to Indian citizens, there is a need for a "community well-being" approach. In our view, the NHPS would need to be integrated with the Wellness Centers initiative – with the latter providing the primary care and continuum of prevention care approach, to offset the low budgetary provisions for NHPS implementation.

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Organizations and institutions involved in the National Health Conclave, 2017

The CONCLAVE, as the name suggests, involved various stakeholders including government, research institutions, academia, industry, community and international agencies on one platform to find a lasting solution.

The various stakeholders include:

- 1. Association of Biotech Led Enterprise
- 2. Association of Indian Health Sciences Universities
- 3. Association of Indian Medical Device Industry
- 4. Association of Healthcare Providers India
- 5. Association of National Board Accredited Institutions
- 6. British Medical Journal, India
- 7. Christian Medical College, Vellore
- 8. Consortium of Accredited Healthcare Organizations
- 9. Director General Medical Services Defense (DGMS)
- 10. Department of Biotechnology, Ministry of Science and Technology, Government of India
- 11. Disease Management Association of India
- 12. General Insurance Council
- 13. Google
- 14. Healthcare Sector Skill Council
- 15. Indian Institute of Management, Bangalore
- 16. Indian Institute of Technology, Madras
- 17. Indian Space Research Organization
- 18. Indian Council of Medical Research
- 19. Indian Medical Association
- 20. National Board of Examination
- 21. National Law school of India University
- 22. National Health Systems Resource Centre
- 23. National Centre for Health Informatics
- 24. Organization of Pharmaceutical Producers of India
- 25. Public Health Foundation of India
- 26. Quality Council of India

Appendix

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Glimpses of the National Health Conclave













