Vital Signs

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Vital Signs

Dear Reader,

Dvara Health Finance's (DHF) mission is to ensure that spending on health translates into better financial and health outcomes for all Indians. We aim to offer at-scale, tailored financing and information services that will enable lower out-of-pocket expenditure for the individual at the point-of-care. Our first product, the Health Savings Account, combines automatic savings, top-up insurance and out-patient care coordination.

Our bi-monthly newsletter, **'Vital Signs'** is an effort to build a community of practice for health sector innovators and practitioners in India. We aim to share learnings from new healthcare models and build a vibrant community that helps improve the value equation for household spending on health.

In our very first issue, we look at the need for innovative financing mechanisms to bridge gaps in coverage for non-communicable diseases (NCDs), and share evidence on what works for effective hypertension management. We also share learnings from the field through a case study of a Health Savings Account customer to provide design pointers for chronic disease management.

In the spirit of an evolving dialogue, we would love to get your thoughts on this inaugural issue. In future issues, we will share insights from our partners & advisors as well as learnings from ongoing pilots. Please send your suggestions on what you would like to see in future issues or anything health financing-related at communications.health@dvara.com. You can also subscribe to the newsletter by signing up here.

Happy reading and wishing you good health!

Bindu Ananth
Founder & CEO - Dvara Health Finance

Section 1: A Deeper Look at NFHS Data

Social protection strategies that integrate prevention against NCDs are needed to head off the health crisis spawned by India's epidemiological transition

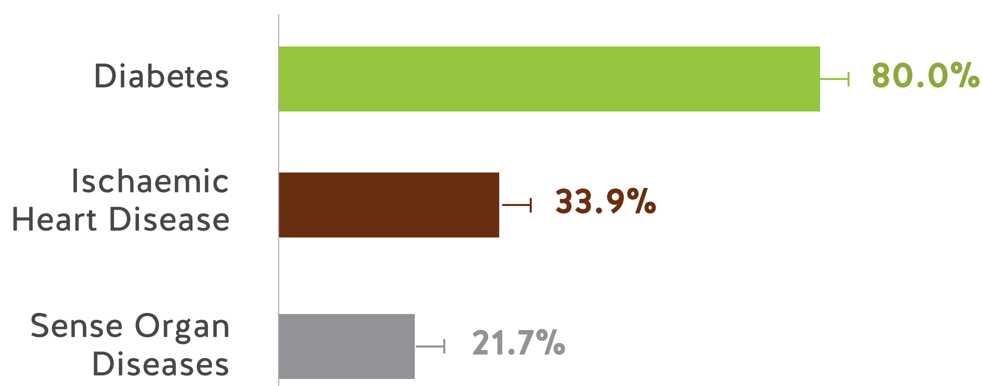
"The burden of non-communicable diseases in India has been rising over the past few decades. The National Family Health Survey-5 data show a high and increasing population prevalence of risk factors that are associated with cardiovascular diseases and diabetes. However, the existing public and private health insurance solutions in India are inadequate, leaving wide gaps in coverage, especially for prevention of NCDs. Ergo, financing mechanisms that promote prevention and early diagnosis of NCDs and affordable treatment for those living with NCDs are vital to improve health and financial outcomes for everyone."

An epidemiological transition is afoot in India

India has been witnessing an epidemiological transition over the past few decades. Simply put, the burden of disease due to non-communicable diseases and injuries (NCDs) has been increasing relative to the burden of communicable, maternal, neonatal, and nutritional disorders (CMNNDs).

In 1990, the top five causes of disease burden in India were CMNNDs, whereas in 2016, three of the top five causes were NCDs, evincing the shift. The disease burden due to most NCDs increased from 1990 to 2016. Of the individual NCDs that were in the top 30 leading causes of disease burden in 2016, the increase in population prevalence between 1990 and 2016 was highest for the following:

Top three NCDs by increase in prevalence between 1990 - 2016

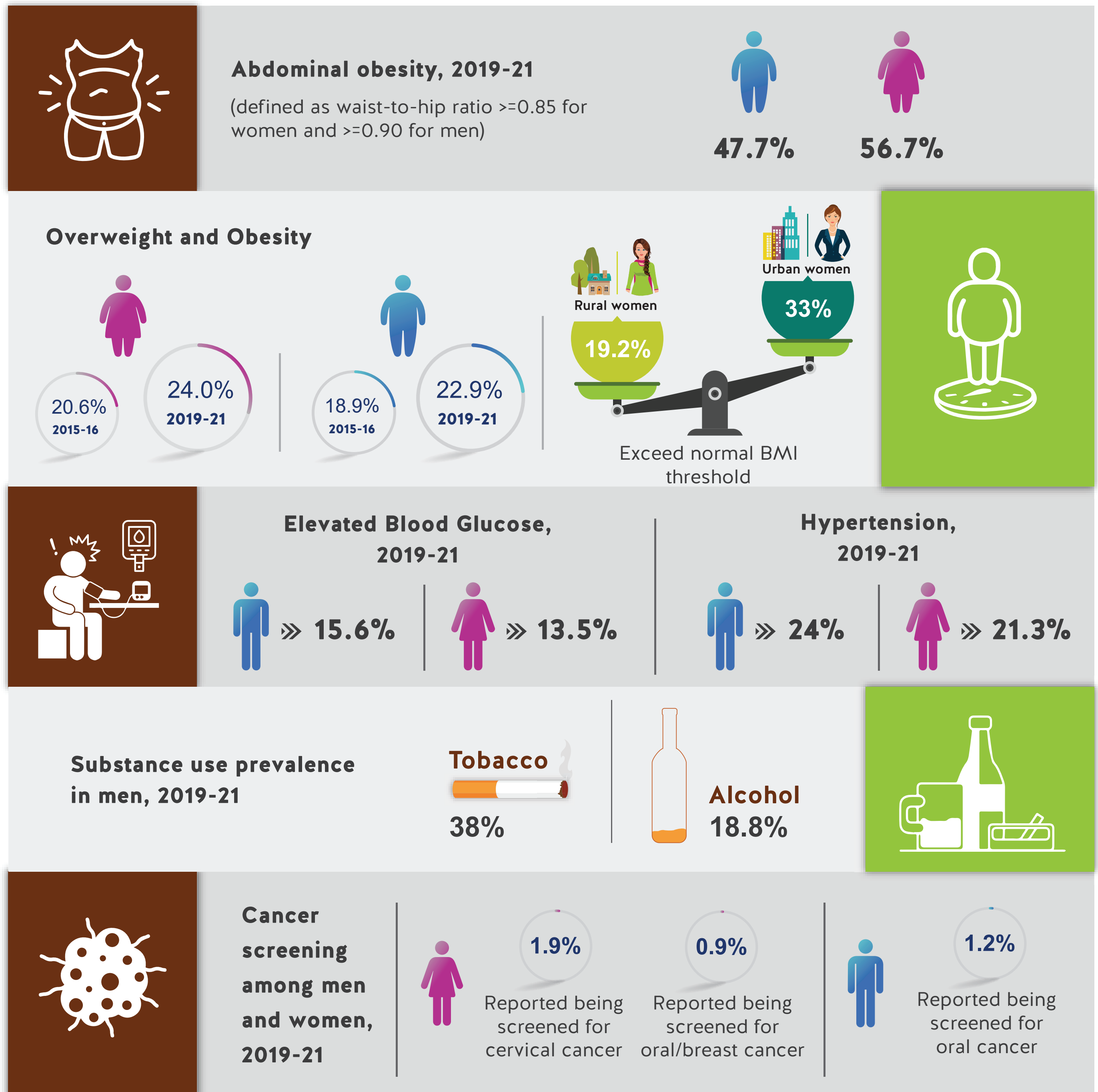


National Family Health Survey adds new indicators to track the epidemiological shift

Unsurprisingly, the need to track population health in step with this epidemiological transition has shown up periodically through inclusion of new indicators in the National Family Health Survey (NFHS). In 2015-16, the NFHS included measurements of blood glucose and blood pressure levels for persons aged 15-49. This was the first time that biomarkers for NCD risk apart from BMI were measured. Its latest edition, the NFHS-5 (2019-21), began collecting population level data on specific NCD risk factors such as waist and hip circumference, glycosylated haemoglobin (HbA1c), and Vitamin D3 for the very first time. The most recent survey also tracked the proportion of women who had ever undergone screening for breast, cervical or oral cancer and that of men who had been screened for oral cancer. Further, NFHS-5 expanded the coverage for the measurement of blood pressure and blood glucose to all persons aged 15 and older.

NFHS-5 finds high population prevalence of risk factors for NCDs

The NFHS-5 data show a high and increasing population prevalence of risk factors that are associated with cardiovascular diseases and diabetes.



These trends point to a burgeoning health crisis that needs to be addressed at multiple levels, including through policy and market solutions.

NCDs impose a significant economic burden on households in LMICs, including India

The adverse household economic impact of NCDs is a growing concern for developing countries where public spending on NCDs is scant, and there are limited private resources to accommodate healthcare needs. A recent multi-country study in 18 countries showed that households with NCDs in lower middle-income countries (LMICs) spent more on healthcare and were at greater risk of catastrophic expenditure and impoverishment than households without. Evidence shows that financial protection from healthcare costs for people with NCDs is inadequate, particularly in LMICs. In India, only about 41% of households (38.1% in urban areas and 42.4% in rural areas) reported having a member covered under a health insurance or financing scheme in 2019-21. Whilst this represents a significant increase over the 28.7% households that were covered in 2015-16, a large swathe of the population still doesn't have access to any financial protection in the event of a health crisis. Even where insurance is available, the coverage may be insufficient to cover out-patient expenditures and tail risk events.

An India-specific study found that 27.7% of NCDs-affected households and 14.6% of non-NCDs households experienced catastrophic health expenditure in public facilities, whereas, in the private facilities, it was 72.1% and 55.9% for NCDs-households and non-NCDs households respectively. It also revealed that out-of-pocket spending on medicine and diagnostics was especially high in public facilities for NCD-affected households compared to non-NCD households. Even as NCDs continue to impoverish households at an alarming rate and impose a significantly higher economic strain on families than non-NCDs, the public policy toolkit for the prevention and management of NCDs in India is limited. The Pradhan Mantri Jan Arogya Yojana (PMJAY), intends to provide hospitalisation cover to 10 lac poor households, representing the bottom 40% of India's population. This leaves out those just above the poverty line but not wealthy enough to pay a private family health insurance premium – what health economists call the 'missing middle'. Furthermore, at INR 6400 crore for FY 2021-22, the budgetary allocations for PMJAY fall short, even for the 500 million poorest Indians that the programme intends to cover.

On the other hand, private health insurance continues to be a relatively small market in India, serving less than 10% of the population, through voluntary group and individual businesses. Further, private healthcare insurers often have a generic health insurance offering which doesn't cater to limited paying capacities and specific healthcare needs of low-income populations. For instance, these often do not cover doctor visits or health screenings, which can help detect a health problem early and help prevent disease progression, obviating the need for more invasive and expensive medical interventions down the line. Consequently, there is an urgent need for private health insurance to move away from the hospitalisation-based indemnity models to an integrated product offering that combines services provision and financing.

As a large swathe of the country's population continues to be underserved by existing public and private health insurance solutions, there is an urgent need to search for broader solutions which address these coverage gaps and focus adequately on integrating primary health care in financial protection mechanisms.

Innovative financing mechanisms that enable access to NCD prevention and treatment are needed

Sustainable Development Goal 3.4 aims to reduce premature mortality from NCDs globally by one-third by 2030 through prevention and treatment. Financing mechanisms that promote prevention and early diagnosis of NCDs and affordable treatment for those living with NCDs are vital to achieving this target. At Dvara Health Finance (DHF), we are keenly testing approaches that combine multiple financial instruments (savings + insurance) and also a subscription-based approach to health care that gradually starts to move away from fee-for-service approaches.

Section 2: Case Study

Patient-centricity tides over initial resistance to new hypertension diagnosis

"This case study demonstrates how reticence in seeking health care for newly discovered metabolic conditions/health risks can be addressed through a patient-centred approach that allays patients' fears and concerns and empowers them to make informed decisions. It also underlines the need for providers to engage with the patients beyond diagnosis and prescription."

We reached out to Harish (name changed to protect identity), a policy-holder with our partner insurer, and convinced him to visit our partner clinic for a free family health check-up. Harish, aged 29, is an apparently healthy software engineer. At his initial clinic visit, he was diagnosed with hypertension. He refused to accept his diagnosis; arguing that his high blood pressure reading was likely a one off due to recent stress. He left the clinic with a prescription but was clearly reluctant to initiate treatment.

In the days that followed, the patient did not initiate his medications. However, through several health coach/advisor-led counselling sessions, the reasons for his aversion to treatment were revealed: fear of potential pharmacological side-effects, perception of life-long medication dependency and negative reactions of family members due to pre-conceived notions about being on blood pressure regulation drugs.

These barriers were gradually addressed through counselling and repeated follow-ups by the health coach. These actions resulted in Harish showing up at the clinic, 22 days after his initial visit. But this time around, seeing his still-high blood pressure measurements, Harish accepted his diagnosis and agreed to initiate treatment.

This case study demonstrates how reticence in seeking health care for newly discovered metabolic conditions/health risks can be addressed through a patient-centred approach that entails counselling and education to allay patients' fears and concerns and empowers them to make informed decisions to improve their health and wellbeing.

Further, it emphasizes the need for healthcare practitioners to engage and support new patients beyond diagnosis and prescription, especially since acceptance of a condition and consequently, adherence to medication, will likely be resisted immediately after diagnosis.

Section 3: What we are reading?

Investing in patient-level strategies might be the best bet for improving hypertension control rates in LMICs

“Hypertension is the leading modifiable cause of preventable death globally. Yet, it is poorly controlled despite the availability of effective treatments, especially in developing countries. A systematic review of effective implementation strategies for BP control by KT Mills et al argues that in LMIC settings, where limited resources may constrain the feasibility of implementing multilevel strategies like team-based care, patient-level approaches, such as health coaching and home BP monitoring might be a cost-effective alternative for hypertension control. In its ongoing pilot, DHF has adopted the Punjab Hypertension Protocol, developed by 'Resolve to Save Lives' in collaboration with the local government, for hypertension screening and management.”

Hypertension is the leading modifiable cause of preventable death globally. In 2019, the number of people with hypertension worldwide was over 1 billion. Hypertension care—including detection, treatment, and control—varies substantially worldwide. Sub-Saharan Africa, Oceania, and South Asia have the lowest rates of detection, treatment, and control and many countries in these regions have seen minimal improvement in these outcomes over the past 30 years. ***Notably, hypertension control rates across South Asia were less than 10% in 2019.***

Barriers to effective hypertension control exist at multiple levels. These include:

- ***Health system level barriers,*** such as limited health care resources, lack of performance standards, and limited reimbursement for health coaching
- ***Health care provider level barriers,*** like lack of adherence to clinical guidelines; and
- ***Patient-level barriers,*** such as lack of adherence to prescribed medications and lifestyle modifications

This presents an urgent need for health systems to understand what works and also what doesn’t for effective BP management, more so in limited resource settings to get the most value for their healthcare spending.

To this end, Katherine T. Mills and colleagues synthesized evidence on the effectiveness of implementation strategies for hypertension management in a 2018 paper in the Annals of Internal Medicine. This review weighs in on the effectiveness of patient-level, provider-level and multilevel strategies based on evidence from randomized controlled trials (RCTs) on lowering hypertension. While the review is limited in that very few trials addressed system level barriers such as lack of performance standards and reimbursement of physician-to-patient health coaching and only about 20% of the studies were conducted in LMICs, it offers salient insights into some of the most effective interventions that can help alleviate the burgeoning hypertension burden globally.

Table 1: Implementation Strategies for Hypertension Management

Implementation Strategy Category	Description
Patient-level	
Health Coaching	Multiple sessions for patient-centered health education and motivation delivered with the goal of facilitating lifestyle modification and/or medication adherence.
Home Blood Pressure Monitoring	Self-monitoring of patient blood pressure and recording of measurements either manually or by automatic electronic transmission; blood pressure readings provided to providers.
Provider-level	
Provider Training	Education or training targeting providers on hypertension management, including guideline adherence (treatment goals, lifestyle intervention, and medication titrations), and/or patient communication.
Audit and Feedback	Repeated, periodic summaries of patient outcomes given to providers, such as blood pressure values, so they can evaluate and improve patient care; could also include provider training.
Electronic Decision Support System	Computerized alerts, reminders, or order sets intended to aid providers in point of care decision making; could also include provider training.
Multilevel	
Multilevel Strategy without Team-based Care	Interventions that target barriers to hypertension control at multiple levels but do not include team-based care, such as a combination of provider training and patient health coaching.
Team-based Care with Physicians Titrating Medications	Collaborative provision of care for hypertension by at least two providers, including a primary care physician who titrates medications, working collaboratively with patients to accomplish shared treatment goals.
Team-based Care with Non-Physician Providers Titrating Medications	Collaborative provision of care for hypertension by at least two providers, including a non-physician team member who titrates medications, working collaboratively with patients to accomplish shared treatment goals.

The authors concluded that implementation strategies targeting multiple-level or patient-level barriers were most effective for blood pressure reduction. Importantly, team-based care with non-physicians titrating medications and multilevel strategies without team-based care achieved significant reductions in both systolic and diastolic blood pressure measurements. ***Team-based care is particularly effective because it frees physicians' time to focus on urgent and complex cases, while still allowing for patient-centred care. Additionally, patient health coaching and home BP monitoring were also effective.*** On the other hand, provider-level strategies such as provider training, audit and feedback and electronic decision support systems had limited effect on their own, and needed to be a part of multilevel, multicomponent strategies to have any effect.

The review unequivocally recommends the integration of multilevel, multicomponent strategies, combining team-based care, health coaching, home BP monitoring and provider training in clinical practice and public health policy. However, the analyses also revealed that health coaching and home BP monitoring alone achieved significant reductions in BP in hypertensive patients. ***Health coaching was found to be effective for behavioural change, including lifestyle modification and anti-hypertensive medication adherence. Therefore, in LMIC settings, where limited resources may constrain the feasibility of implementing multilevel strategies, health coaching combined with home BP monitoring might be a cost-effective alternative for BP control.*** Hypertension control is an area where there is potential for significant impact on patient health outcomes and down-stream cost control. The research findings are clear, it is now up to practitioners to contextualise implementation and bring a team-based approach to ongoing care.