True accountable care

Maximizing healthcare delivery impact, efficiently

November 2025

FICCI

The better the question.
The better the answer.
The better the world works.

FICCI HEAL 2025
HEALTH + ENTERPRISE + LEARNING

EY Parthenon
Shape the future with confidence

Foreword

It is with great pride that we present this report, *'True accountable care: Maximizing healthcare delivery impact, efficiently', a collaborative effort between the Federation of Indian Chambers of Commerce & Industry (FICCI) and EY.*

India's healthcare sector has delivered extraordinary progress over the past two decades—expanding access, improving infrastructure and achieving global recognition for cost efficiency. These gains reflect the sector's ingenuity and resilience. However, the next leap forward must be driven by a dual commitment: to quality and viability.

Standardization is central to this shift. Without a unified framework for measuring and delivering quality, outcomes remain inconsistent and fragmented. Establishing robust standards will elevate care delivery and foster trust, transparency and accountability across the ecosystem.

The current landscape reflects a dynamic interplay between providers and payers. While both aim to serve the patient, misaligned incentives and outdated reimbursement models often hinder progress. This report calls for a transition to value-based care, where outcomes, patient experience and long-term health are prioritized over volume.

Reimbursement must evolve into a strategic enabler, one that supports affordability while rewarding clinical excellence. This requires collaboration, not confrontation. Providers and insurers must co-create sustainable models that align financial viability with quality care.

This report offers a comprehensive roadmap: from hospital grading and clinical outcomes reporting to digital adoption and managed care frameworks. It is both a reflection on where we have been and a vision for where we must go.

We hope this report, released during the 19th edition of FICCI's annual healthcare conference, FICCI HEAL 2025, with the central theme '**Care@25: Defining Moments in Healthcare**', serves as a catalyst for dialogue, collaboration and coordinated action. By advancing the principles of accountable care, we can reimagine India's healthcare landscape where quality and viability go hand in hand, where trust is strengthened and where value-based outcomes become the foundation for a more resilient, equitable and patient-centric system.

As we turn the page to this next chapter, let us do so with shared purpose. The future of healthcare in India depends not just on innovation, but on integration of standards, incentives and a collective commitment to accountable care.

Dr. Harsh Mahajan
Chair, FICCI Health Services Committee and Founder & Chairman, Mahajan Imaging & Labs

Varun Khanna
Co-Chair, FICCI Health Services Committee and Group MD, Quality Care India Limited (Care, KIMS & Evercare)

Prof. Anupam Sibal
Co-Chair, FICCI Health Services Committee and Group Medical Director, Apollo Hospitals Group

Preface

India's healthcare system stands at an inflection point. Significant achievements in improving access to high quality care have positioned India as both a trusted provider to its citizens and a global hub for medical value travel. However, progress has been uneven with persistent inequities around access and availability of care, systemic gaps around quality of care and perception around rising cost of care – which collectively threaten to erode trust and stall momentum.

This report, '*True accountable care: Maximizing healthcare delivery impact, efficiently*', addresses a fundamental question: how can India deliver healthcare that is accessible, affordable and accountable – at scale? While leading healthcare providers are individually driving the quality agenda at commensurate cost of care, formidable structural challenges exist– lack of focus on long term health outcomes, lack of incentivization for adoption of quality standards and digitization and limited insurance penetration coupled with viability challenges for both providers and insurers. These constrain the system's ability to deliver equitable care.

From a macro perspective, clinical excellence means the best outcome for the community at large, i.e., best possible care to maximum number of people. This essentially invokes a simultaneous and consistent commitment to advance the quality of care agenda at the micro level and continuously innovating to minimize the cost of delivering care both at transaction level (episodic) and lifecycle level (health continuum). Such a system will necessitate multiple dynamic quality grades to harmonize technology evolution and affordability. Cost of care is key to community health outcomes and hence advancement of care in the Indian context of a large population needing government support to avail quality care will essentially entail sustained focus on affordability.

To ground this analysis, EY conducted a nationwide survey of patients and clinicians in addition to brainstorming with key industry leaders including CXOs, administrators, senior clinicians and investors. The insights gathered reinforce the need for a national framework that sets clear minimum quality standards which will enable patients to make informed healthcare choices while allowing providers the flexibility to innovate and improve.

We believe a step change is needed. Indian healthcare's way forward must be anchored on key guiding principles of balancing quality with access and affordability, empowering patients with credible information on quality, experience and pricing, embedding agility, standardization and innovation in care models, moving toward outcome-based health reimbursements and enabling financial viability for providers through aligned incentives.

In this context, this report outlines a pioneering illustrative grading framework to reward excellence, proposes a Central Authority for Clinical Excellence to unify standards and drive trust and introduces strategic levers to navigate the quality-cost trade-off. It champions customer empowerment through transparent data and flexible insurance and calls for managed care pilots to reimagine continuity and outcomes. Anchored by the VALUE digital framework, this vision sets the stage for a connected, accountable and equitable health system – one that delivers on the promise of "*Swasth Viksit Bharat*" for every citizen.

We are grateful to FICCI for this opportunity to partner with them on developing this report and the excellent support provided by them in facilitating discussions with key industry stakeholders and providing valuable insights. We are also deeply grateful to everyone who gave us time to deliberate on various aspects of this report and for sharing their perspectives, experiences and insights which have shaped the form and content of the report. It has been a truly enriching experience for us to work on this report and hope it further strengthens the aspiration, agenda and actions for a health system in India firmly rooted in delivering true quality healthcare for all, efficiently and effectively.


Ashish Nanda


Muralidharan Nair


Kaivaan Movdawalla


Srimayee Chakraborty


Akshay Ravi


Ankur Dhandharia


Tara Ravi

Table of contents

“

True Care for me is compassion married with precision in healthcare. Building and maintaining a culture of quality starts with transparency. Providers must move beyond process checklists to publishing risk-adjusted outcomes and patient-reported experiences, so that quality is not just claimed, but demonstrated. Doctors and care teams need to be empowered and recognized for collective outcomes: safety, recovery, patient satisfaction and not just volume of procedures. Digital can be a powerful enabler here: real-time dashboards, interoperable health records and AI-supported pathways help clinicians make better decisions, while remote monitoring and home-based care bring care closer to patients. Above all, listening to the patient’s voice - their fears, their goals, their experiences - keeps us anchored. When we embed this feedback into daily practice, quality becomes sustainable, scalable and truly patient-centered. The pace and terms of delivery and feedback cycle in our industry is changing rapidly; we need to embrace this as it creates an integration of care and breaks the silos we used to operate in, enabling better care management.

Alisha Moopen
MD and Group CEO, Aster DM Healthcare FZC

“

Today, the healthcare consumer is knowledgeable, discerning and value-conscious. As healthcare providers, we have to work on ways to deliver value ahead of price and that can be done by making sure we deliver high-quality care in a seamless way, at every touchpoint – primary, secondary and tertiary. Integrated systems that achieve this with least friction, highest skill and deep empathy will be those that build lasting relationships with consumers and lay the foundation for lifetime value.

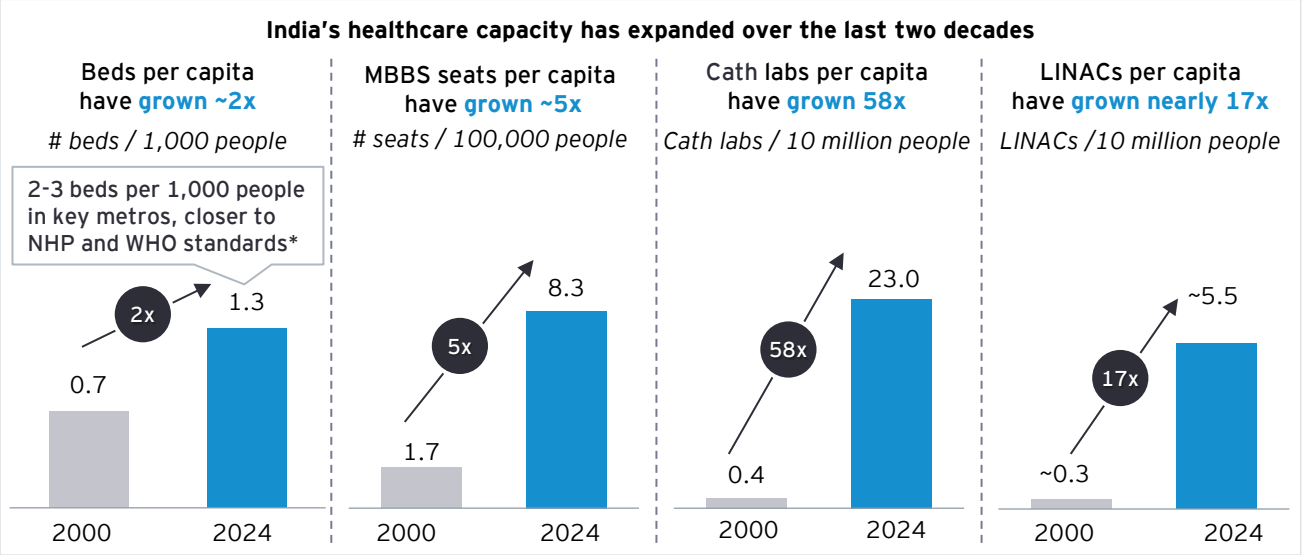
Ms. Suneeta Reddy
Managing Director, Apollo Hospitals Enterprise Limited

Executive **summary**

Four lenses to view India's healthcare transformation

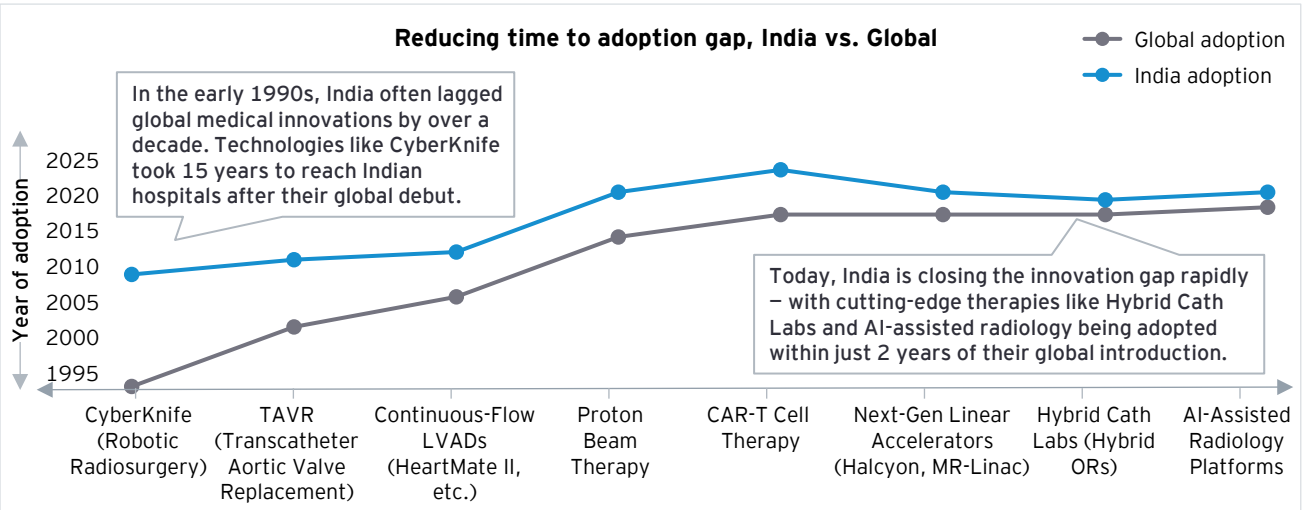
India's healthcare system stands at a pivotal moment in its history. Over the past two decades, the nation has achieved remarkable progress – expanding hospital capacity, improving access and delivering care at a fraction of global costs.

Healthcare as a sector has also drawn significant PE investments of US$15 billion over the last five years, representing over 8-9% of the total PE investments made in India in the last two years, up from 2% in 2018.



Source: EY-Parthenon analysis; National Health Policy 2005, 2018; World Bank 2025; World Health Organization 2024, National Health Policy 2017; Ministry of Health and Welfare- Health Intelligence Report 2001, 2025; World Health Organization, Press Information Bureau 2024; Atomic Energy Regulatory Board, 2024; Radiotherapy centers licensed by AERB, Times of India 2022, Analysis of Radiotherapy Machine Requirements in India: Impact of the Pandemic and Regional Disparities.

Cath labs: Cardiac Catheterization labs, LINAC: Linear accelerator; *NHP targets 2 beds/1000 people, 3 beds/1000 people recommended by WHO



Source: Stanford University, Cribier et al., American Heart Association; Varian, Ministry of Science & Technology; HCG; Apollo Hospitals, etc., compiled press announcements by first movers

Yet, as India aspires to the vision of "*Viksit Bharat*," the challenges ahead are more complex, urgent and multidimensional than ever before. The future will not be shaped by incremental change, but by a bold reimagining of how value, complexity, trust and action are understood and delivered across the healthcare ecosystem.

India's healthcare transformation journey may need to be viewed through four lenses – each offering a distinct perspective on the journey so far, the challenges that persist and the opportunities that lie ahead:

1. **Value** – From cost to outcomes
2. **Complexity** – From episodic to longitudinal care
3. **Trust** – From fragmentation to transparency and quality
4. **Action** – From "one size fits all" to a cohorted, bespoke approach

Value – From largely cost to cost and outcome

India's healthcare system has long been celebrated for its ability to deliver more with less. For decades, the country has set a global benchmark in price efficiency, making high-quality care accessible to millions at a fraction of international costs. This legacy is not accidental - it is the result of systemic ingenuity, relentless focus on frugality and a culture of doing more with limited resources. Yet, as India stands on the cusp of a new era, the very definition of value in healthcare will need to evolve. The future will demand differential focus on maximization of health outcomes for every rupee spent.

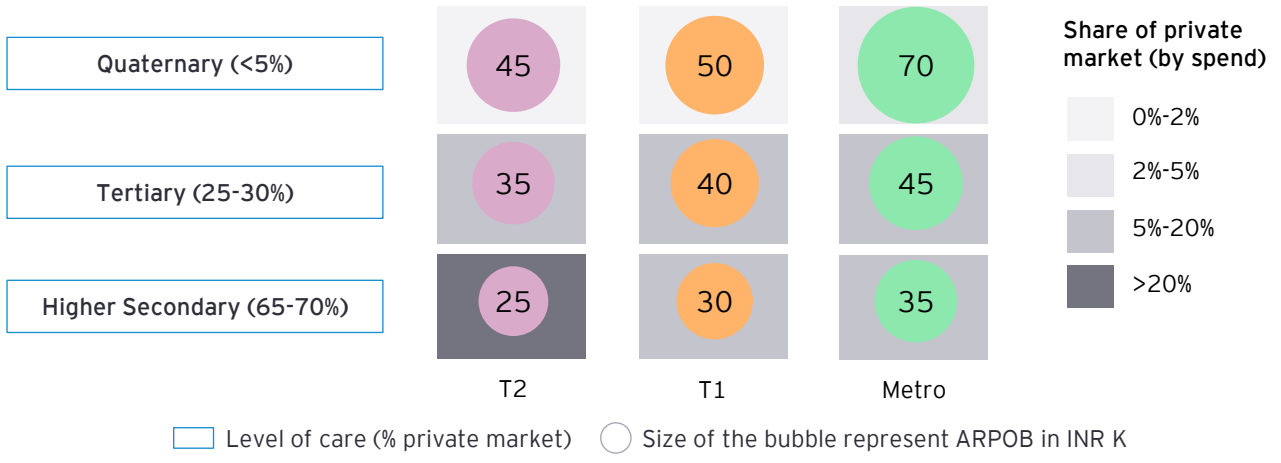
The legacy of India's price efficiency

The numbers speak for themselves. Key procedures in leading Indian hospitals are priced more than 70% lower than in hospitals in developed and high-cost countries such as the US and the UK; they are also priced ~50% lower than in other middle-income countries like Thailand and Malaysia.

Even at leading private hospitals across a mix of city-tiers, the Average Revenue Per Occupied Bed Day (ARPOBD) ranges between INR30,000 and INR40,000, breaching the INR70,000-mark only for quaternary care in metros, which is less than 5% of the total private market by value.

ARPOBDs for leading players across city-tiers and capabilities

Based on EY-Parthenon analyses of estimates from ~250 quality hospitals, with ~75,000+ beds across ~40 cities



Source: Above analysis includes 'quality' players only; Investor presentations of Apollo, NH, HCG, Fortis, Max, Medanta and other major Indian hospitals, EY-Parthenon analysis

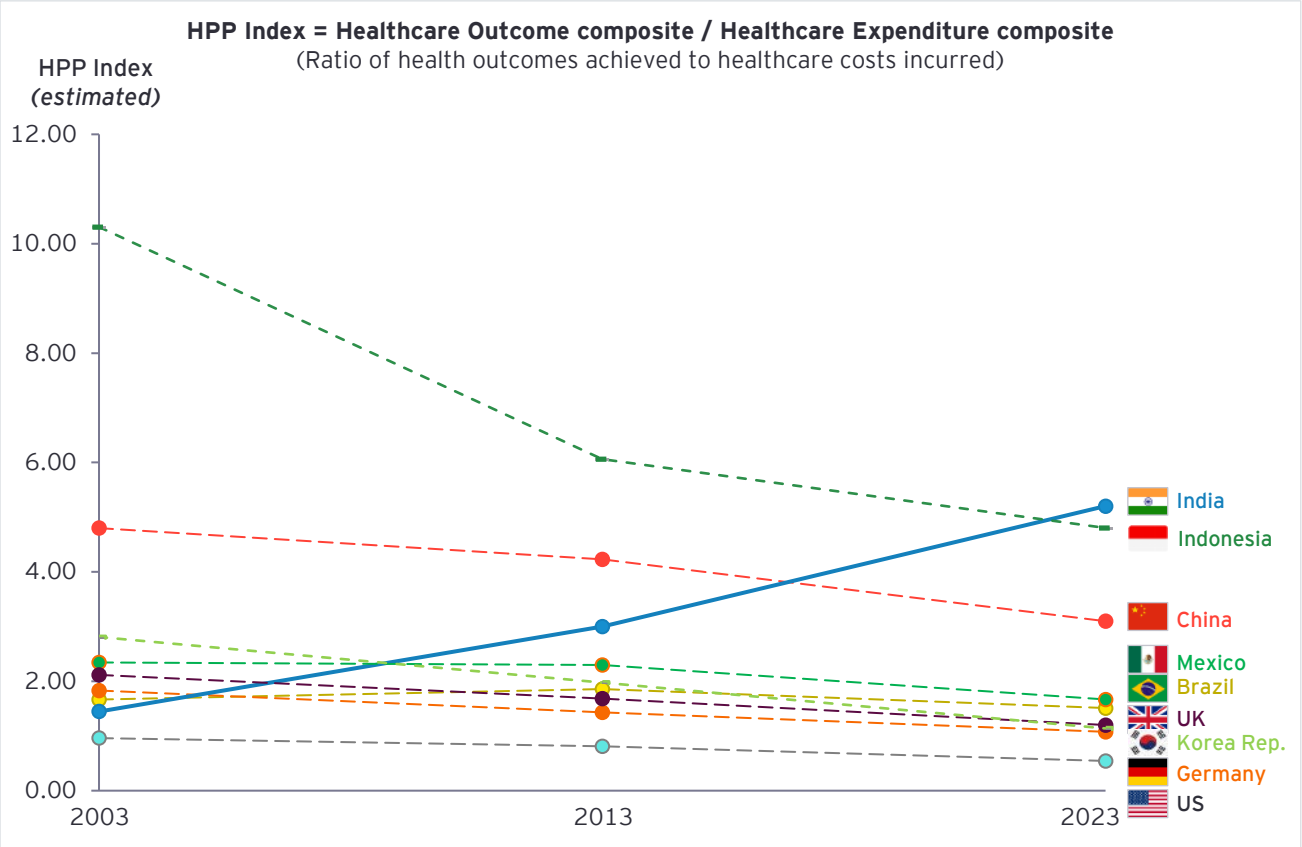
This pricing discipline has ensured that most hospital bills remain within the coverage limits of Ayushman Bharat and private insurance schemes, making high-quality care accessible to millions.

This frugality is not merely a function of lower input costs; it is the result of systemic efficiency. Even as capacity has grown - more beds, more doctors, more institutions - the system has managed to keep core price inflation to just 3%–4% annually. Most of the 9%-9.5% average long-term growth in inpatient realizations has been driven not by price hikes, but by changes in case mix and complexity: more tertiary procedures, deployment of advanced therapies and a shift toward more complex admissions as access, diagnosis and affordability improve.

It must be acknowledged that despite relatively low procedure prices and ARPOBDs, the financial burden of healthcare on Indian households is still largely prohibitive.

The HPP Index: A new measure of value

However, price efficiency alone does not tell the whole story. What truly sets India apart is its ability to deliver outcomes per unit of spend – a fact captured by the Healthcare Productivity and Performance (HPP) Index. This composite measure, which evaluates system cost efficiency by benchmarking countries on their ability to generate health outcomes relative to health system costs, reveals a striking trend: India's HPP Index has risen from ~1.9 in 2003 to ~5.8 in 2023, outpacing even high-income countries.



Source: World Bank Indicators, IHME, EY-Parthenon analysis ; HPP index adjusted for PPP

Advanced economies, despite higher spending, have seen declining efficiency as rising costs outweigh modest improvements in outcomes. In contrast, India's trajectory reflects the highest outcome improvement with the lowest expenditure inflation relative to GDP growth. The efficiency gap between India and its peers has widened significantly over the past two decades, underscoring the nation's ability to deliver value at scale.

While this reinforces conviction that India has been more efficient in healthcare spending, the degree of gap may be influenced by two reasons – integrity and completeness of outcome data and relative demographic advantage (younger population).

The need to expand the definition of 'value'

It must be acknowledged, however, that on absolute health outcome indicators, India continues to lag those of global peers. India's legacy of frugality is a powerful foundation, but it is not enough. The next leap demands a shift from frugality to maximizing health outcomes per rupee spent. While India has delivered more for less, India's demographic and disease profile shifts require a new focus on value – measured not just by cost, but by the quality and equity of outcomes.

Globally, the definition of value in healthcare has evolved from a narrow focus on cost to a broader commitment to outcomes that matter to patients.

Countries such as the Netherlands and Sweden have pioneered value-based healthcare, systematically measuring not just costs but also patient-reported outcomes and quality of life. The International Consortium for Health Outcomes Measurement (ICHOM) has helped standardize outcome clinical metrics across conditions, enabling benchmarking and continuous improvement.

Singapore's health system, for example, combines strong cost controls with a relentless focus on outcomes. Australia's activity-based funding model ties payments to both efficiency and quality, ensuring that providers are rewarded for delivering better outcomes, not just more services.

These global experiences show that value is not a static concept – it is dynamic, patient-centered and requires systems that can measure, compare and improve both costs and outcomes. India's next leap must be to embed this broader, outcomes-driven definition of value into every aspect of its health system.

As India looks to the future, value must become the north star of its healthcare system. The future cannot be primarily about cost containment, but about maximizing health outcomes - life expectancy, quality of life and equity – per rupee spent.

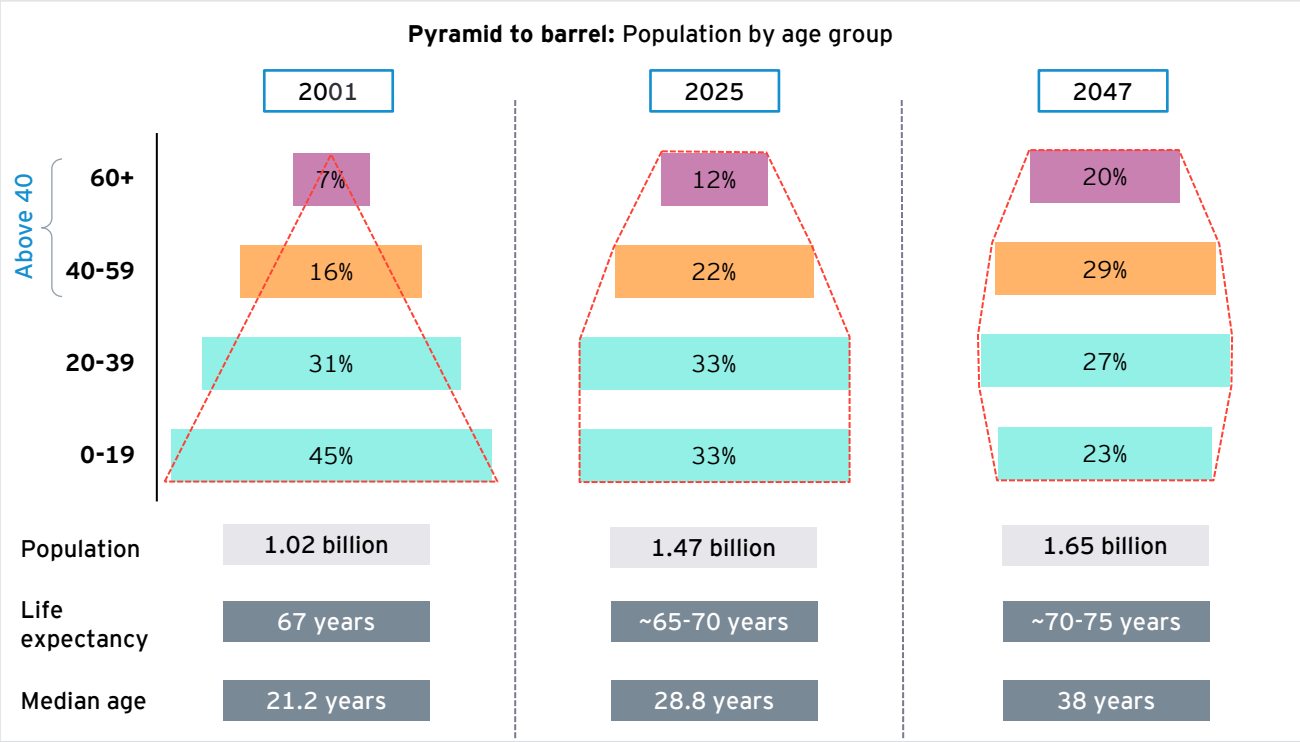
Complexity – From episodic to longitudinal care

India's healthcare system is entering an era of unprecedented complexity. The challenges ahead are not just about scale, but about the very nature of health and disease in a rapidly changing society. The demographic dividend that once promised decades of growth is giving way to a new reality: an aging population, a surge in chronic and lifestyle diseases and a sharp rise in co-morbidities. These trends are not only multiplying the quantum of healthcare needs but also compounding their complexity; thus, demanding a fundamental shift in how care is delivered, financed and experienced.

The demographic and disease shift

At the turn of the millennium, India was poised to reap the benefits of a young, growing workforce. Today, that demographic window is narrowing. By 2047, the population aged 60 and above is projected to grow nearly five-fold compared to 2001, while the 40+ years cohort will nearly triple, reaching approximately 820 million and comprising half the country's population. This aging trend is accompanied by a rapid epidemiological transition: non-communicable diseases (NCDs) such as diabetes, cardiovascular disease and cancer have overtaken infectious diseases as the dominant health burden.

Indians are living longer but they are also getting sicker at younger ages. The onset of NCDs occurs 3–10 years earlier than in high-income countries and late-stage detection remains a formidable challenge. Screening rates for cancers and other chronic conditions are far below global peers, leading to higher mortality, greater suffering and catastrophic financial shocks for families. The prevalence of co-morbidities has grown 20-fold since 1995 and the burden of chronic disease and multi-morbidity is expected to intensify as the population ages.



Source: Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July 2020; Census Data 2001, 2011; EY-Parthenon analysis

The compounding nature of healthcare needs

The implications of these trends are profound. Aggregate hospitalizations are potentially projected to rise 2.5-3 times by 2047 and national health expenditure could reach INR160–190 lakh crore – up from INR10–11 lakh crore today. This would push health spend to 6%–7% of GDP, nearly doubling its share.

But the challenge is not just about more patients or higher costs. It is about the compounding complexity of care. Rising rates of early-onset NCDs, late-stage detection and multiple co-morbidities mean that patients require more intensive, coordinated and continuous care. The traditional model – episodic, acute and reactive, may thus no longer be sufficient. Without a shift to longitudinal, lifecycle-based care, the system risks being overwhelmed by the sheer scale and complexity of future demand.

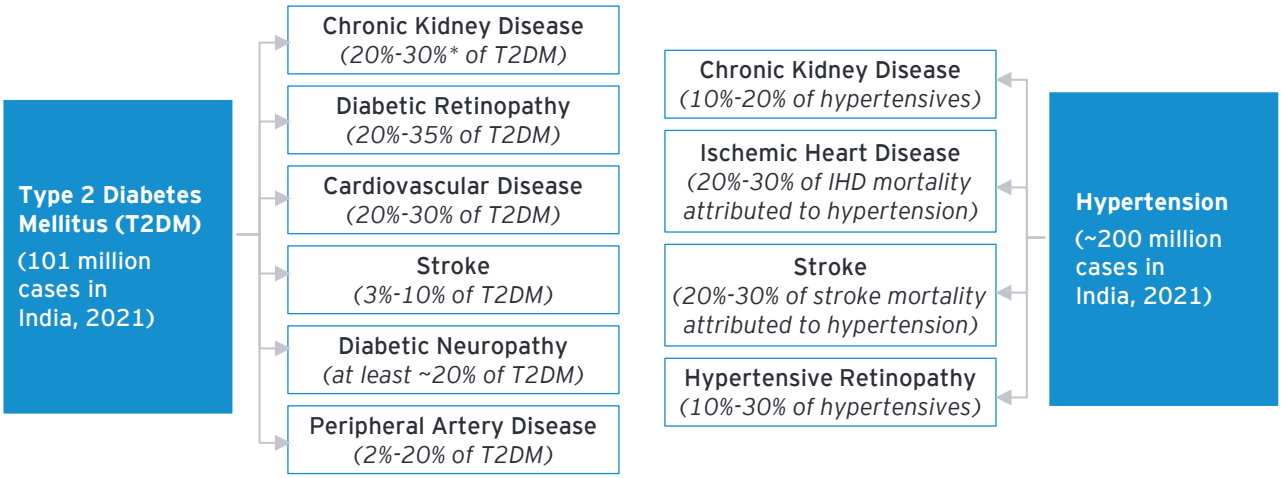
The case for longitudinal, lifecycle-based care

The opportunity and necessity, is to move from episodic, reactive care to a longitudinal, lifecycle approach. This means investing in prevention, early detection and coordinated disease management. It means building systems that support patients across the entire health journey – from wellness and risk assessment, to early intervention, to chronic disease management and palliative care.

Early-stage management of diseases costs significantly less than late-stage treatment across disease cohorts. For example, early-stage kidney disease may be medically managed, while late-stage chronic kidney disease requires regular dialysis and/or transplants. Similarly, advanced, late-stage cancer treatment costs many times more than early interventions.

A systems-level or lifecycle approach allows us to expand the notion of "right care at the right time" across the entire patient journey. Preventive and primary healthcare, disease management, quality diagnostics and appropriate treatment plans must all be integrated into a seamless continuum. The impact of lapses in early stages compounds across the lifecycle, driving higher costs, worse outcomes and greater financial strain.

Illustrative disease cascade: Potential long-term complications over 10-20 years, associated with key diseases/risk factors, based on a meta-analysis of sample-based global and Indian clinical studies



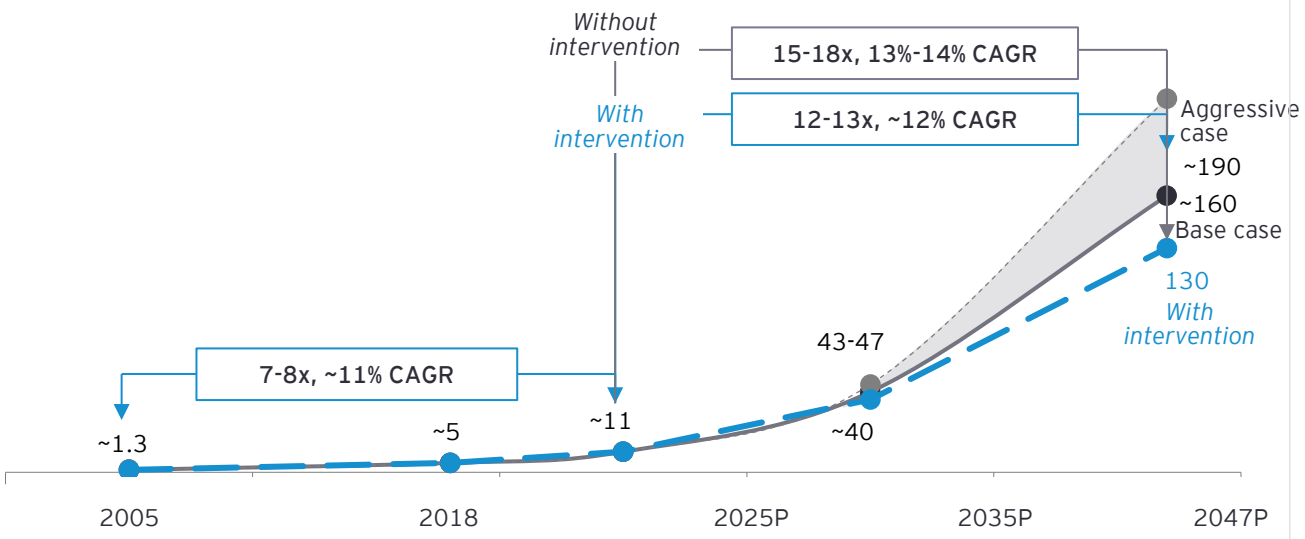
Note: *Prevalence rates are strictly illustrative estimates based on metanalysis of multiple published studies across various geographies and micro-cohorts. This may vary for India at population level and over a longer period, driven by several genetic, lifestyle and epidemiological factors

Source: Prevalence of PAD among patients with T2DM in India, 2024, Diabetes & Metabolic Syndrome: Clinical Research and Reviews; Asian-Indians: a review of CAD, 2018, Annals of Translational Medicine; Prevalence of diabetic retinopathy in India: Results from the National Survey 2015-19, 2021, Indian Journal of Ophthalmology; A study on prevalence of diabetic peripheral neuropathy in diabetic patients in rural Tamil Nadu, 2024, Journal of Family Medicine and Primary Care; CDC and US National Institute of Diabetes and Digestive and Kidney Diseases; Hypertension in India: a systematic review and meta-analysis, 2014, Journal of Hypertension; The trend of hypertension-related chronic kidney disease from 1990 to 2019 and its predictions over 25 years: An analysis of the Global Burden of Disease Study 2019, International Urology and Nephrology

Flattening the curve: The opportunity ahead

With a shift to longitudinal care, India can flatten both the hospitalization and expenditure curves. International benchmarks and modelling by EY-Parthenon suggest that with the right interventions, hospitalizations could be reduced by 20%–30% from projected levels and health expenditure could be contained closer to 5% of GDP – delivering best-in-class outcomes at a fraction of the cost seen in developed markets.

Projected increase in healthcare expenditure, INR lakh crore



Healthcare expenditure's **share in GDP projected could grow ~2x; 20-30 lakh incremental beds could be needed**

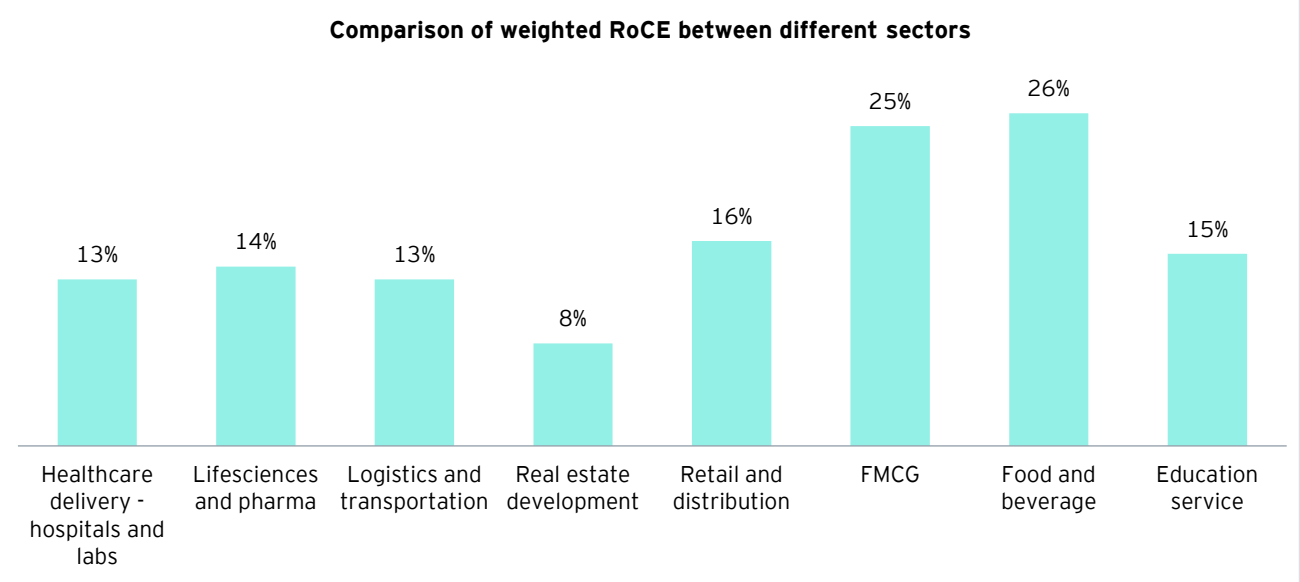
	2005	2018	2025P	2035P	2047P
National health expenditure (as a % of GDP)	~4.7%	~3%	~3.1%	~5-6%	~6-7%
				~4.5%	~5%
Operational beds (lakh)	10-12	14-16	18-20	26-27	39-48
				~24	~30
Beds per 1,000 population (#)	~1	~1.2	~1.3	1.6-1.7	2.4-2.9
				~1.5	~1.8
Incremental investment required (INR lakh crore)					20-30
					~10

Without intervention | With intervention

Source: LASI 2019; NSS 1995 and 2018; Multimorbidity patterns and hospitalization occurrence in adults and older adults aged 50 years or over, 2022, NHA 2014-22, NHP, E-YP Analysis

Financial pressures – A key barrier to be overcome

Delivering longitudinal, coordinated care requires sustained investment in workforce, technology and infrastructure, yet many providers face persistent margin pressures due to rising input costs, wage inflation, higher tax burden given limited Input Tax Credit (ITC) on inputs and reimbursement rates that often fail to reflect true complexity. Surveyed doctors recognize that investments in quality can lower longitudinal costs, but smaller providers often struggle to balance short-term profitability with the imperative to improve outcomes. Leading providers have, however, made rapid strides to drive the affordable quality agenda through innovation and efficiency measures, reaping dignified returns on capital employed.



Source: Private Circle (2023 data), EY-Parthenon analysis
Note: Weighted RoCE calculated for top 20-30 companies by revenue across sectors. Capital employed is total assets net of current liabilities

Investment going forward will need to be largely private and hence this challenge will need to be overcome. Insurers, meanwhile, often grapple with suboptimal risk pools, inability to assess and price clinical risk effectively, low empanelment rates amongst nursing homes and high claims ratios (85%-90%), making it difficult to support innovative care models or expand coverage sustainably.

Without new payment mechanisms and risk-sharing frameworks, these financial pressures risk becoming a barrier to the very transformation India needs – limiting the system's ability to shift from episodic to lifecycle-based care and to invest in prevention, early intervention and chronic disease management.

Trust – From fragmentation to transparency and integration

Trust is the foundation of any healthcare system. In India, building and sustaining trust is uniquely challenging because fragmentation exists across nearly every dimension of the health ecosystem. As the system grows in scale and complexity, the imperative is to move from a patchwork of experiences to a unified, transparent and quality-driven ecosystem that earns and sustains the trust of every patient, clinician and stakeholder.

The roots of India's unique fragmentation problem

India's fragmentation problem is multi-layered and deeply structural:

- **Access to care:** Stark disparities persist in access to beds, specialist care and high-end equipment. While metros and southern states approach global norms (beds per 1,000 capita ratios of 2.0-3.0), tier 2, tier 3 and rural areas, with lower bed density (often less than 1.5 per 1,000 capita) and limited access to advanced therapies, remain underserved.
- **Provider scale and size:** The landscape is dominated by a mix of large hospital chains, mid-sized regional players and a vast number of small, standalone clinics and nursing homes; consequently, India has among the lowest number of beds per hospital (25-30) globally (100+ typically). This diversity creates wide variability in resources, capabilities and patient experience.
- **Payer fragmentation:** Financial protection is fragmented across government schemes, social health insurance, private insurance and a large "missing middle" (25%-30% of the population) that remains uninsured and exposed to out-of-pocket expenses. The payer ecosystem is more fragmented than most other countries globally (top five payers drive ~40% payouts in India vs. 60%-90% globally). Each payer segment operates with different standards, scope of coverage, reimbursement models, compliance requirements and network hospitals, further complicating the landscape.
- **Provider maturity:** Accreditation and quality process adoption are uneven. Less than 10% of private providers have full accreditation from National Accreditation Board for Hospitals & Healthcare Providers (NABH) and less than 2% of diagnostic labs are estimated to have National Accreditation Board for Testing and Calibration Laboratories (NABL) accreditation.
- **Quality standards:** While extensive definitions exist – scope for greater specificity and coverage of appropriateness of care standards, clinician privileging and credentialing as well as depth and breadth of measurable outcome metrics (both CROMs* and PROMs**).
- **Digital readiness:** Digital adoption is highly variable. Large hospitals in urban centers have invested in Hospital Information System (HIS) or Electronic Medical Record (EMR), but most smaller clinics and nursing homes still rely on paper-based records. The lack of interoperable digital infrastructure leads to information silos and impedes care coordination.

This fragmentation results in inconsistent quality, limited accountability and a lack of system-wide standards, making it difficult for patients to navigate, for clinicians to benchmark and for payers to reward value.

* CROM: Clinician Reported Outcome Measures
** PROM: Patient Reported Outcome Measures

NABH's current KPIs

Patient journey

KPIs mandatory to be reported for fully accredited hospitals

	General KPIs	Specialty focused KPIs
Initial consultations	▪ Waiting time for OPD consultation ▪ Return to ER within 72 hours with similar complaints ▪ No. of variations observed in mock drills (O) ▪ % of safe and rational prescriptions	Limited / no KPIs
Diagnostic evaluation	▪ No. of reporting errors/1,000 investigations ▪ % adherence to safety precautions during investigations ▪ Waiting time for diagnostics ▪ Rate of needlestick injuries (O)	▪ Time to CT/MRI in emergency stroke patients (Neuro)
Decision making: Treatment appropriateness and operator competence	Limited / no KPIs	
Admission and Procedure	▪ Initial assessment of IP patients ▪ Incidence of medication errors ▪ % of inpatients developing adverse drug reactions ▪ % of unplanned return to OT ▪ % of transfusion reactions ▪ Standard mortality ratio for ICU ▪ Return to ICU within 48 hours ▪ % of near misses ▪ Incidence of patient falls	▪ Door-to-Balloon Time in STEMI patients (Cardiac) ▪ Cesarean Section Rate (OBGYN) ▪ Maternal Mortality Rate (OBGYN) ▪ Postpartum Hemorrhage Incidence (OBGYN)
	▪ Incidence of hospital associated pressure ulcers ▪ Catheter associated urinary tract infection ▪ Ventilator associated Pneumonia rate ▪ CL associated bloodstream infection rate ▪ Surgical site infection rate ▪ Compliance to hand hygiene practices ▪ Appropriate handovers during shift change	▪ Mortality rate following CABG (Cardiac) ▪ Time from diagnosis to initiation of chemotherapy (Onco) (O) ▪ SSI rate post joint replacement (Ortho) (O) ▪ Mortality rate for Craniotomy (Neuro)
	▪ Nurse-Patient ratio for ICU and wards ▪ TAT for issue of blood and blood components ▪ % of rescheduling of surgeries ▪ % of cases receiving appropriate prophylactic antibiotics within specified time ▪ % of stockouts of emergency medicine ▪ Surgical safety checklist	▪ ICU Mortality Rate ▪ VAP Rate
Discharge	▪ Time taken for discharge ▪ % of medical records having incomplete/improper consent (O)	▪ ALOS for TKR/THR (Ortho) ▪ ICU ALOS (Critical care)
Post-discharge care	Limited / no KPIs	▪ 30-day readmission rate after cardiac surgery (Cardiac) ▪ Mortality within 30 days of chemotherapy (Onco) ▪ Unplanned hospital readmissions during chemotherapy cycles (Onco) ▪ Reoperation within 30 days (Ortho)

Note: STEMI: ST-Elevation Myocardial Infarction; CABG: Coronary Artery Bypass Grafting; SSI: Surgical Site Infection; VAP rate: Ventilator-Associated Pneumonia Rate; ALOS: Average Length of Stay; TKR: Total Knee Replacement; THR: Total Hip Replacement

Source: NABH website

The post-Covid world: Stakeholder sentiments reinforce an opportunity for formalization through transparency and integration

Amidst this fragmentation, both patients and clinicians are signaling that the time is right for a new era of formalization—one built on transparency, integration and shared standards.

Patients increasingly seek objective, accessible information to guide their choices (~80%). Of these, nearly 90% say they would pay more for certified quality and a majority (~80%) express a desire for a single, trusted source of hospital ratings and clinical outcomes. Yet, only about a third can easily access such information today, relying instead on informal proxies like brand reputation (~60%) and word-of-mouth (~80%). The absence of standardized, transparent quality metrics leaves patients uncertain and often dissatisfied, especially when navigating high-stakes or complex care.

Clinicians are equally ready for change. There is strong intent to measure and share outcomes (~ 65%), with many doctors supporting proactive reporting (~35%) and the need for standardized protocols to enhance outcomes (~90%). However, the reality is fragmented: outcome tracking is often ad hoc, metrics are inconsistent (~60%) and digital tools are underutilized. Clinicians recognize that formalization – through clear standards (~90%), digital integration (~50%) and transparent reporting – would not only improve care but also build trust with patients. This convergence of patient and clinician aspirations creates a unique window of opportunity.

By moving decisively toward transparency and integration, India can formalize quality, empower informed choice and create a virtuous cycle of trust and improvement.

Lessons from global systems: Enablers for transparency and integration

Global health systems that have made progress on trust and quality share a set of underlying enablers – each of which offers a roadmap for India's next leap:

Arm's-length bodies defining clear standards and metrics
Independent organizations (like the UK's National Institute for Health and Care Excellence and Care Quality Commission or Australia's National Safety and Quality Health Service) set evidence-based standards for clinical care, safety and patient experience. These bodies operate at arm's length from providers, payers as well as the regulator, ensuring objectivity and credibility.

Enforcement and licensing linked to minimum standards
Licensing and reimbursement are tied to compliance with minimum quality standards. Regular audits, accreditation and stringent enforcement mechanisms ensure that standards are not just aspirational, but operational realities.

Public dashboards and customer empowerment initiatives
Mature systems publish provider-level data on outcomes, safety and patient experience through public dashboards. Patients can compare hospitals, understand risks and make informed choices. Customer empowerment is further enhanced through tools for feedback, complaints and shared decision-making.

Scientific mechanisms for linking reimbursements to objective outcome metrics
Payment models are increasingly tied to objective, risk-adjusted outcome metrics—both clinical (e.g., mortality, readmission rates) and patient-reported (e.g., PROMs, satisfaction scores). This creates financial incentives for providers to improve quality and transparency and for payers to reward value rather than volume.

These enablers are not isolated reforms, but part of an integrated ecosystem that aligns incentives, builds accountability and fosters a culture of continuous improvement.

The paradox of regulatory progress vs. systemic trust and enforcement

India's regulatory and policy ecosystem has consistently demonstrated leadership and intent to bringing in global best-in-class practices, customized for the Indian context. Over the past couple of decades, regulators and standard-setting bodies have made significant strides:

- **Standard Treatment Workflows:** The Indian Council of Medical Research (ICMR), in collaboration with the National Health Authority and WHO India, has developed and released evidence-based Standard Treatment Workflows (STWs) across 28 specialties, aiming to ensure uniform, optimal and rational treatment practices nationwide.
- **Customization of accreditation standards:** The NABH has tailored its frameworks to accommodate India's highly fragmented provider ecosystem, making quality standards more accessible to small and mid-sized facilities. Of late, NABH has also moved to defining specialty specific digital standards, partnering with relevant associations.
- **Digital Public Infrastructure:** The Ayushman Bharat Digital Mission (ABDM) is a robust, forward-looking digital framework, inspired by India's successes in other sectors (like UPI and Aadhaar), designed to create a unified, interoperable health data ecosystem.

- **Common empanelment platforms:** Initiatives to simplify and standardize the process of hospital empanelment and negotiations between payers and providers are underway, aiming to reduce administrative friction and improve transparency.
- **Hospital grading framework:** The Quality Council of India is piloting a scientific, transparent grading system for hospitals, which will enable patients and payers to make more informed choices and incentivize providers to improve quality.
- **Differential reimbursements:** The NITI Aayog (2022) document on Value-Based Care advocated explicitly for linking reimbursement to quality and outcomes. It proposed health indices and nudges for central government programs to build these linkages. Even the recently revised CGHS rates move towards meaningfully recognizing differences in input costs across city tiers and rewarding excellence basis both accreditation as well as super specialty status. Additionally, as Ayushman Bharat prices have been revised through HBP 2.0, HBP 2.2 and subsequently HBP 2022, there has been progressive thrust towards formulating incremental recognition and reward mechanisms for:
  - Basic quality proxies (10% for entry level NABH; 15% for full NABH accreditation; 10% for running PG/DNB courses in empaneled specialty)
  - Higher cost structures by city tier – ~5% differential between Tier 1 and Tier 2; ~20% differential between Tier 1 and Tier 3
  - Challenging viability scenarios (10% for presence in aspirational district).
- **Viability gap funding (VGF) and PPP models:** Revamped in 2020, the new VGF scheme under the Department of Economic Affairs (DEA) offers provision for significantly higher capex as well as opex grants to drive infrastructure creation through PPP in underserved, financially unviable areas. The NITI Aayog model agreements and frameworks launched in 2018 for NCD service (cardiac, oncology, etc.) expansion also enable flexible options for states to drive creation of high-end infrastructure in underserved areas.
- **Cost effectiveness framework:** Health Technology Assessment India (HTAIn) has been established to provide scientific, evidence-based guidelines for the usage of high-cost drugs and implants, using rigorous cost-effectiveness studies to inform policy and reimbursement decisions. This is a critical step in ensuring that scarce resources are allocated efficiently and equitably.
- **Enforcement powers:** Envisioned as a transformative piece of legislation, the Clinical Establishment Act would have made the adoption of minimum standards mandatory and given real enforcement powers to regulators. As health is a state subject and the Act requires state-level ratification, its adoption is at different levels.

Despite these best-in-class regulatory efforts, a persistent dichotomy remains: adoption and impact on the ground have lagged policy ambition. The root cause is not a lack of technical expertise or regulatory intent, but rather the absence of robust enabling mechanisms for collaboration between stakeholders – providers, payers, clinicians and patients. Many providers, especially smaller ones, remain wary of new standards or digital mandates, fearing increased scrutiny, compliance costs or loss of autonomy. Payers and regulators, in turn, often lack reliable data or mechanisms to enforce standards uniformly. Clinicians are slowly adopting to digital means of capturing clinical information of patients across out-patient areas and IPD. Patients, meanwhile, struggle to access transparent, actionable information.

This paradox highlights a critical lesson: regulatory excellence alone is not enough. For India to realize the full potential of its policy innovations, it must invest equally in building trust, fostering collaboration and crucially, in ensuring enforcement strength. Without robust mechanisms for enforcement and incentives for voluntary adoption, even the most thoughtfully designed frameworks risk remaining on paper. The future of Indian healthcare depends on closing this gap: combining world-class regulatory vision with the practical tools, trust and enforcement teeth needed to drive real, system-wide change.

The path forward: Building a trustworthy system anchored in true care

For India, the imperative of building trust is clear. Trust will not be built overnight. It will require sustained commitment, collaboration and a willingness to embrace transparency – even when it is uncomfortable. But the rewards can potentially be profound: a system where every patient can make informed choices, every clinician can benchmark and improve and every stakeholder is accountable for outcomes.

Trust will also not be an automatic byproduct of reform – though reform is its foundation. As India's healthcare system grows in scale and complexity, the imperative is to move from fragmentation to transparency and quality. By building a system that is open, accountable and relentlessly focused on outcomes, India can earn and sustain the trust of its people – and set a global benchmark for value-driven, patient-centered care.

Action: From one size fits all to a cohorted, bespoke approach – The 7C Solutioning Framework

India's healthcare future cannot be built on generic, uniform solutions. The diversity of its population, heterogeneity of disease burdens and wide spectrum of provider and payer maturity demand a move away from "one size fits all" thinking. Instead, the next leap forward must be rooted in a cohorted, bespoke approach – one that recognizes the unique needs of different patient groups, geographies and stakeholders and tailors interventions accordingly.

A 7C Solutioning Framework is proposed for the country – a comprehensive, integrated blueprint for aligning incentives, empowering stakeholders and delivering world-class care at scale.

Proposed solution framework: Towards accountable care

Cohorting and segmentation-based approach

Gradually expand in scope as threshold conditions on population coverage, provider accreditations and metric clarity are satisfied

Clinical excellence

Regulating for trust via a Central Authority

Setting standards	Tiering accreditation	Enforcing accountability
Appropriateness of care, privileging, outcome metrics, reporting requirements	Minimum standards, Centre of Excellence, feedback loops	Risk-adjusted publishing, penalties and audit mechanisms

Cost consciousness

Balancing quality-cost through policy enablement

Driving access	Improving affordability	Supporting viability
Cost reduction mechanisms (VGF, infra sharing), tech-driven models	Rational use of high-cost therapies, Subsidies for "missing middle" cover	Group purchasing organizations (GPOs); Schemes link to minimum costing, standards; GST reform to lower burden

Care reimbursement

Tiering payout basis quality, infra and service

Differentiating care	Tiering reimbursements	Maintaining fairness
Differentiated care delivery (Quality × Capability × Service)	Rate differentials by hospital, geography, complexity	Reducing variability between similarly capable hospitals; rewards / penalties

Consumer empowerment

Enabling informed decision-making

Improving transparency	Building clarity	Expanding choice
Dashboards for quality, cost and guides	Scaled awareness and education programs	Insurance product innovations: base vs. top-ups

Care coordination

Moving towards a managed-care ecosystem

Piloting payer-provider solutions	Scaling integrated networks	Enabling tech driven models
Bundled payments for integrated care	Capitation for preventive and chronic care	Home healthcare, clinical grade wearables and care consortium groups

Connected ecosystem

Moving towards digitally enabled ecosystem

Infrastructure enablement	System intelligence	Data-driven governance
Common portals and ABDM-compliant EMRs	System-wide tools for fraud and clinical guidance	Cohorting, risk models and grading backed by data

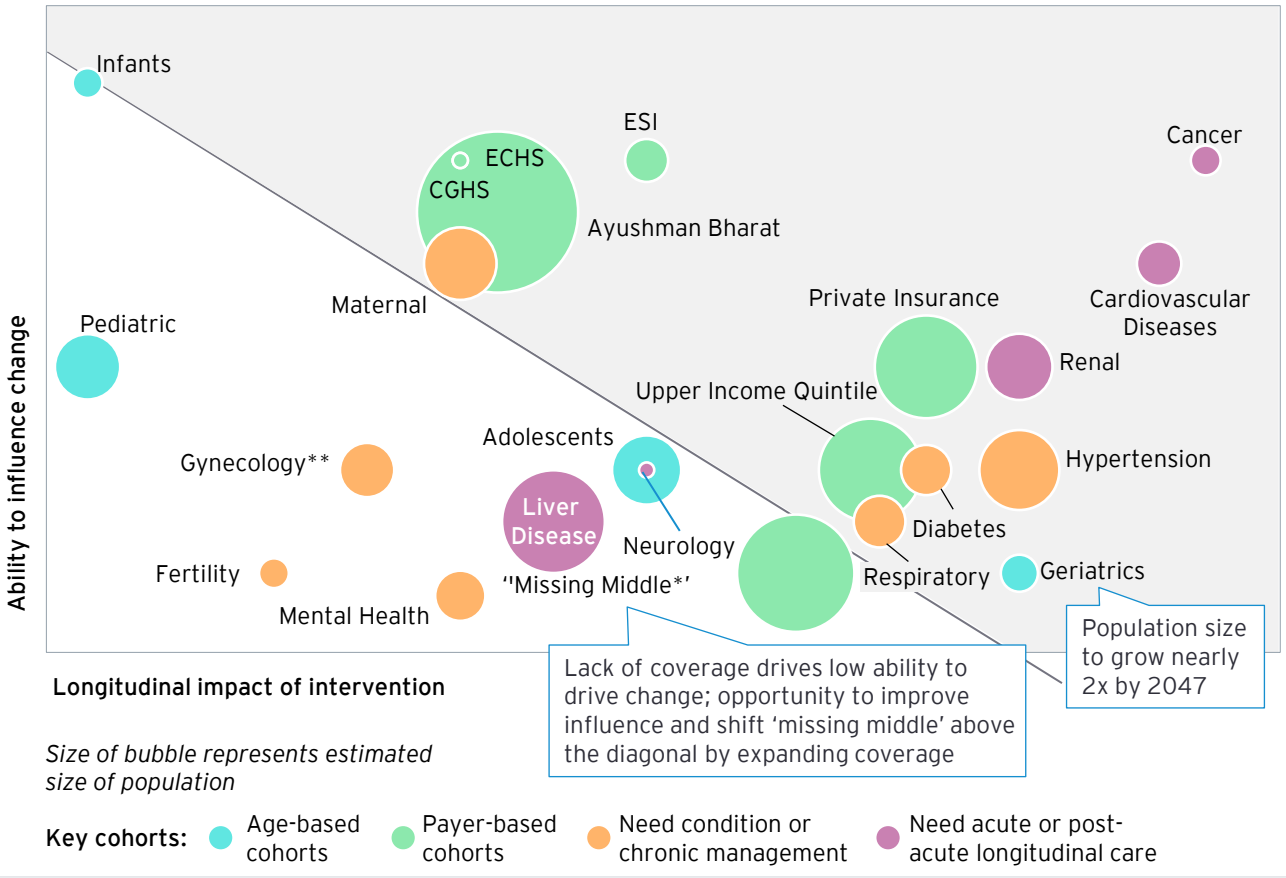
Cohorting: Segmenting objectives and approach to drive targeted initiatives and impact

India's health needs are not monolithic. There is a need to segment populations by risk, disease, geography and payer type and tailor interventions for high-impact cohorts. Cohorting of objectives based on health system maturity is a central step to scalable design for India. For micro-markets with extremely low bed densities and/or formalization (beds accredited, beds empaneled, population covered) – focus on the basics to drive access and formalization is warranted. Only for micro-markets with a reasonable critical mass of access, insurance cover and hospitals with regulatory or payer coverage, can targeted interventions to drive holistic outcome focus, be implemented.

Cohorting enables more efficient resource allocation, sharper policy focus and the ability to demonstrate early wins in targeted segments. An illustrative segmentation and prioritization roadmap, basis size of various population cohorts, scale of longitudinal impact of a shift to value-based care and the ability to drive change, has been shown below.

Illustrative cohorting of patient groups

Patient cohorts split into four distinct groups; do not add up to 100% of population



Source: EY-Parthenon analysis, Report of the Technical Group on Population Projections, Ministry of Health and Family Welfare, 2021; Global Burden of Disease, 2021, Health Insurance for the Missing Middle, Niti Aayog, 2021, Lancet 2001, 2021, National Family Health Survey-2021, WHO 2002-2025, WHO x Globocan 2018, 2022, National Health Accounts, 2022, Independent peer-reviewed clinical studies, published in the European and British journals of General Practice, The American College of Obstetricians and Gynecologists, Mayo Clinic: evaluation of insurance products by State and major private providers, National Mental Health Survey, NIMHANS, 2025, Pradhan Mantri National Dialysis Programme, 2025, Press Information Bureau

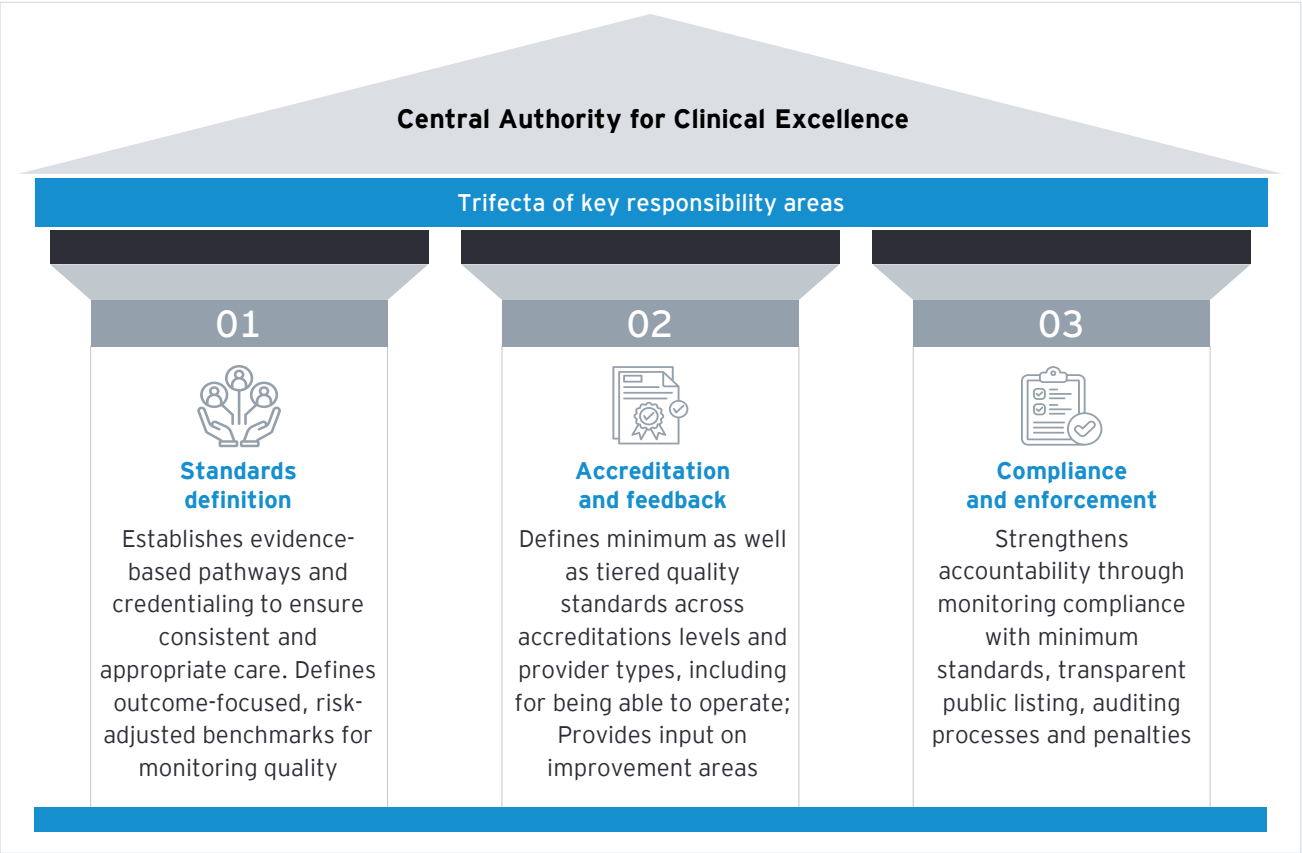
Note: CGHS - Central Government Health Scheme, ECHS - Ex-Servicemen Contributory Health Scheme, ESI - Employees' ;'Missing Middle' are middle of pyramid individuals who are not covered under any insurance- as defined by Niti Aayog in "Health Insurance for the Missing Middle", 2021; Upper Income Quintile assumed to have partial insurance penetration of private insurance as reported in same Niti Aayog report (2021); Gynecology ** - includes addressable population which older than 40

The chart above showcases an illustrative roadmap to potentially sequence planning of solutions to deliver high impact and efficient deployment of resources, as we move towards accountable care.

Clinical excellence: Regulating for trust via a central authority

India's clinical excellence framework will need to solve for the triple problem of adoption of common standards, enforcement and tiering. Industry stakeholders have emphasized the need for a framework that not only enforces minimum standards but also recognizes institutions delivering world-class outcomes.

Drawing lessons from global models like the UK's NICE and CQC as well as from the country's own experience in other sectors (for instance with FSSAI or BIS), India could benefit from a Central Authority for Clinical Excellence that balances advisory and regulatory roles. This authority should be anchored in three core functions: standards definition, accreditation and feedback and compliance and enforcement.



Such a body must act as a true partner though and not a gatekeeper, have clarity of purpose, flexibility by design, be inclusive, industry-led, empowered and well-resourced to succeed.

It must also integrate existing efforts and be complementary, not duplicative while enabling diverse representation and fostering collaboration with states and providers to drive systemic reforms in access, affordability and quality of care across India.

Cost consciousness: Balancing quality-cost through policy enablement

The quality-cost balance equation for India implies solving for market inefficiencies that have hampered private sector expansion; the role of policy and government in driving such solutions is likely to be pivotal. Inefficiencies include those:

- Inhibiting infrastructure creation in underserved areas
- Inhibiting provision of meaningful health cover to the "missing middle" (the segment not covered by government insurance and cannot afford private insurance)
- Resulting in potentially unnecessary usage of expensive drugs, implants or equipment
- Inhibiting uptake of central or state government (AB-PMJAY) schemes

The government has already established strong foundational building blocks to address these problems; a concerted and targeted effort to drive effective enablers for these and to scale these solutions across focus cohorts can accelerate India's journey to health equity.

Dimension	Levers/programs to be accelerated
Driving access for all	▪ Ramp-up of revamped VGF scheme (under Department of Economic Affairs); NITI Aayog's 2018 PPP framework for NCD service expansion ▪ Fast-track enabling policy measures to drive adoption of digital tools to solve the access problem (e.g., digital pathology, teleradiology, centralized treatment planning,
Driving affordability	▪ Extension of HTAIn to cover cost effectiveness of care pathways and high-end therapies ▪ Widening range of topics for evaluation of frugal innovations under HTAIn ▪ Exploring zero-rating of healthcare services and enabling full ITC on inputs
Driving feasibility	▪ Extension of Jan Aushadhi GPO model to smaller hospitals / nursing homes as an option ▪ Linkage of government schemes with true minimal or marginal costing of heterogenous providers with minimum quality standards

Care reimbursement: Tiering payout based on quality, infrastructure and service

The need for a tiered reimbursement framework, anchored on a scientific grading system has been clearly articulated by various stakeholders and has also been seen globally to be one of the most effective levers towards incentivizing a mindset shift towards quality. Approximately 80% of patients surveyed believed that standardized grading would strengthen their trust in hospitals and clinicians. As mentioned earlier, key stakeholder interactions have also articulated the need for a framework to recognize and differentially reward institutions delivering high quality outcomes and clinical excellence.

Government schemes such as Ayushman Bharat and even CGHS recently have already moved towards tiered pricing basis differences in input costs by city tier and basis accreditations like NABH and NQAS. The private insurance sector though may not yet have a formalized system of scientifically assessing and linking reimbursement rates to input costs as well as quality indicators or outcomes.

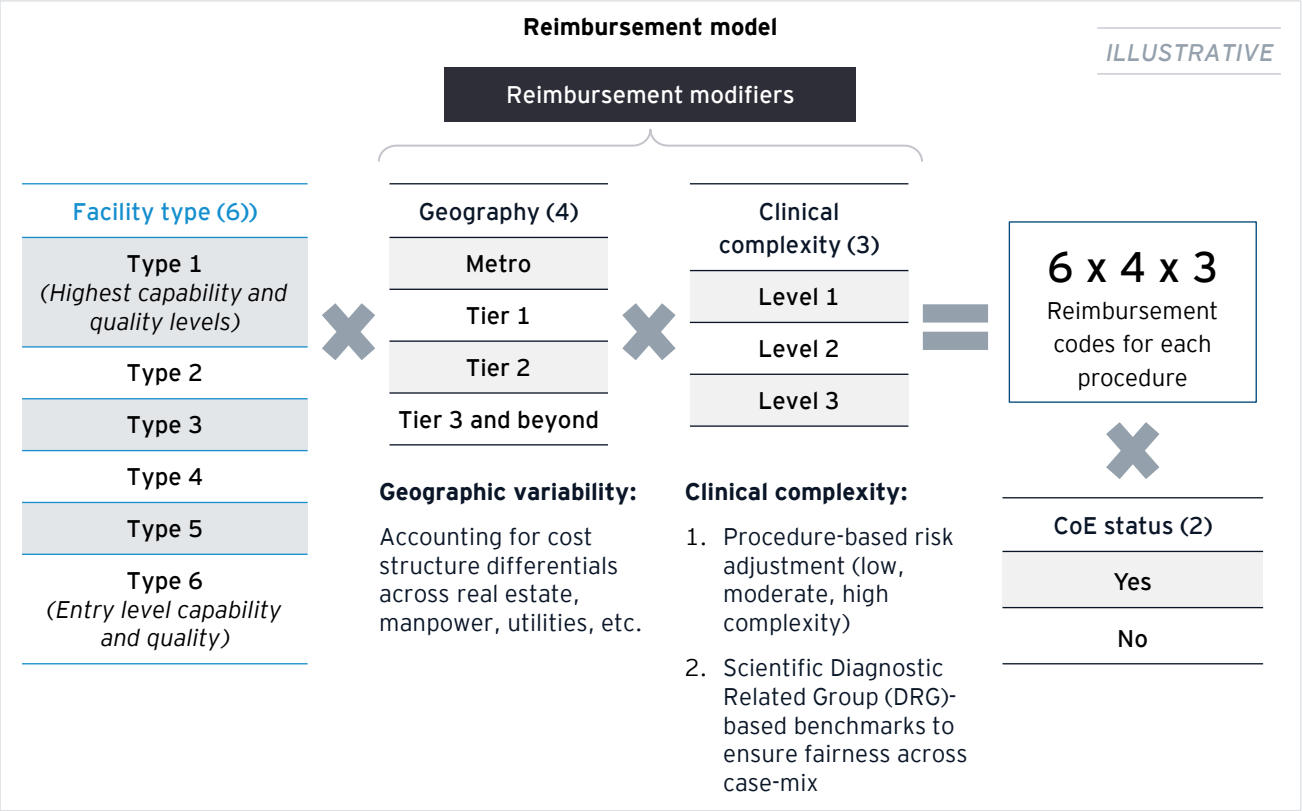
EY-Parthenon proposes a simple grading system for private insurers to leverage, that groups hospitals based on capability and quality, into six types, which will further form the basis of tariff bands. This would appropriately differentiate input investments and quality levels. This would appropriately differentiate input investments and quality levels across six hospital archetypes.

Further, to account for the variations in cost of capital and real estate by geographic location as well as accounting for complexity of the disease, reimbursement modifiers can be introduced. These modifiers will have weightages associated for each category, which accounts for differences in the cost structures of geographic location and severity of disease, enabling justifiable variances in reimbursement levels beyond only the hospital capability and quality.

A Centre of Excellence modifier can also be kept as an optional modifier, which can be used in exceptional cases where there is depth in specific specialties which is exemplified by equipment, infra, research, affiliations, etc. Such facilities also cater to a larger volume of patients which includes a significant portion of medical tourism. They are characterized by exceptional medical outcomes and a modifier would allow compensation accordingly for bringing excellence in care.

Capability of facility	Illustrative definition metrics
Tier 1	▪ Cutting-edge medical infrastructure (Robotics, advanced diagnostics, etc.) ▪ Multi-disciplinary care teams active in at least top three therapy areas (Cardiac, oncology, transplant, etc.) ▪ Fully integrated EMR systems
Tier 2	▪ Advanced medical infrastructure ▪ Sub-specialization / multi-disciplinary team available in at least 1 specialty ▪ Digitized HIS systems
Tier 3	▪ Standard medical infra ▪ Multispecialty availability

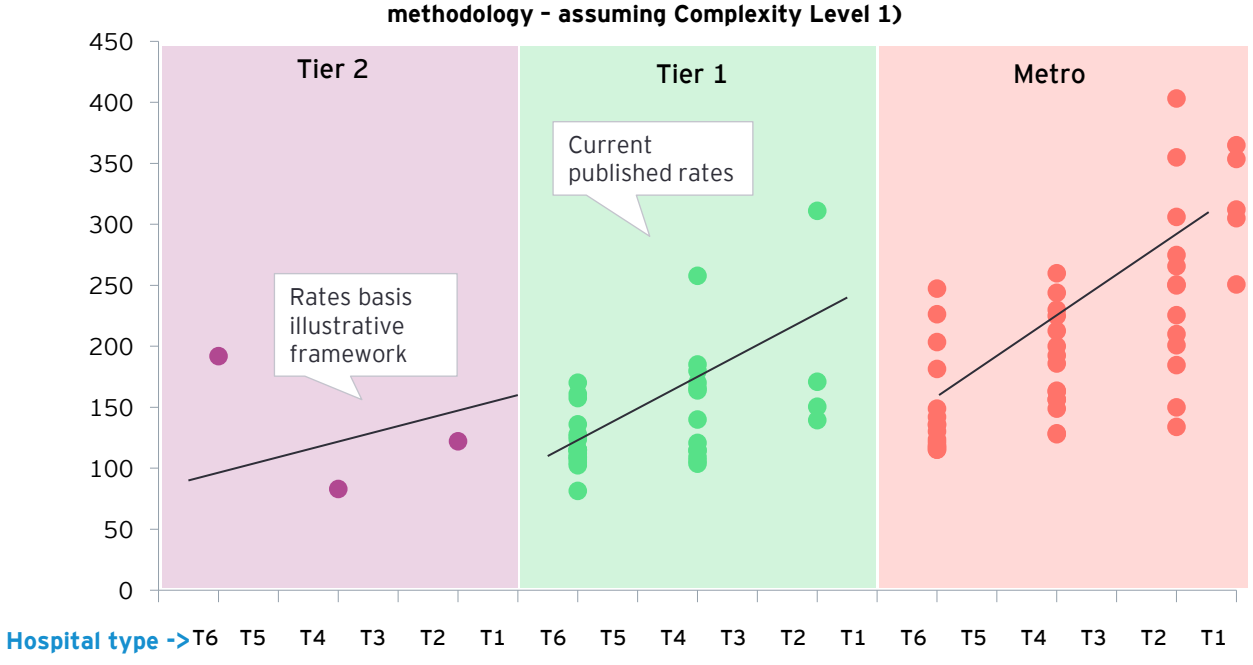
Quality of care	Illustrative definition metrics
Advanced	▪ Full NABH accreditation and JCI accreditation preferred ▪ Audited minimum threshold performance across at least three PROMs ▪ Audited minimum threshold performance across at least eight CROMs
Standard	▪ Entry-level NABH accreditation ▪ Audited minimum threshold performance across at least four CROMs



Source: EY-Parthenon analysis

Publicized GIPSA tariffs currently have significant tariff variations across different geographical regions as well as hospital types. Solving using a simple least squares regression method, EY-Parthenon estimated suitable reimbursement modifier weights basis the sample analyses of rates across 90 hospitals in 15 cities. The resulting implied reimbursement rates have been plotted in the chart below versus the published rates for a sample set of hospitals for a CABG procedure.

GIPSA Coronary artery bypass grafting (CABG) tariff trends (General Ward) across hospital and city types (Analysis of rates across ~90 hospitals across 15 cities and potential for harmonization using illustrative methodology – assuming Complexity Level 1)



The suggested tiering framework is only illustrative and a detailed exercise will need to be carried out given the heterogeneity in our healthcare system. However, this shows the potential for such a system to bring in a transparent, scientific mechanism to defining the reimbursement rates.

Customer empowerment: Enabling informed decision making

Healthcare choices in India have traditionally been driven by word of mouth and clinician legacy, which has led to a disproportionate pull of patients to selective doctors. Such a model has limited basis in evidence and puts higher pressure of healthcare delivery on fewer resources/individuals. There is a need to empower patients enough for them to take better control of their health via informed decision making.

Three key levers for customer empowerment suggested to be developed:

Dimension	Levers/programs to be accelerated
Improving transparency	▪ Driving minimum data sanctity - Creation of one profile per provider; Linking of data across ABDM, PM-JAY and hospital systems to make such profiles both reliable and machine-readable ▪ Curation of a consumer-grade public dashboard stitched from ABDM, PM-JAY and eSanjeevani feeds ▪ Availability in Indian languages, low-bandwidth formats and distributed through kiosks, ASHA networks and awareness campaigns
Building clarity	▪ Deployment of simple comparison tools to view hospital grades, clinician and provider details, outcomes, cashless eligibility checks ▪ Incorporation of key clinical outcome signals into patient journeys, while payers use the same data to steer demand and design value-based contracts ▪ Standardized disclosures and product cards for insurance products
Expanding choice	▪ Coverage across every household through an affordable baseline clinical insurance cover (e.g., a INR5,000 family floater) ▪ Preserving the freedom to upgrade service eligibility through top-ups ▪ Steerage options – trade-off between premiums and range of network hospitals (within a certain geography or payer-preferred network)

Care co-ordination: Moving towards a managed-care ecosystem

There is growing interest and recognition among providers, clinicians and even patients in the potential for managed care to significantly improve outcomes and experience across the care continuum. Approximately 90% of surveyed patients resonated with the concept of a managed care model with ~50% associating chronic disease management and easy access to doctors as key potential benefits.

Significant barriers exist though to building managed care systems at scale in India. A multi-pronged approach is needed that balances the setup of foundational enablers with pragmatic piloting. These pilots can build belief in the feasibility of managed care models and generate critical learnings on what works in the Indian context.

Importantly, while the private sector faces acute challenges in integration, the public sector, with its tiered Primary Health Center (PHC)–Community Health Center (CHC)–District–Apex architecture, holds natural potential for scaling managed care, especially in states with relatively well-developed infrastructure.

At the same time, private sector models could also become scalable at a cohort or micro market level, provided certain threshold conditions are met:

1. Broad consensus on clinical pathways and disease management guidelines for targeted comorbidities or ailments.
2. A critical mass of patients in a micro market covered under a single payer (or a coalition of payers willing to participate).
3. A critical mass of accredited providers willing to align with stringent clinical and reporting standards and empaneled with the payer.

As broader interventions around clinical governance, quality-cost balance and customer empowerment are implemented, these threshold conditions will increasingly be met across multiple micro markets. This creates the opportunity to test and refine managed care models in India through pilots. Three potential arenas can be piloted in parallel to maximize learnings and operational experience in building conviction for scaling managed care across the country:

Model type	Key features	Applicability
Provider-led pilots: Closed-Network Wellbeing Ecosystems	Integrated network spanning primary clinics, diagnostics, hospitals and homecare Subscription-based or outcome-linked pre-paid care packages Priority access, bundled discounts, preventive check-ups and wellness services (nutrition, lifestyle coaching)	Private provider with multi-specialty and longitudinal care ecosystem or Public healthcare system Sufficient patient base within catchment area for meaningful testing Provider readiness to invest in digital and wellness integration
Insurer–provider collaborative pilots: Pre-paid managed care models	Joint offering between insurer and provider for comprehensive coverage (OPD, diagnostics, hospitalization) Pre-paid, predictable cost structure with shared savings model Incentives for preventive and outpatient care to reduce hospitalization	Anchor insurer with significant local customer base Anchor provider with strong equity in the micromarket; initiates tie-ups with other key specialists in the micromarket Tri-partite agreement (hospital-payer-specialists) on outcome-linked reimbursement and governance framework
Health-tech anchored pilots: Disease-focused, digital-first care	Digital-first programs for chronic conditions (diabetes, hypertension, cardiac care) Tele-consults, remote monitoring, diagnostics coverage, AI-driven insights Convenience and scale beyond geographical limits	Insurer partnership with health-tech platform and quality clinician partners Defined disease group with standard protocols and measurable outcomes Patient cohorts large enough for meaningful analytics

Connected ecosystem: Moving towards a digitally integrated ecosystem

To unlock the full potential of digital health, India must move beyond isolated implementations and build an integrated, scalable and trust-driven ecosystem. This requires:

- Solving for strengthening infrastructure
- Embedding standardized data capture, tracking and monitoring quality parameters such as PROMS and CROMs
- Fostering interoperability and ensuring compliance with national frameworks like NABH digital standards, ABDM and the DPDP Act
- Building data-backed linkages between clinical pathways and longitudinal outcomes to enable effective designing of nuanced insurance products and longitudinal care models
- Enabling effective data pooling and leveraging AI or LLMs to glean effective population level and cohort level insights for more effective planning as well as actuarial pricing
- Creating the right incentives for adoption across all levels of care

Based on the key challenges of the current digital ecosystem and learnings from other countries, the VALUE framework by EY-Parthenon defines Vital Aspects of Leveraging Digital for Unifying and Enhancing Health Outcomes for India with a focus on 5Is – Infrastructure, Interoperability, Intelligent systems, Integrated care and Insight-based governance. It will be imperative to leverage the initial momentum gained in this journey through ABDM initiative as well as recently launched NABH digital standards.

Framework	Objective	Focus areas
V- Vital Digital Infrastructure	Lay the foundation for digital transformation by ensuring all providers adopt basic building blocks such as HIS, EMR, Laboratory Information Systems (LIS), Radiology Information Systems (RIS), Picture Archiving and Communication Systems (PACS); preferably NABH-approved and ABDM-compliant systems	▪ Critical focus systems: HIS, EMR, PACS, LIS, RIS patient apps, National Health Claims Exchange (NHCX) ▪ HIS and EMR as standard across all type of providers (clinics, nursing homes, hospitals) to capture patients' longitudinal medical history ▪ Patient apps (under ABDM or hospitals patient app) for access to medical records, engagement and consent management for data portability, well integrated with HIS and EMR
A – Advanced Interoperability	Enable seamless, secure flow of health information across the ecosystem	▪ ABHA-linked health records to ensure continuity of care across all levels of care ▪ Common data capture standards, templates and open APIs for nationwide exchange. ▪ Patient consent-driven data sharing with stakeholders aligned with Digital Personal Data Protection Act (DPDP Act)
L – Leveraging Intelligent Systems	Harness technology to improve outcomes, efficiency and trust between patients, providers, payers and regulators	▪ AI, GenAI and Agentic AI for clinical decision support at provider level and personalized health awareness and education at patient level ▪ Smart automation to reduce manual effort and error at provider and payer level ▪ Fraud detection in claims and insurance processes at payer level ▪ Automated quality metrics capture and monitoring at provider level ▪ AI-based models for predictive analysis of health emergencies or changing health profile at government level
U – Unifying Care	Break silos to deliver holistic, patient-centric care	▪ Integrated platforms for collaboration between hospitals, clinics, labs, pharmacies, payers and regulators for longitudinal Patient 360° view across all stakeholders ▪ Integration of HIS system with NHCX for claims and scheme management
E – Evidence-Based Governance	Translate data into actionable insights and accountability	▪ Real-time dashboards for regulators, payers and providers ▪ Standardized reporting of outcomes and quality indicators ▪ Feedback loops for continuous improvement ▪ Leveraged data analytics for public health studies, disease profiling, clinical R&D, infrastructure planning, health budgeting etc ▪ Data analytics to create cohort-based managed care models

Stakeholder roles: A collective responsibility

Stakeholder	Key imperatives
 Regulator	1. **Establish a Central Authority for Clinical Excellence** to define, accredit and enforce minimum and tiered quality standards 2. **Scale policy enablers** like VGF schemes, GST reforms to include ITC on inputs, Ayushman Bharat and HTAIn to address infrastructure gaps and affordability for the "missing middle" 3. **Mandate digital adoption** through ABDM and NHCX compliance, especially in tier 2/3 and rural areas 4. **Drive managed care pilots** in public systems leveraging PHC–CHC–District–Apex architecture 5. **Enable transparent public dashboards** for hospital performance and clinical outcomes 6. **Incentivize private sector participation** in cost studies, digital health and value-based care models 7. **Create legal and regulatory frameworks** for data sharing, privacy (DPDP Act) and outcome-linked reimbursements
 Provider	1. **Invest in digital infrastructure** to enable longitudinal patient records, quality tracking and ABDM integration 2. **Lead managed care pilots** by building integrated networks (primary, diagnostics, tertiary) 3. **Standardize care pathways** and align with national protocols to improve outcomes and trust 4. **Enable transparent reporting** of clinical outcomes and quality metrics to build patient confidence 5. **Train staff on quality protocols** and digital tools to improve compliance and operational efficiency 6. **Explore bundled care models** and pre-paid packages to improve affordability and predictability for patients
 Payer	1. **Adopt tiered reimbursement models** linked to provider capability, quality, geography and complexity 2. **Collaborate with providers** to launch capitated managed care models for select focused cohorts with shared savings and outcome-linked incentives 3. **Support digital claims and quality tracking** through NHCX and ABDM integration. 4. **Develop flexible insurance products** tailored to different affordability levels and care needs 5. **Use clinical data to steer demand** toward high-quality providers and design value-based contracts 6. **Subsidize or co-pay for "missing middle"** populations; empanel compliant nursing homes to expand coverage, risk pooling 7. **Invest in fraud detection and analytics** to improve efficiency and trust in the system
 Clinician	1. **Co-create and adopt standardized clinical pathways** and participate in quality benchmarking initiatives 2. **Engage in continuous credentialing and privileging** aligned with national frameworks 3. **Champion digital adoption** by integrating EHRs and contributing to longitudinal patient records 4. **Participate in multidisciplinary reviews and outcome tracking** to improve care quality 5. **Educate patients** on treatment options, outcomes and preventive care to build trust 6. **Align with managed care models** to deliver coordinated, outcome-driven care 7. **Contribute to feedback loops** for refining protocols and improving system-wide quality
 Patient	1. **Use digital tools** to access hospital ratings, clinical outcomes and insurance eligibility 2. **Choose care based on quality data**, not just word-of-mouth or legacy reputation 3. **Participate in feedback mechanisms** to improve provider accountability 4. **Adopt preventive care practices** and engage in chronic disease management programs 5. **Understand care rights and standards** through awareness campaigns and vernacular dashboards 6. **Leverage telehealth and digital services** for access, especially in underserved areas

Conclusion

India's healthcare system stands at a strategic inflection point. Decades of innovation and scale have proven its ability to deliver high-quality care under resource constraints. Now, as the nation advances toward the vision of *Viksit Bharat*, the imperative is clear: shift from incremental progress to bold, systemic transformation.

The path forward demands a reimagined health architecture; one that is digitally enabled, outcome-driven and anchored in collaborative governance. India must move beyond pilot programs and fragmented initiatives to institutionalize clinical excellence, unlock data-led decision-making and align incentives across stakeholders. The opportunity exists to redefine healthcare delivery. By empowering government, providers, payers, clinicians and citizens to act in collaboration, India can architect a model of care that delivers globally benchmarked outcomes with the lowest systemic costs.

With visionary leadership and collective resolve, India can deliver on the promise of a "*Swasth Viksit Bharat*" where affordable, high-quality healthcare is not aspirational, but foundational.

01 | Fixing the **value equation**

India's healthcare inflation is less about arbitrary price increases and more a reflection of rising complexity. With life expectancy steadily improving, we are now seeing a sharp increase in the prevalence of chronic and lifestyle-related non-communicable diseases, which require longer-term and resource-intensive management. Yet, India continues to stand out globally for delivering some of the best outcomes at one of the lowest costs in the world. India's challenge is affordability — ensuring patients can access quality care without financial burden.

There is an urgent need to address the balance between quality and affordability. This needs to be solved by differentially rewarding quality, making systems cost efficient and setting transparent, minimum quality standards that safeguard outcomes while preserving accessibility.

Varun Khanna
Co-Chair, FICCI Health Services Committee and Group MD, Quality Care India Limited (Care, KIMS & Evercare)

Perhaps no other human endeavor requires a greater and continuous focus than quality and safety in healthcare delivery – it is simply a question of life and death.

Whilst undoubtedly the entire healthcare ecosystem has grown and benefited from policies and practices, an eagle's eye is required to be kept on quality and safety. Sadly, that is something that has been patchy. Accreditation and other quality tools' popularity and spread along with the quality of medical education requires greater attention. I must admit, however, that I am sanguine about that happening sooner rather than later.

Quantity and spread are essential in a country with a population of 1.4 billion but Quality and Safety must march to the same tune alongside. Assurance (aka Q&S) must happen alongside Access and Affordability – no easy task, but we have no choice other than to achieve it.

Dr. Narottam Puri
Advisor - FICCI Health Services, Principal Advisor - QCI; Board Member and Former Chairman NABH; Advisor - Medical Operations, Fortis Healthcare Ltd.

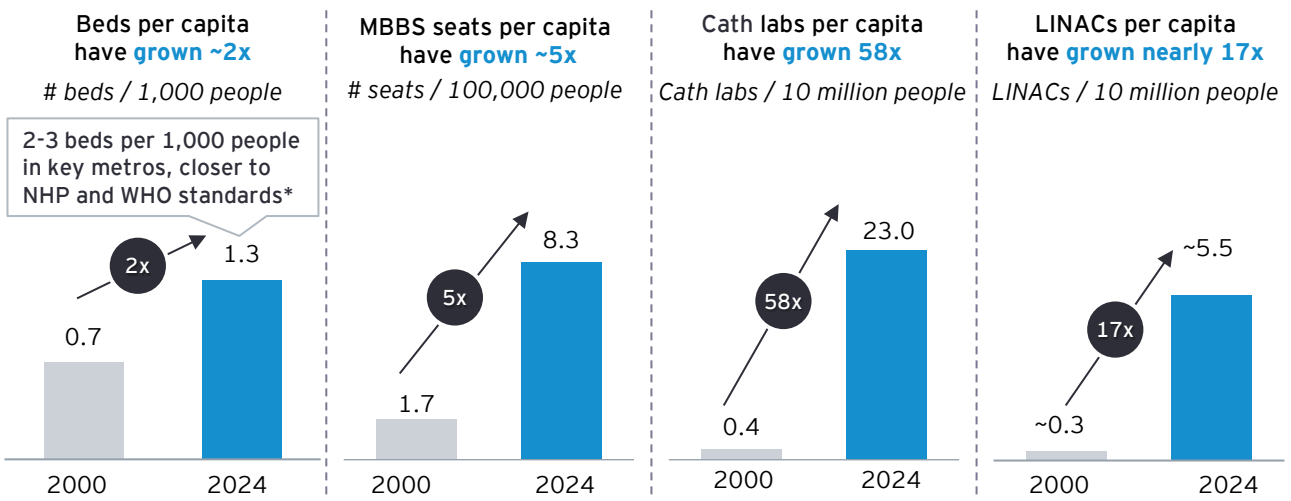
India has made notable strides in healthcare access and affordability, but realizing Viksit Bharat will require going further

India has come a long way in improving availability of high-quality healthcare and specialists while enhancing basic health outcomes.

The last two decades have seen a significant expansion in both our healthcare capacity and our ability to deal with the rising complexity of care.

Capacity has grown sharply in bed supply, doctors and institutional care, bringing infrastructure closer to global benchmarks on select metrics.

India's healthcare capacity has expanded over the last two decades

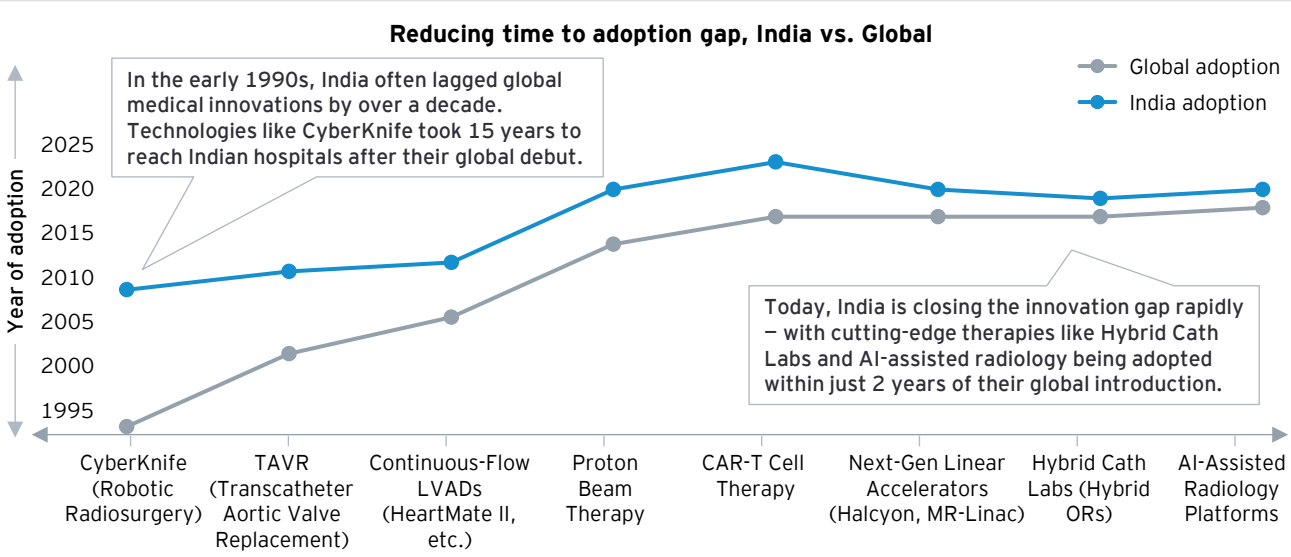


Source: EY-Parthenon analysis; National Health Policy 2005, 2018; World Bank 2025; World Health Organization 2024, National Health Policy 2018; Ministry of Health and Welfare- Health Intelligence Report 2001, 2025; World Health Organization, Press Information Bureau 2024; Atomic Energy Regulatory Board, 2024; Radiotherapy centers licensed by AERB, Analysis of Radiotherapy Machine Requirements in India: Impact of the Pandemic and Regional Disparities, National Institutes of Health 2024

Cath labs: Cardiac Catheterization labs, LINAC: Linear accelerator; *National Health Policy (NHP), 2018 targets 2 beds/1000 people, 3 beds/1000 people recommended by WHO

Simultaneously, the ability to provide complex care has also improved over time, reflected in the steady reduction in the time to adoption of high-end equipment and therapies, against global introduction.

Reducing time to adoption gap, India vs. Global

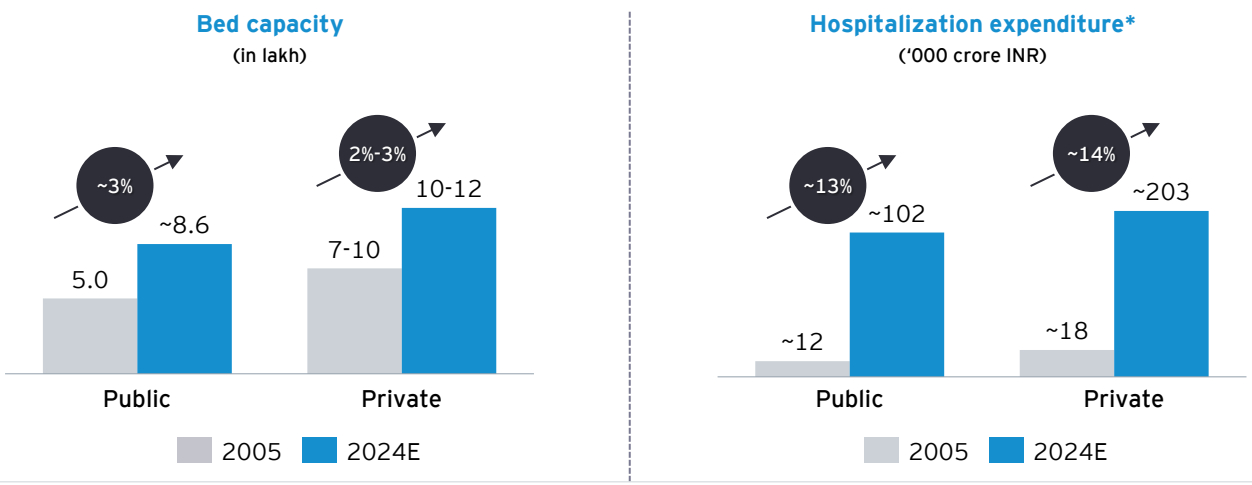


Source: Stanford University, Cribier et al., American Heart Association; Varian, Ministry of Science & Technology; HCG; Apollo Hospitals, etc., compiled press announcements by first movers

These trends mark significant advancements for healthcare in India, even as the effort to deepen access at the bottom of the pyramid continues.

A significant part of this growth has been supported by the private sector and they are expected to continue playing a pivotal role going forward

India's public vs. private hospital capacity and expenditure



* Hospital expenditure split by type of provider

Source: National Health Accounts 2005, 2022; National Health Policy 2005, 2018; World Bank 2024; EY-Parthenon analysis

Today, private hospitals account for nearly half[1] of all hospitalizations in the country, underscoring their critical role in meeting rising demand and catering to a large share of the population.

Notably, healthcare systems in India have also been extremely price-efficient in this journey of improvement.

Key trends that point to India's price efficiency

1. **Key procedures priced at a fraction of global benchmarks**
   Key procedures even at leading hospitals are priced at 15%-20% of global benchmarks
2. **Leading players have been able to extend quality care standards to T1+ markets at lower ARPOBDs (Average Revenue per Occupied Bed per day)**
   ARPOBDs range largely between ~INR30,000-40,000; breaching the INR70,000-mark only for quaternary cases (<5% of private market)
3. **India outranks peers on the Health Productivity and Performance (HPP) Index, which measures the system's cost efficiency**
   When health outcomes and health expenditure are viewed together as a ratio, India outranks several countries on system efficiency in terms of value delivered per unit cost
4. **A large part of the growth in the average per hospitalization spend is driven by a shift in service mix (greater complexity of care) vs. like-for-like price hikes**
   Over a 6 to 15-year period, hospitalization spend has increased at an average of ~9% CAGR; nearly 4%-5% of this growth has been driven by increase in tertiary procedures, high-realization specialties and higher acuity
5. **Healthcare sector's return on capital employed (RoCE) is at par or lower than comparable sectors**
   Key players' RoCEs, over a period of time (2015-23) have averaged at around ~13% vs. a 16% average for comparable sectors and >20% for FMCG

We discuss these in detail in this section.

[1] "National Health Accounts,2024

Key procedure tariffs in India, even at leading quality hospitals are at a fraction of global benchmarks.

Capacity additions have not been the only lever to deepen access.

Even top tier hospitals deliver care at 1/5th to 1/8th of the prices of global markets in many cases. An example of this are the comparative tariffs for three key procedures—Total Knee Replacement (TKR), Percutaneous Transluminal Coronary Angioplasty (PTCA) and Coronary Artery Bypass Grafting (CABG)—across leading corporate hospitals in a tier 1 Indian city and average tariffs of the same procedures in select countries.

Expectedly, India is priced well below developed and high-cost countries such as the US and the UK, but it is also priced lower than Asian peers like Thailand and Malaysia.

Key procedure tariffs in India (leading corporate hospitals in tier 1 city) vs. global benchmarks (US$)

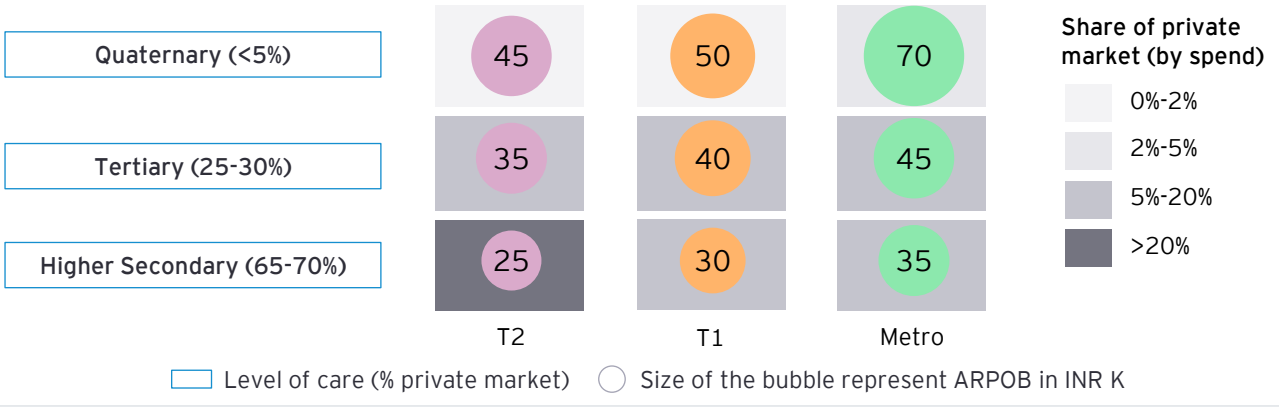
	TKR	PTCA	CABG
US	12,200	12,900	29,300
UK	18,200	13,800	34,000
Singapore	15,100	21,200	34,000
Thailand	8,900	5,900	10,400
Malaysia	7,100	5,900	14,200
India	3,100	2,500	4,500

Source: EY-Parthenon analysis; published tariff lists from private insurers and key hospitals (as publicly available); Ayushman Bharat; NHS, Ministry of Health, Singapore; 'Inpatient Reimbursement Prospectus' Medicare 2025, Abbott

Even at leading private hospitals across a mix of city-tiers, ARPOBDs range between INR30,000-40,000, breaching the INR50,000-mark only for quaternary care.

ARPOBDs for leading players across city-tiers and capabilities

Based on EY-Parthenon analyses of estimates from ~250 quality hospitals, with ~75,000+ beds across ~40 cities



Source: Above analysis includes 'quality' players only; Investor presentations of Apollo, NH, HCG, Fortis, Max, Medanta and other major Indian hospitals, EY-Parthenon analysis

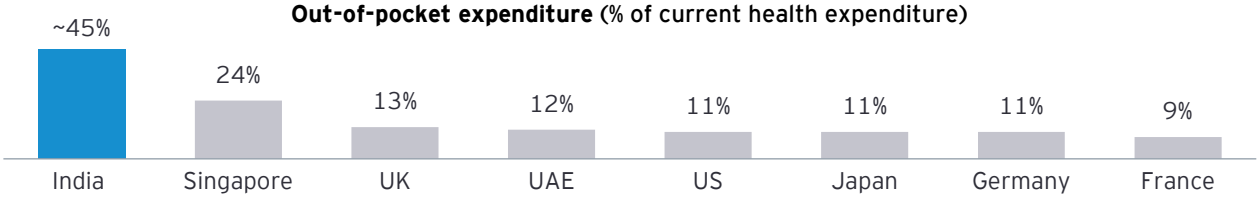
Note: Quality bed refer to hospitals which are privately owned, have upgraded infrastructure with strong patient experience

At an average length of stay (ALOS) of 2-3 days, average ARPOBDs of INR30,000-40,000 place average total bills at patient level well within the cover value of Ayushman Bharat and other private insurance offerings (INR3-5 lakh).

While the share of out-of-pocket expenditure (OOPE) on healthcare in India remains high; its ratio to Monthly Per-capita Consumption Expenditure (MPCE) has been consistently declining.

It must be acknowledged, that despite relatively low procedure prices and ARPOBDs, the financial burden of healthcare on Indian households is still largely prohibitive. The average private sector per hospitalization spend (~INR58,000)[2], is roughly equal to the annual per capita consumption expenditure of an average Indian. It also exceeds the yearly consumption expenditure of nearly half of all households and ~70% of rural households.[3] OOPE as a share of current healthcare expenditure in India remains high. At ~45% of Current Health Expenditure (CHE), nearly two-fifths of all healthcare expense is borne out of pocket.

Out-of-pocket expenditure (% of current health expenditure)



Source: Estimated basis National Health Accounts, 2022; World Bank WDI Database 2023, EY-Parthenon analysis

However, the ratio of OOPE health expenditure per capita to monthly per capita consumption expenditure (MPCE) shows a declining trend, implying that price growth may not be driving an adverse impact on affordability trends over time. The emergence of this trend can also be attributed to increasing insurance penetration (given the expansion of Ayushman Bharat), even though ~30% population remains uncovered.[4]

	2005	2014	2024
Out-of-pocket health expenditure per capita, *NHA estimates, INR*	853	2336	~2,600
Out-of-pocket health expenditure per capita per month, *INR*	71	195	~220
Monthly per capita consumption expenditure (MPCE), *NSSO, INR**	~640	~2,400	~4,900
OOP Health Expenditure/ MPCE	**~11%**	**~8%**	**~4%**

Source: NHA 2005, 2018, 2022; NSSO 2005, 2014 and 2024; *estimated given Rural and Urban MPCE

[2] Per hospitalization expenditure estimated using NSS 2004 and 2018

[3] Annualized Blended Per Capita Expenditure estimated basis Rural and Urban monthly per capita consumption expenditure, NSSO 2024

[4] "Health Insurance for India's Missing Middle", NITI Aayog, 2021

Therefore, it is no surprise to see that not only is India's healthcare priced at a fraction of global benchmarks, it is also more efficient vs. other countries in terms of outcomes delivered per unit of cost (PPP adjusted).

We have measured the efficiency of healthcare systems by putting together the **Healthcare Productivity and Performance (HPP) Index**, which evaluates system cost efficiency by measuring the value delivered per unit of healthcare expenditure. It benchmarks countries on their ability to generate health outcomes relative to health system costs. This approach aligns with the WHO's call for "maximizing health outcomes with available resources".

HPP Index = Healthcare Outcome composite/Healthcare Expenditure composite (ratio of health outcomes achieved, to healthcare costs incurred) where:

Health Outcomes composite = weighted composite of normalized health outcomes (e.g., life expectancy, maternal and child mortality, non-communicable disease (NCD) mortality, Disability-Adjusted Life Years (DALYs))

Health Expenditure composite = weighted composite of normalized health expenditure metrics (e.g., per capita health expenditure, out-of-pocket expenditure, share of GDP spent on health).

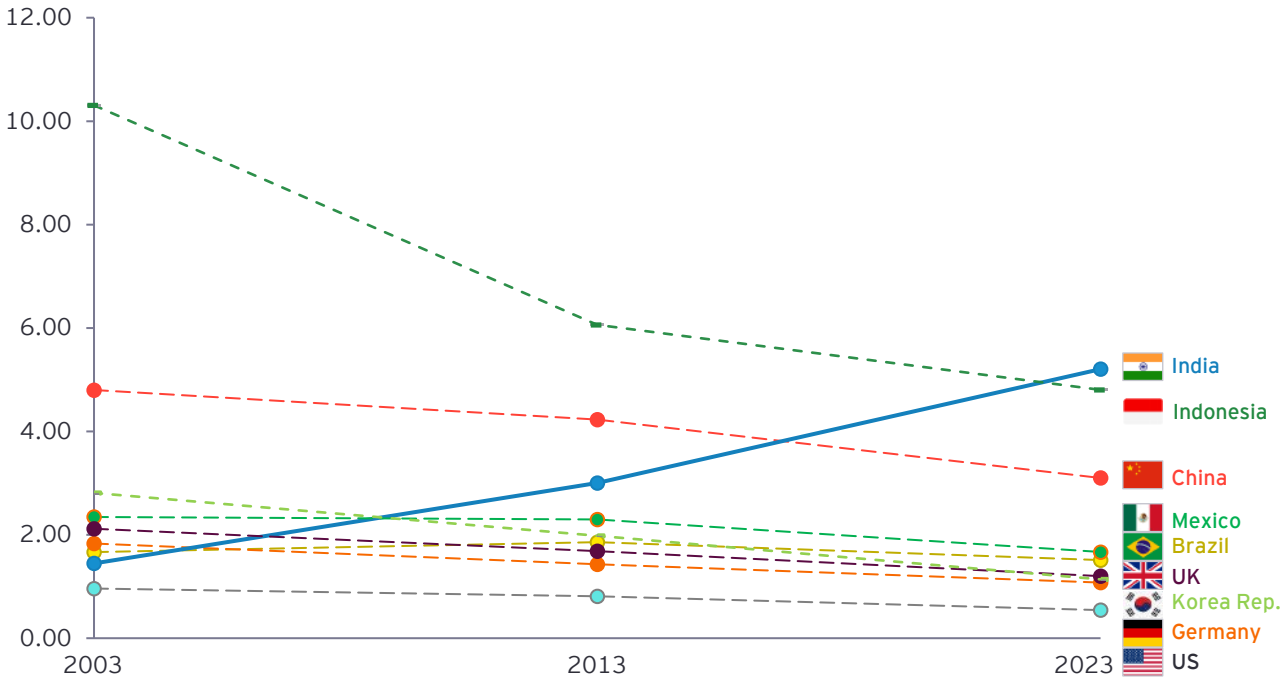
Higher the HPP Index, greater the efficiency of the health system in delivering outcomes per unit of cost.

When outcomes and costs were viewed in conjunction, two key observations emerged:

1. **India's score on the HPP Index was significantly higher than global benchmarks (including High-Income Countries).**
   Countries with higher spending (like the US, the UK, Japan, etc.) depicted declining efficiency over time as rising costs outweighed modest improvements in outcomes.

2. **The efficiency gap between the Indian healthcare system and that of other countries grew significantly between 2003 and 2023.**
   India's estimated HPP Index rose sharply from **~1.5 in 2003 to ~5.2 in 2023**, reflecting strong improvements in health outcomes despite moderate spending growth. Indonesia and China, which started high in 2003 and declined by 2023, demonstrate that gains in outcomes came at higher costs, thus reducing efficiency. Other middle-income peer countries like Brazil and Mexico have remained range-bound at lower efficiency levels.

HPP Index = Healthcare Outcome composite / Healthcare Expenditure composite
(Ratio of health outcomes achieved to healthcare costs incurred)



Source: World Bank Indicators, Institute for Health Metrics and Evaluation (HME), EY-Parthenon analysis ; HPP index adjusted for PPP
Note: The degree of gap may be influenced by two reasons – integrity and completeness of outcome data and relative demographic advantage (younger population).

Please refer to Annexure 1 for detailed breakdown of methodology and approach

India's trajectory of health outcomes relative to costs, reflects a combination of highest outcome improvement with lowest expenditure inflation. Thus, India's "value delivered per unit of spend" has improved more sharply than global peers, as captured by the HPP index.

Over the last two decades, India has recorded the highest improvement in healthcare outcomes and lowest growth in healthcare expenditure among major economies

While India still lags compared to other countries on key outcome metrics, it has exhibited the highest % change on outcomes against lowest % change in cost

		INDIA	CHINA	UK	US	Indonesia
Key outcomes (2023)	Overall Disability Adjusted Lost Lifetime Years* *(% of total lifetime years)*	0.57%	0.37%	0.41%	0.54%	0.53%
	Life Expectancy at Birth *(total years)*	72	78	73	78	71
	Survival to age 65, Female *(% of Cohort)*	79%	90%	91%	88%	79%
	Survival to age 65, Male *(% of Cohort)*	72%	82%	86%	80%	70%
Expenditure (2023)	Out-of-pocket expenditure per capita, PPP adjusted *(current international $)*	114	381	881	1,334	136
	Current health expenditure per capita, PPP adjusted *(current international $)*	259	1,143	6,372	12,502	516

Source: World Bank Indicators, IHME, EY-Parthenon analysis

Note: *Declining trend is a positive health outcome

Outcomes (% improvement, 2003-2023)	< 2%	2% - 10%	> 10%
Cost (% increase, 2003-2023)	< 2%	2% - 5%	> 5%

However, it must be acknowledged, that on absolute health outcome indicators, India still has some ground to cover as compared to the peer-set in the chart above. Historically, India's superior price efficiency profile has reflected a cost-driven advantage – outcomes have improved steadily, but it is India's lower spends vs. higher-cost global peers that have driven its growth on the index.

Going forward, given that affordability remains a challenge for the bottom and middle of the pyramid population, it will be critical to preserve our cost advantage. However, sustained outperformance on HPP Index will hinge on significant gains in clinical outcomes.

"

India has a unique opportunity to reimagine healthcare by making value-based care the norm rather than the exception. The way forward lies in building a culture where quality is measured, outcomes are transparently reported and patient experience is treated as central to success. Diagnostics have been playing a pivotal role in transformation. Through evidence-based testing, predictive insights and personalized care pathways, we are already seeing how quality and efficiency work seamlessly together to improve clinical outcomes while keeping care affordable.

To make this shift sustainable, establishing minimum quality benchmarks across hospitals, diagnostics, pharma, digital health and startups is critical for building a strong foundation. Digital technologies and AI-driven tools can help providers deliver safer, more consistent and more personalized care at scale. Equally important is redefining doctor engagement models, fostering multidisciplinary collaboration and integrating patient feedback into clinical decision-making.

By aligning regulation, innovation and investment around this approach, India can set global in-patient-centered care. What excites me most is that this shift is entirely achievable. It simply requires collective intent to put patients first and create a system where doing the right thing is also the most viable thing.

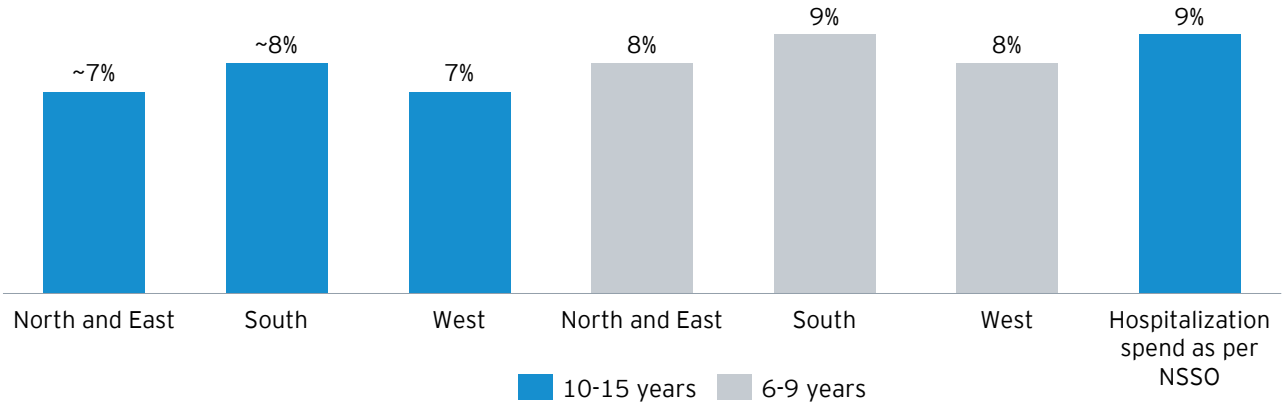
Ameera Shah

Promoter and Executive Chairperson, Metropolis Healthcare Limited

Indian industry has also been able to limit core price inflation to 3%-4%; a large part of the growth in hospitalization spend per capita has been driven by changes in disease complexity and increased use of higher-end therapies

India's inpatient (IP) healthcare spend per capita has risen by 5-6× between FY05 and FY18, implying a ~9% CAGR, which is consistent with long-term average revenue per patient (ARPP) growth trend observed for leading healthcare providers.

Long-term (5-15 years) Average Revenue Per Patient (ARPP) growth (%) for select organized hospitals
Based on EY-Parthenon analysis of estimates from 100+ quality hospitals across ~10 organized chain players, by zone

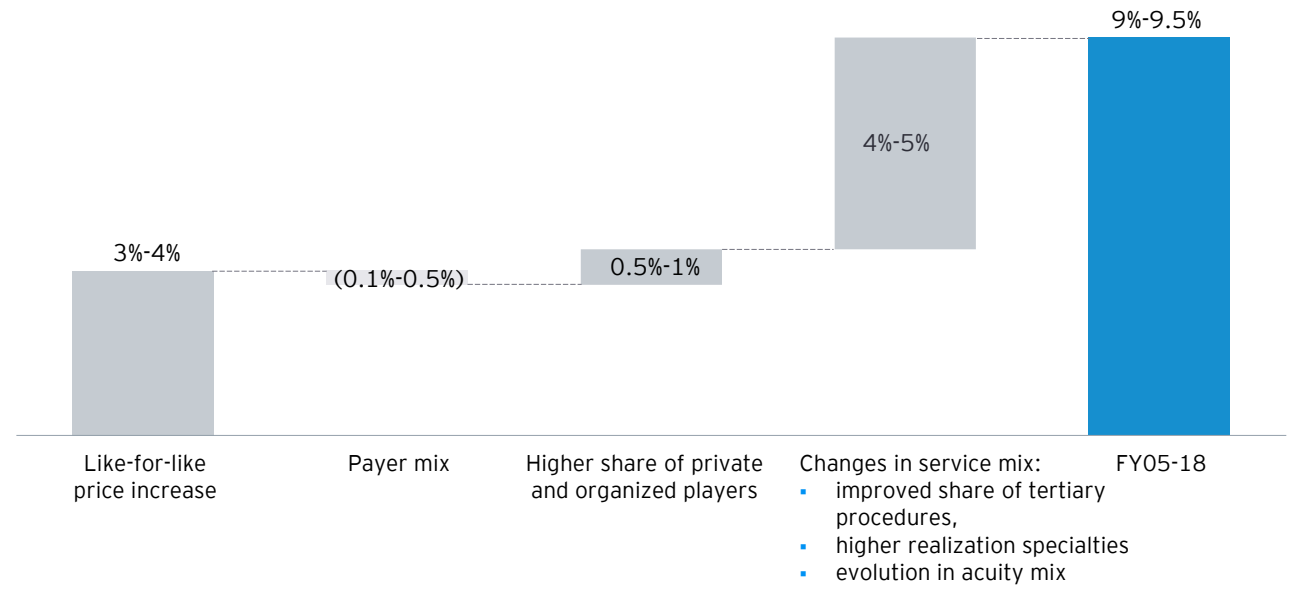


Source: Annual report and presentations for key players (2009-2025) – cluster and hospital level revenues considered as available, NSSO-2004, 2018, EY-Parthenon analysis

The growth can be largely attributed to changes in the mix of services: improvements in share of tertiary procedures, share of high-realization specialties and evolution in acuity mix account for 4-5 percentage points of the overall ~9% growth. This indicates a move towards more complex and higher-intensity admissions as access and affordability improve. In contrast, like-for-like pricing growth accounts for only about 3 percentage points, highlighting that the growth is primarily driven by changes in case mix rather than price hikes.

This forces us to recontextualize India's medical inflation over the last two decades and builds some degree of reassurance in the Indian healthcare system's ability to deliver complex care with price efficiency.

Growth in per hospitalization spend (%) FY05-18 (estimated basis spends reported in NSSO)



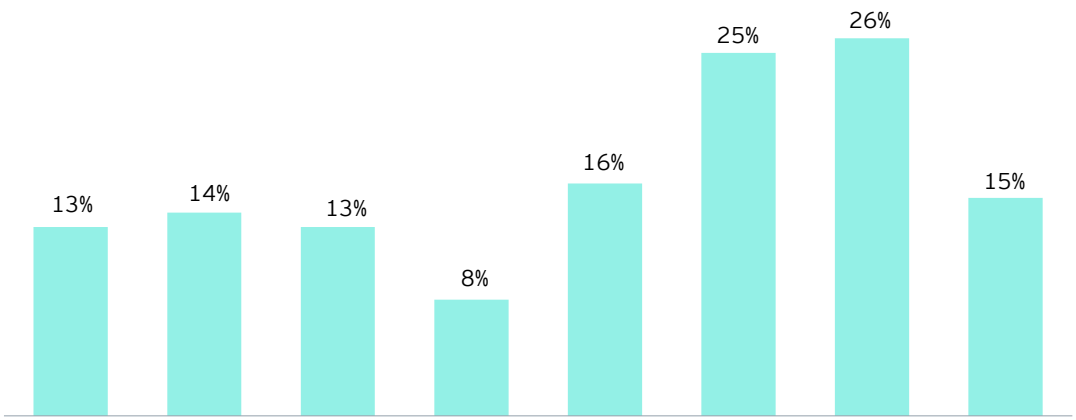
Source: NSSO 2004 and 2018, realization growth across key players, EY-Parthenon analysis

As we look ahead, a core component of keeping price inflation in check will likely be the system's, providers' and population's ability to control the growth in complexity of care burden.

When compared to other sectors, return on capital employed (RoCE) in healthcare delivery has been lower than in other industries, implying that while large-scale investments have taken place, RoCE has been relatively lower

Healthcare delivery is a highly essential and structurally resilient service sector, but one that offers modest returns (12%-13%) despite sizable capital investments. Other capital-heavy sectors such as life sciences, retail, FMCG and food & beverages offer higher returns. Healthcare delivery therefore sits at the lower end of the returns spectrum among capex-heavy sectors. We expect RoCE to remain under continued pressure going forward, as players expand capacity in T1+ markets.

Comparison of Weighted RoCE between different sectors (2023)



	Healthcare delivery – hospitals and labs	Lifesciences and Pharma	Logistics and transportation	Real estate development	Retail and distribution	FMCG	Food and beverage	Education service
2015 wt. RoCE	12%	18%	12%	10%	9%	40%	25%	19%
Capital employed (INR billion)	~760	~4,700	~3,000	~3,100	~2,600	~2,500	~1,250	~107
Capex CAGR (2015-23)	17%	18%	17%	17%	35%	15%	14%	30%

Source: Private Circle, EY-Parthenon analysis; Note: Weighted RoCE calculated for top 20-30 companies by revenue across sectors. Capital employed is total assets net of current liabilities

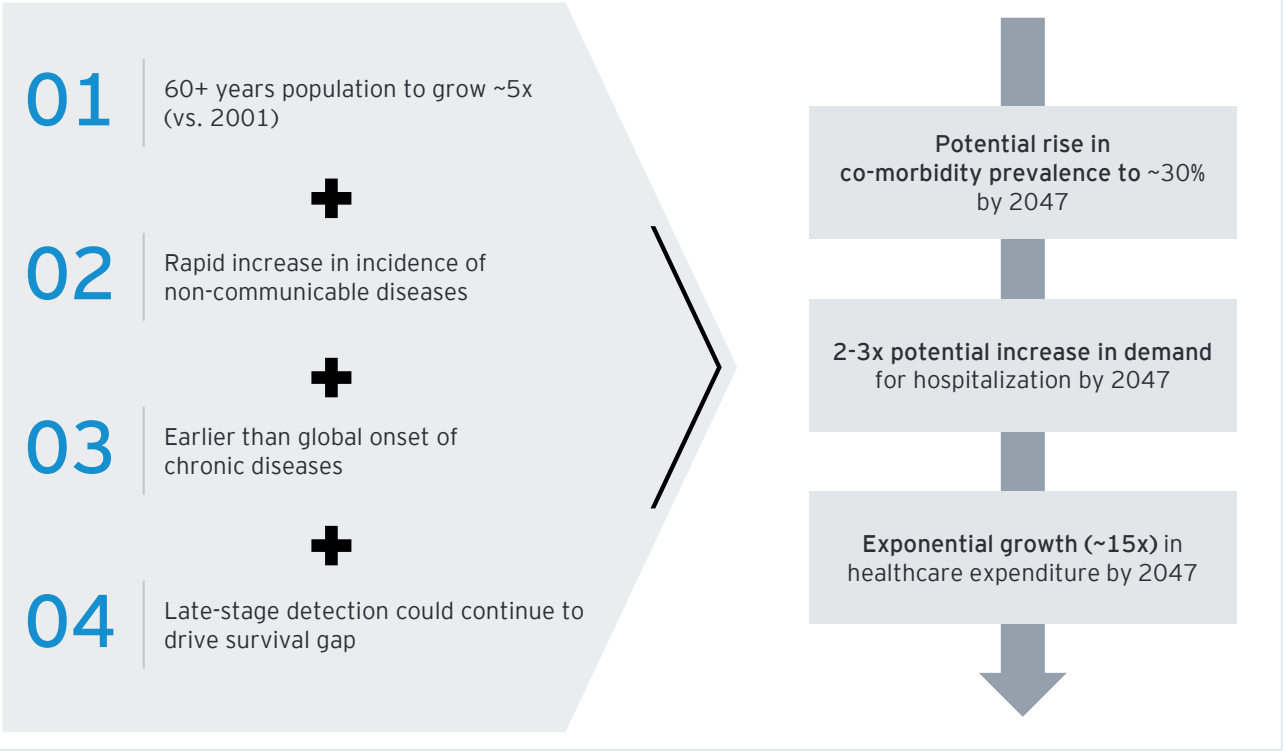
India's challenges ahead, however, will require more than expanded access and affordability. India's health needs will multiply as the population ages and they will become more complex as chronic disease continues to strike earlier, co-morbidities rise and diagnoses continue to come late. Access alone will not be enough; unless quality, equity and care continuity improve, rising demand will only deepen system strain. That said, continued work on improving affordability will also remain critical- the exhibit earlier comparing ARPOBDs across levels of care and city tiers shows that complex care expenditure can be 1.5-2x of that for higher secondary levels of care.

India's vision of Viksit Bharat – its ambition of becoming a developed nation by 2047 – places 'Swasth Bharat' at its core. To realize that ambition, the next phase in healthcare must build on progress in access and affordability while preparing the system for multiplying and compounding demands in the decades ahead. We discuss this in greater depth in the next section.

From access and affordability to efficiency and quality – India's health journey calls for a shift in approach

India faces a four-pronged challenge over the next two decades

Multiplying needs and compounding complexity to drive significant increase in our healthcare needs- higher expenditure as % of GDP, higher number of hospital beds



Source: EY-Parthenon analysis, Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July, 2020;; NFHS- 4 and 5, LASI 2019, Globocan 2002, 2018, WHO 2024, The Lancet, global benchmark health statistics across nationally published data and independent peer-reviewed clinical studies 2000-2025; independent Indian clinical and epidemiological studies in peer-reviewed journals 2000-2025

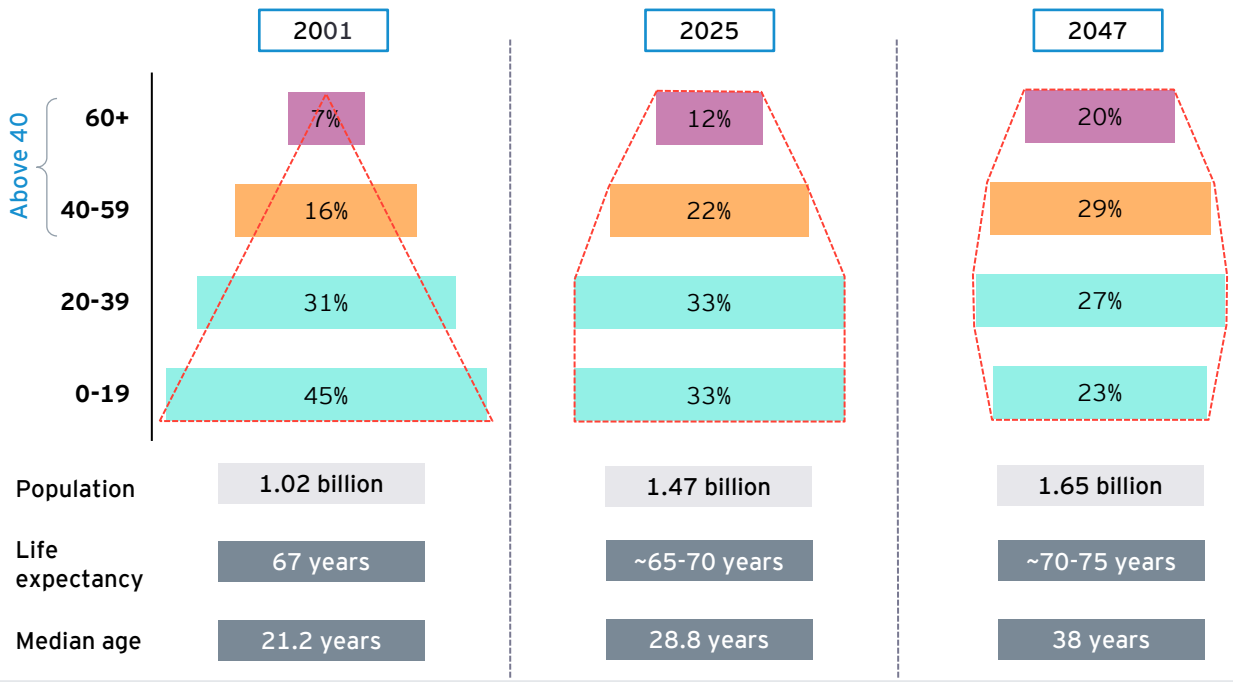
Multiplying needs: India is not as young as it once was. The 60+ years population is estimated to grow almost 5x by 2047 versus 2001. The quantum of our healthcare needs can therefore be expected to increase significantly.

At the onset of the 2000s, India entered a period of vitality and hope, poised to reap three decades of 'demographic dividend' from a favorable age mix. The working-age population, rising gradually since the 1980s, accelerated sharply in the 2000s and is now approaching its peak, expected by 2030. Yet while the promise of this dividend captured popular imagination, the reality of its impending closure has gone largely unnoticed.

It is estimated that the size of the population aged 40 years and above is projected to triple by 2047, reaching ~820 million from ~250 million in 2000, making up ~50% of the country's population[5], indicating a substantial demographic shift. About 350 million of this cohort would be aged 60 or older, approximately ~4.7x times of the recorded number in 2001 driving a higher rate of disease incidence and significant growth in hospitalizations per year. Thus, hospitalizations could potentially increase by ~2.4x (assuming hospitalization rates remain constant), drastically increasing the quantum of our healthcare needs.

[5] Population Projections of India 2000-2011-2036, Ministry of Health and Family Welfare , July 2020; Census 2001, 2011; EY-Parthenon analysis

Pyramid to barrel: Population by age group



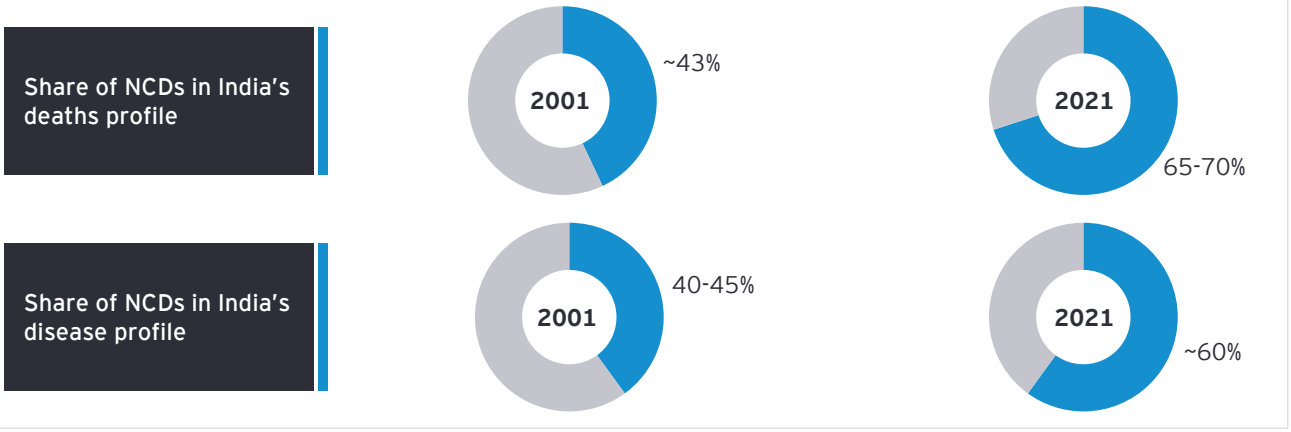
Source: Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July, 2020; Census Data 2001, 2011; EY-Parthenon analysis

Compounding complexity: Rising chronic and lifestyle diseases, combined with earlier onset and late-stage detection drive greater co-morbidity and add complexity to our healthcare needs

Indians are living longer but getting sick younger – NCDs are on the rise, along with early onset.

In conjunction with an aging population, India has also undergone a rapid epidemiological transition in recent decades, with non-communicable diseases (NCDs) overtaking infectious diseases as the dominant health burden.

India's morbidity and mortality profile



Source: NFHS 4, 5, WHO

Growing urbanization, lifestyle and dietary changes, alongside worsening environmental conditions have catalyzed growth in chronic disease. Today, the country also bears a disproportionate proportion of global NCDs, for instance, accounting for one-fifth (~20%) of worldwide deaths from cardiovascular diseases.[6]

Growth in NCD and average age of onset

	Age of onset (years)		Number of cases (Million)		Number of deaths p.a. (Million)	
	India	Global	Previous	Recent	2000	2021
CVD	52	65+	~26 *(1990)*	~55 *(2016)*	~1.4	~2.8
Hypertension	56	62	~89 *(2001)*	~220 *(2021)*	~0.07	~1.5 *(2016)*
COPD	60	60	~28 *(1990)*	~58 *(2016)*	~0.5	~1
Cancer *(5 yr prevalence)*	60	65	~2.3 *(2018)*	~3.3 *(2022)*	~0.5	~1
Diabetes	47	50	~32 *(2001)*	~101 *(2021)*	~0.12	~0.33
Chronic kidney disease	50	60	~82 *(2001)*	~128 *(2021)*	~0.07	~0.2

Source: Global Disease Burden Report, 2021, Projections Tool 2025; Lancet 2001, 2021, National Family Health Survey-2021, WHO 2002-2025, WHO x GloboCan 2018, 2022; ICMR-INDIAB study

A striking feature of India's NCD burden is the younger age of onset compared to global benchmarks. Some diseases that typically manifest in late middle age or old age in high-income settings are seen 3-10 years earlier in Indians, as in figure above. Additionally, for some disease cohorts, mortality in India is also premature compared to global benchmarks- over 52% of cardiovascular deaths in India occur below the age of 70 years vs. 23% in high-income countries.[6]

[6] Cardiovascular Diseases in India: Current Epidemiology and Future Directions, 2016, American Heart Association

Given worsening environmental and lifestyle factors—rising air pollution, urban disease vectors, sedentary habits, chronic stress—this trend of early onset and mortality will likely continue to compound. This is evident in the growing prevalence of risk factors even in younger cohorts (<40 years). Notably, this trend is even sharper in the middle to high income groups, where both access and quality of healthcare are relatively superior.

Chronic disease risk factors prominent in India across age groups

Condition	India		Mid- to high-income group - India	
	Under 40	Above 40	Under 40	Above 40
Obesity	~16%	~56%	~50%	~67%
Pre-hypertensive	~43%	~50%	~50%	~50%
Pre-diabetic*	~4%	~11%	~25%	~33%
Stress	~15%	~18%	~33%	~33%

*Range of 141-160 blood glucose levels considered as pre-diabetic

Source: Health of Nation 2024, 2023, Apollo Hospital Source: NFHS-5, NMHS 2019; Okui, T., Park, J. Difference in the prevalence of hypertension and its risk factors depending on area-level deprivation in Japan. BMC Res Notes 15, 37 (2022); PMC article "JOH2-62-e12095"; SCIRP Health journal article (2021);BMC Research Notes article "s13104-022-05931-6"; Nature article hr2008170

Simultaneously, late-stage detection continues to be a formidable challenge in India

Breast cancer	Chronic kidney disease	Glaucoma	Heart failure
Only ~29% cases in India diagnosed at stages I-II vs. ~65% in US	Only 52% cases in India diagnosed at early stages (pre-4) vs. ~80% in a high-income country (Denmark)	Only ~10% cases diagnosed vs. ~25% in other low- and middle-income countries	~23% of heart failure patients die within a year of diagnosis vs. ~9% in China

Source: "Making cancer care more accessible and affordable in India", EY, 2022; CDC 2022; India CKD Registry, 2005, Indian Society of Nephrology; "Prevalence and incidence of chronic kidney disease stage 3–5- results from KiDiCo", BMC Nephrol. 2023 Jan ; "Glaucoma in India", 2022, Glaucoma Today

India's diagnosis gap drives wide survival gaps in later stages of disease. For instance, the NHS (UK) routinely screens 50%–80%[7] of eligible women for breast cancer. In contrast, India's mammogram uptake is only ~1%–2%.[8]

Subsequently, the 5-year breast cancer survival rate is ~90% in the US and Australia[7] versus 66% in India[9]; for cervical cancer net survival is ~60% in Europe[10] versus ~52% in India.[8]

Early-stage management of diseases costs significantly less than late-stage treatment across disease cohorts.

For example, while early-stage kidney disease may be medically managed, late-stage chronic kidney disease (CKD) requires regular dialysis and/or transplants. Similarly, advanced cancer treatment (e.g., chemotherapy, extensive surgery and radiotherapy) costs many times more than early interventions. This drives significant burden on household finances and overall financial well-being- one survey found 80% of cancer outpatients and 30% of inpatients faced 'catastrophic' (defined as >10% of income) spending on treatment[9] a problem driven by late-stage intensive care needs.

[7] Nuffield Trust, 2024, NHS 2018-2020
[8] Cancer Samiksha, India Cancer Registry, 2012-2015
[9] Financial toxicity of cancer care in India: towards closing cancer gap, 2023, Frontiers in Public Health

Our evolving demographic and disease profile sets the stage for sharp growth in co-morbidities and associated complexities

The **four-pronged challenge** emerging from an aging population, increasing NCD load, early onset and late diagnosis is driving and will continue to drive **higher co-morbidity and greater intensity of healthcare needs.**

We are already seeing this play out. The prevalence of co-morbidity has already grown nearly 20-fold between 1995 and 2018, as per the NSS. More recent estimates by Longitudinal Ageing Study of India in 2019 peg this prevalence at ~6% of population. Comorbidity prevalence has been found to drive 2-3x higher hospitalization rates (vs. the 0-1 conditions cohort) in other countries.

Hospitalization rate basis number of chronic conditions (Brazil, US, UK), basis independent clinical studies

No. of chronic conditions	Hospitalization and Prevalence Ratio		
	Brazil	US	UK
0–1 condition	5.5%	8%	7-8%
2 conditions	8.8%	18%	15%-18%
≥3 conditions	13.5%	~38%	30%-35%

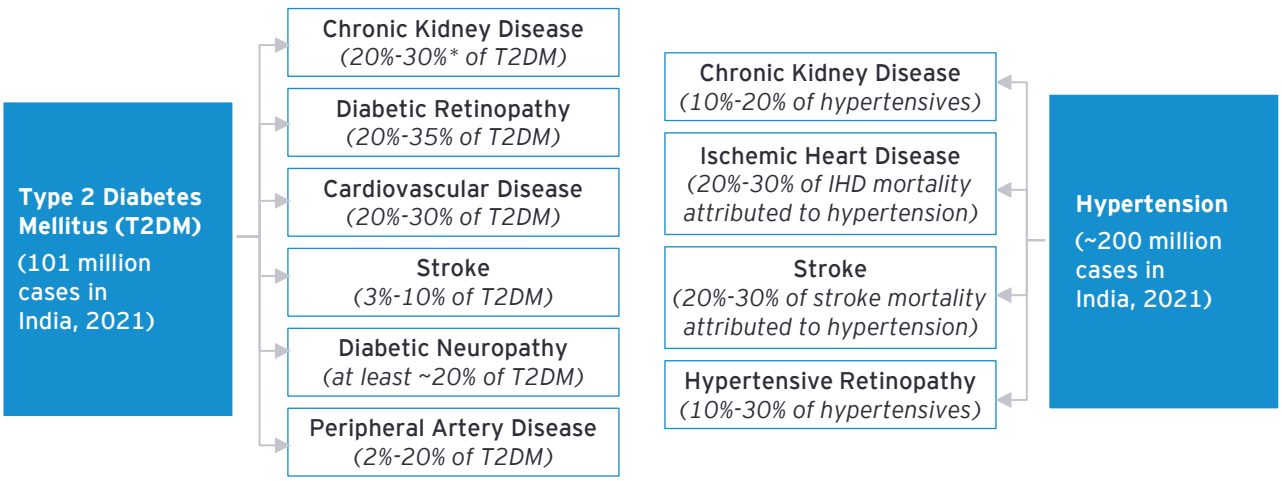
Source: Brazil- Multimorbidity patterns and hospitalization occurrence in adults and older adults aged 50 years or over: ELSI-Brazil cohort (2015–2016), Scientific Reports (Nature, 2022); UK- Salisbury C et al., Lancet, 2011; Barnett K et al., Lancet, 2012; USA- Wolff JL et al., Arch Intern Med, 2002; AHRQ/Medicare claims analyses; OECD Health at a Glance, 2019; NHS; Brazil -2016, US- 2002; UK-2011

Left unaddressed, there is significant risk of accelerated deterioration of overall health outcomes and its associated economic impact over the next two decades; however, opportunity exists to contain impact with interventions

An unchecked progression of the trends can make the health burden heavier in years to come through associate conditions and increased readmission rate alongside the need for chronic management.

For instance, with the rise of diabetes and hypertension (two of the chief contributors to India's disease burden), countries across the globe have also seen a rise in associated heart disease, stroke, kidney disease and diabetic retinopathy over 10-20 years.

Illustrative disease cascade: Potential long-term complications over 10-20 years, associated with key diseases/risk factors, based on a meta-analysis of sample-based global and Indian clinical studies



Note: *Prevalence rates are strictly illustrative estimates based on metanalysis of multiple published studies across various geographies and micro-cohorts. This may vary for India at population level and over a longer period, driven by several genetic, lifestyle and epidemiological factors

Source: Prevalence of PAD among patients with T2DM in India, 2024, Diabetes & Metabolic Syndrome: Clinical Research and Reviews; Asian-Indians: a review of CAD, 2018, Annals of Translational Medicine; Prevalence of diabetic retinopathy in India: Results from the National Survey 2015-19, 2021, Indian Journal of Ophthalmology; A study on prevalence of diabetic peripheral neuropathy in diabetic patients in rural Tamil Nadu, 2024, Journal of Family Medicine and Primary Care; CDC and US National Institute of Diabetes and Digestive and Kidney Diseases; Hypertension in India: a systematic review and meta-analysis, 2014, Journal of Hypertension; The trend of hypertension-related chronic kidney disease from 1990 to 2019 and its predictions over 25 years: An analysis of the Global Burden of Disease Study 2019, International Urology and Nephrology

Not addressing the longitudinal health needs of the population can lead to a steep toll on both the overall health of the population, as well as on the financial quantum of its remedy. In this section, we attempt to quantify the impact of leaving this progression unaddressed - on both aggregate hospitalizations and healthcare expenditure by 2047, by which time India hopes to achieve the goal of Viksit Bharat.

We estimate that by 2047, aggregate hospitalizations may grow 2.5-3x versus present and total national health expenditure may grow from INR10-11 lakh crore to anywhere between INR160 lakh crore and INR190 lakh crore. This implies that, compared to the previous 20-year period (2005-2025P), where national health expenditure grew ~8x from ~INR1.3 lakh crore, it can potentially grow at nearly double the pace, at 15-18x of the expenditure in 2025.

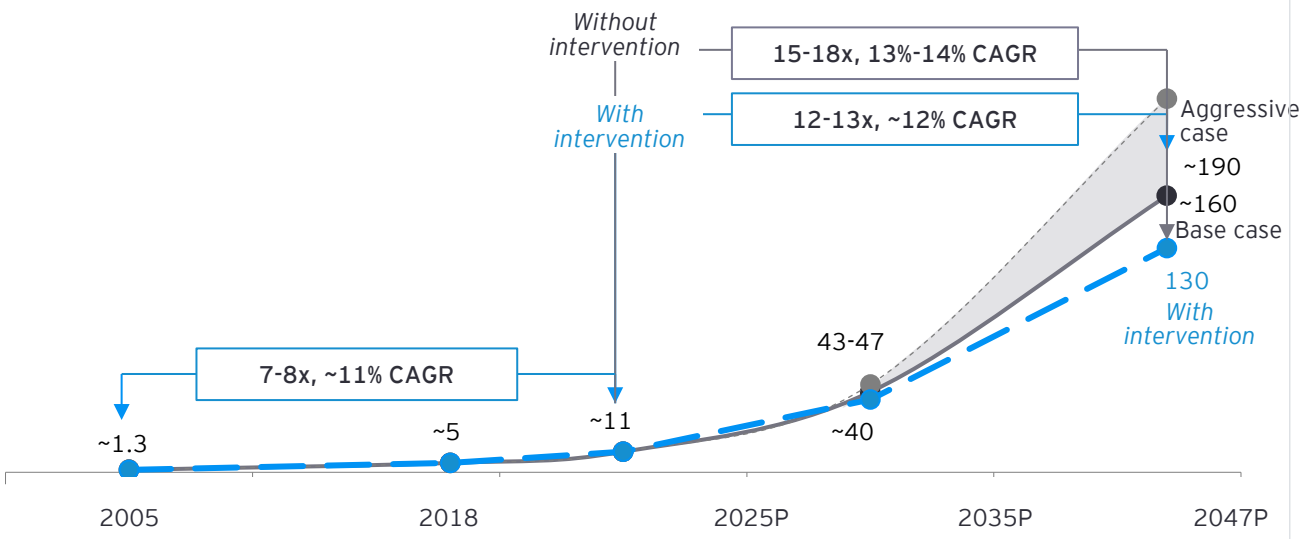
At this rate, we believe, the share of health expenditure in GDP would also jump from the current ~3% to 6%-7%, growing nearly 2-2.3x versus 2025P. Key assertions are discussed in subsequent pages.

Solving for quality care holistically can allow a chance to flatten the curves – both projected growth in healthcare needs as well as National Health Expenditure.

With interventions, access to quality healthcare can be expanded across the patient lifecycle, therefore, checking progression to in-patient care and reducing hospitalizations by about 20%-30%, from the projected 190-212 million hospitalizations per annum to ~155 million hospitalizations by 2047. At a population level, this would imply an overall hospitalization rate of 8%-9% (including deliveries) versus the projected 11%-13% and a significant difference in the hospitalization rate in the 60+ years cohort (20% versus 27%-30% without intervention).

In subsequent chapters, we explore how India can potentially chart out this pathway, learning from global experiences and leveraging new opportunities from the rise of digitization and AI, while keeping its own unique complexities and challenges in mind.

Projected increase in healthcare expenditure, INR lakh crore



Healthcare expenditure's **share in GDP projected could grow ~2x; 20-30 lakh incremental beds could be needed**

	2005	2018	2025P	2035P	2047P
National health expenditure (as a % of GDP)	~4.7%	~3%	~3.1%	~5-6%	~6-7%
				~4.5%	~5%
Operational beds (lakh)	10-12	14-16	18-20	26-27	39-48
				~24	~30
Beds per 1,000 population (#)	~1	~1.2	~1.3	1.6-1.7	2.4-2.9
				~1.5	~1.8
Incremental investment required (INR lakh crore)					20-30
					~10

Without intervention | With intervention

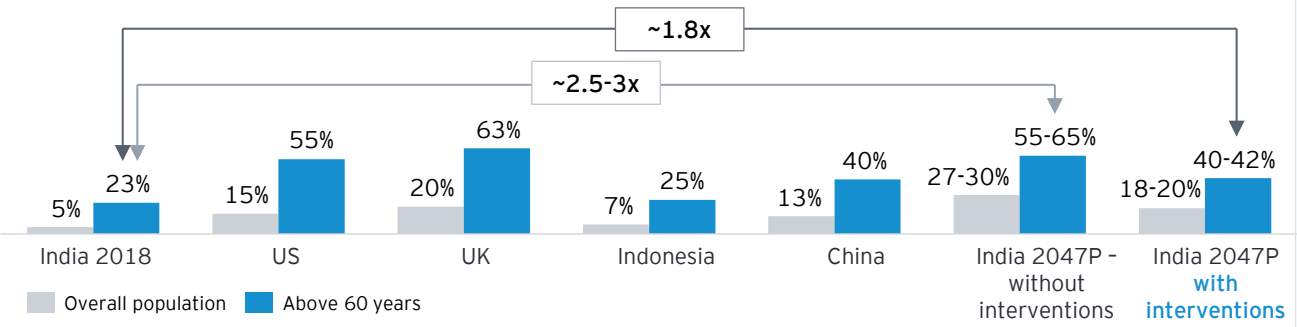
Source: LASI 2019; NSS 1995 and 2018; Multimorbidity patterns and hospitalization occurrence in adults and older adults aged 50 years or over, 2022, NHA 2014-22, NHP, E-YP Analysis

Key assertions and assumptions

1 **If disease progression remains unchecked, hospitalization rates in the 60+ years cohort could grow from 10%-11% at present to 27%-30% by 2047, resembling global developed markets, or present-day Kerala**

With interventions to control co-morbidity progression, hospitalization rate in the 60+ years cohort can be reduced to ~20%-22%

With current trends of disease progression, over half of 60+ years population is expected to suffer from co-morbidity; active interventions in primary and preventative cure can reduce co-morbidity



India's current state

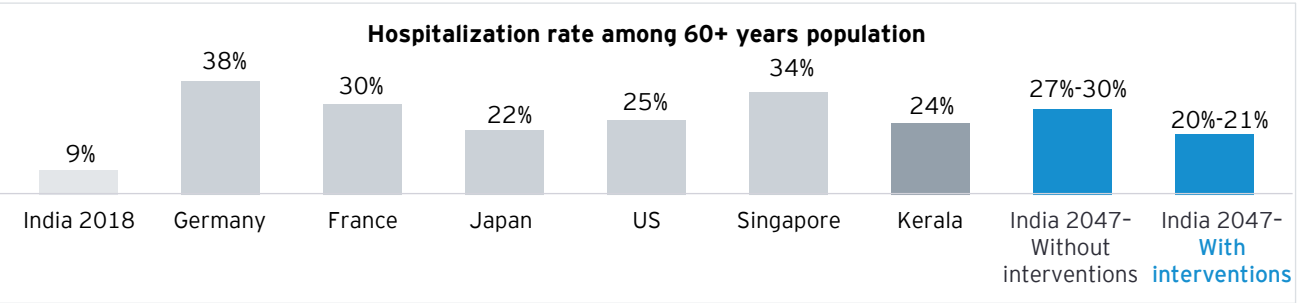
- Co-morbidity prevalence has already grown 20x between 1995 and 2018
- If it continues to grow at a similar pace, estimated to reach ~30% by 2025 among 60+ years-old

India 2047P

- Rise in NCDs will likely accelerate growth in co-morbidity prevalence-
- Even with conservative growth (2.5%-3%), expected to potentially reach ~60% prevalence among 60+ years-olds
- Potential to contain at levels similar to present-day China, with interventions

Source: LASI 2019; NSS 1995 and 2018; Multimorbidity patterns and hospitalization occurrence in adults and older adults aged 50 years or over, 2022, Scientific Reports, CDC 2017, Eurostats 2021, OECD 2021, EY-Parthenon analysis

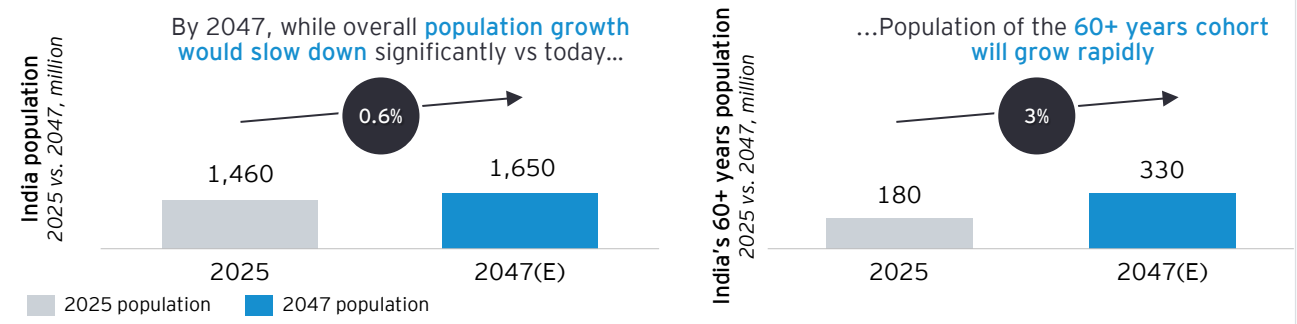
Since globally, increase in co-morbidity has brought along a 2.5-3x greater chance of hospitalization, rate of hospitalization among 60+ year-olds in India is likely to grow from 10%-11% today to 27%-30%



Source: NSS 2004 and 2018; CDC 2017, Eurostats 2021, OECD 2021, Singstats 2023; EY-Parthenon analysis

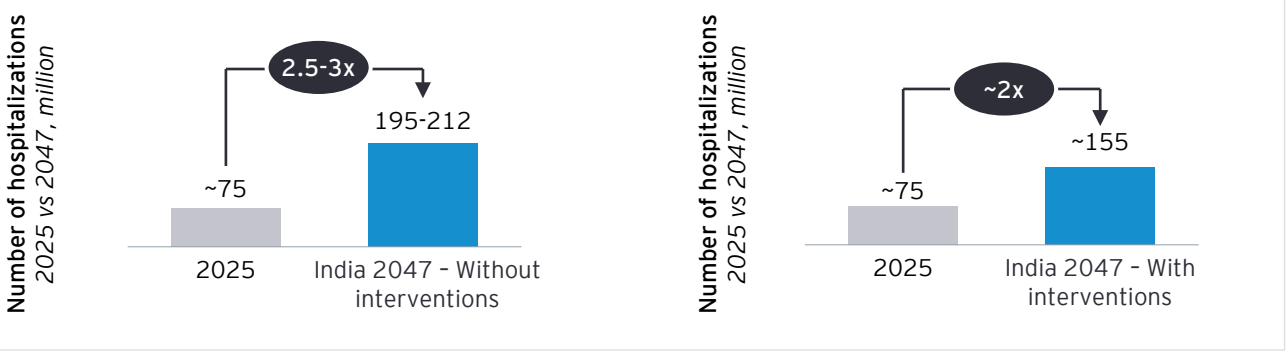
2 **The increase in hospitalization rate, when combined with the steep increase in the 60+ years population between 2025 and 2047, is expected to potentially drive a nearly 2.5-3x growth in aggregate hospitalizations on a population level**

With interventions, growth in aggregate hospitalization can be limited to ~2x from 2025-47



Source: Census 2001,2011, Population Projections of India, Ministry of Health and Welfare x Ministry of Statistics, 2021

Combined with accelerated in hospitalization rates in this cohort, this is likely to nearly triple the number of hospitalizations. Enhanced preventive and primary care interventions can restrict the increase in hospitalizations to ~2× by 2047.

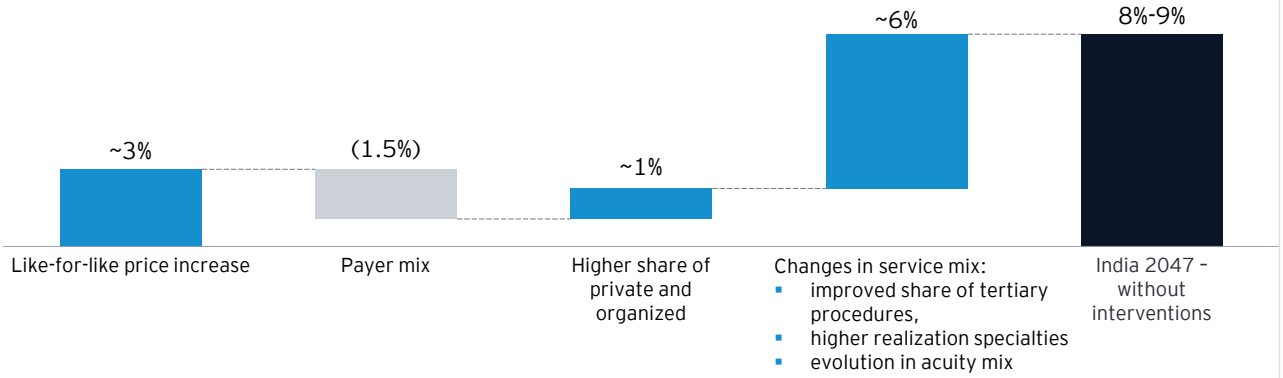


Source: EY-Parthenon analysis

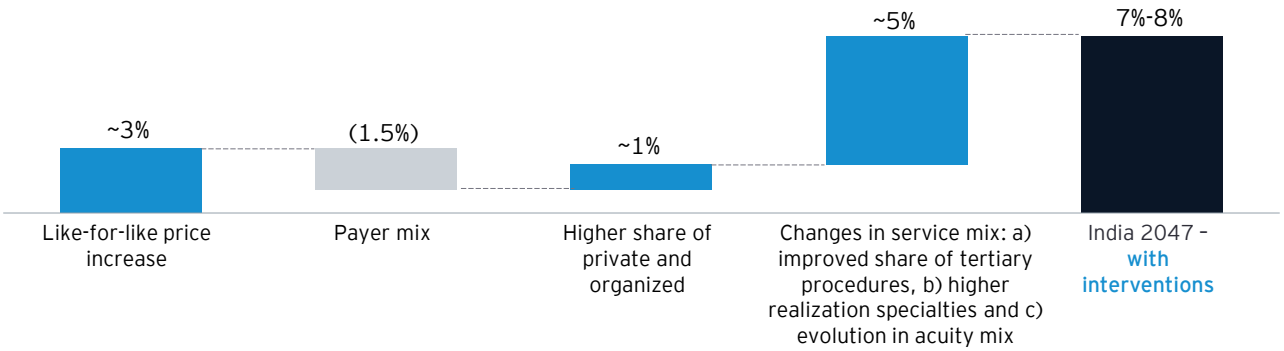
3 **Inpatient spend per hospitalization is projected to potentially grow at 8%-9%, driven by higher-acuity case mix from NCD/co-morbidity progression and the continued rise of organized providers**

With interventions, realization growth is projected to be 7%-8%, driven by lower contribution of high-acuity cases from reduced NCD prevalence

Projected growth in IP healthcare expenditure per hospitalization (without interventions), 2025-47



Projected growth in IP healthcare expenditure per hospitalization (with interventions), 2025-47



LFL increase is not the major growth driver for realization and is expected to be ~3%

Expanding govt. schemes/TPAs compress realizations; **penetration still <25%**

Organized providers gain share as public capacity lags; **current penetration ~18%**

Growth in salience of tertiary care procedure driven by aging and NCD prevalence

Source: EY-Parthenon analysis

4 **With improvements in access even as instances of chronic diseases increase, intensity of OPD usage will likely grow to resemble that in Kerala (5-7 OP consults per capita)**

With interventions, OPD usage intensity is expected to be 4.5-5 OP consults per capita due to reduced chronic disease burden

5 **Assuming that public health expenditure will not grow significantly faster than in previous periods, the private sector will likely play a key role in expanding access to quality healthcare**

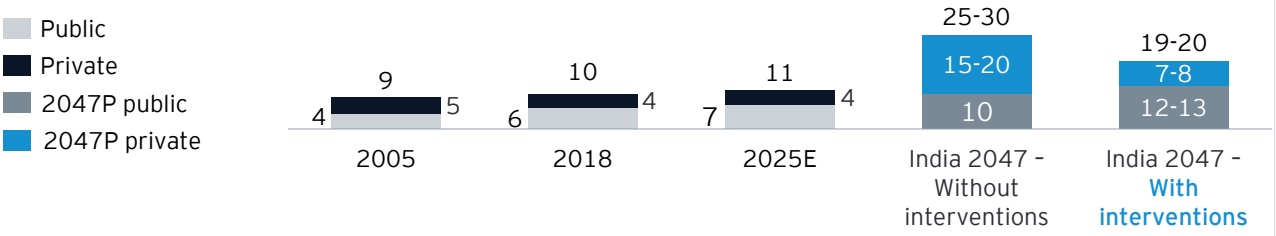
Key interventions will require targeted investments by the public sector to expand our capacity for early-stage intervention and deeper access

Private sector share in health expenditure and occupied beds

National health expenditure (as % of GDP)

	2005	2018	2025E	India 2047 - Without interventions	India 2047 - With interventions
Total	~4.7%	~3.0%	~3.3%	6%-7%	~5.0%
Private sector	~3.0%	~1.7%	~1.9%	4%-5%	~3.0%

Occupied beds (lakh)



While complexity will rise, operational efficiencies are likely to continue improving

	2005	2018	2025E	India 2047 - Without interventions	India 2047 - With interventions
ALOS (# days)	9	6	6	5	5
Share of private sector in total hospitalizations (incl. deliveries) (%)	~57%	~47%	~50%	70%-75%	~50%

An incremental 20-30 lakh beds needed by 2047 vs. ~20 lakh estimated operational in 2025; active disease management interventions can reduce this incremental demand to 8-10 lakh

Source: NHA 2014-22, NHP 2018, 2022, EY-Parthenon analysis

For India, these shifts necessitate focusing across patient journey as well as on the continuum of care, i.e., a shift from episodic care to longitudinal care

A lifecycle approach allows expanding the notion of "right care at the right time" across the entire patient journey.

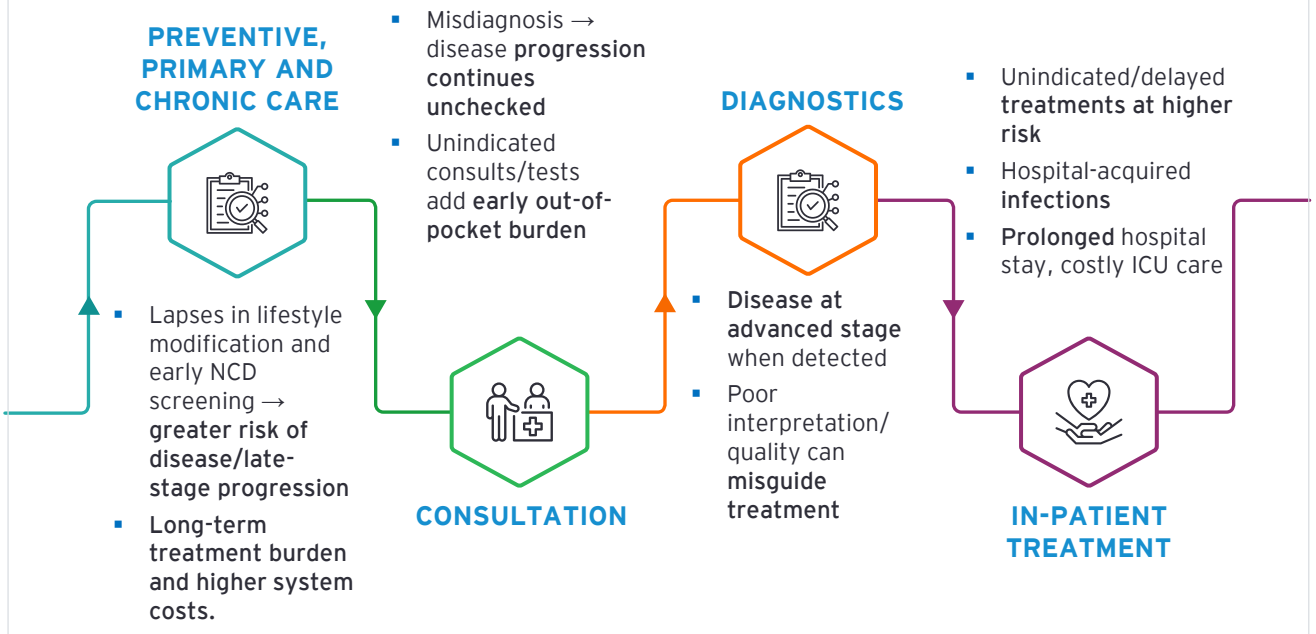
As the quantum and complexity of our healthcare needs increase, it will be increasingly critical to address the determinants of quality outcomes further upstream in the patient lifecycle- in order to optimize utilization of our resources (given that access remains a constraint in various parts of the country and for various customer segments) and maintain both outcomes and overall frugality for the patient (given the current state of affordability and insurance penetration).

Traditionally, frameworks such as the WHO's quality agenda and clinical pedagogy globally emphasize the "four rights" of care: the right care, to the right person, at the right time, in the right way.

In practice, assessment of quality is over-indexed at the level of an individual institution which leads to a narrow and episodic view (largely acute-care centered), restricted to the portion of the treatment that is being managed at that junction in the care pathway.

However, our overall health outcomes are determined not only at that isolated point of delivery but across the entire patient journey. The impact of preventive care, disease management and primary care are often overlooked, despite their significance in a high NCD-load country such as ours. WHO estimates that scaling up preventive and primary healthcare infrastructure can improve life expectancy by ~3.5 years in low- and middle-income countries[10]. In the Indian context, even research from the late 2000s suggests that if India can address key lifestyle-related risk factors, NCD-related premature deaths could decline by 40%-50%[11]. Additionally, several studies also count preventive care uptake as a cost-efficient strategy to prevent catastrophic hospitalization expenses. A meta study examining the financial burden of diabetes in India found that later-stage complications could drive 20% higher expenses versus cases that were well-managed outside acute-care settings in early stages[12]. The impact of lapses in early stages of the patient journey compounds across the lifecycle, as illustrated in the exhibit below.

The compounding impact of lapses across patient journey (illustrative)



[10] WHO Note on Primary Healthcare in LICs and MICs, 2025

[11] The Burden of Non- Communicable Diseases in India", Cameron Institute, 2010

[12] An economic evaluation of diabetes mellitus in India: A systematic review; Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 2022

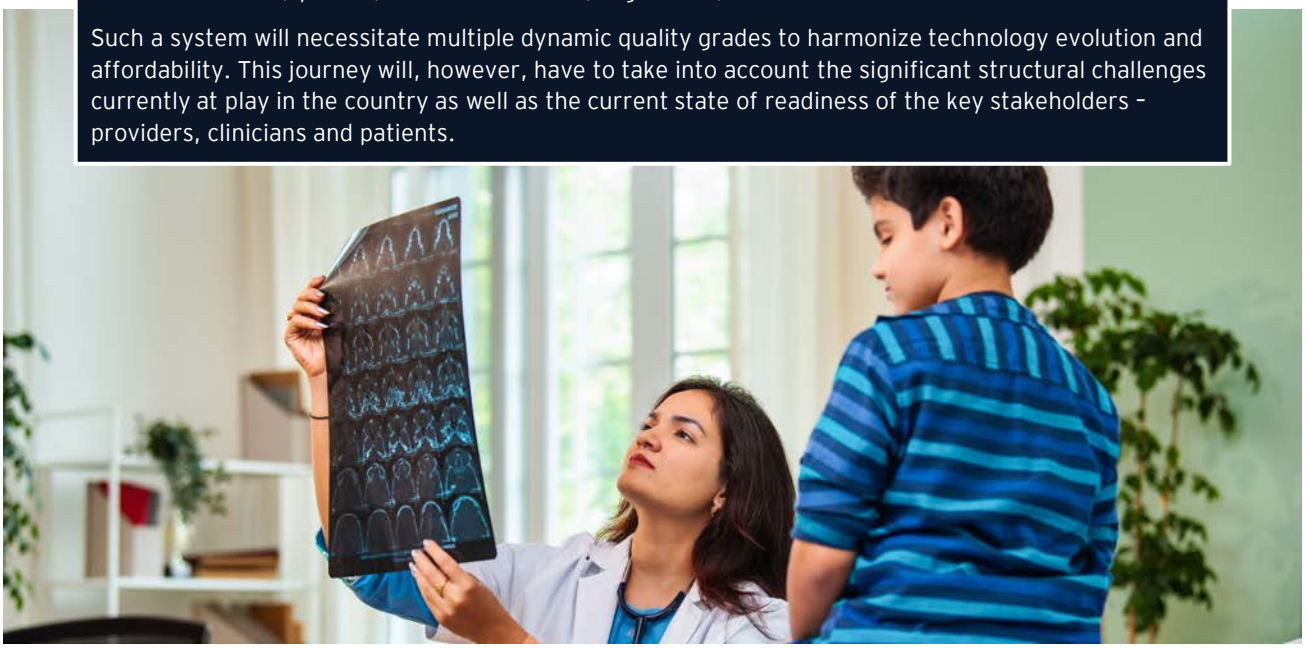
By contrast, a systems-level or lifecycle approach allows us to expand the notion of "right care at the right time" across the entire patient journey. Therefore, any meaningful definition of quality must include:

- Quality of preventive and primary healthcare and disease management
- Quality of consultation that frames the initial diagnostic asks
- Quality of diagnostic investigations that inform subsequent decisions
- Quality and appropriateness of the in-episode treatment plan and treatment itself

From a macro perspective, clinical excellence means best outcomes for the community at large, viz. ensuring the best possible care to the maximum number of people.

This essentially entails simultaneous and consistent commitment to advancing the quality of care at the micro level and continuously innovating to minimize the cost of delivering such care both at transaction level (episodic) and lifetime level (longitudinal).

Such a system will necessitate multiple dynamic quality grades to harmonize technology evolution and affordability. This journey will, however, have to take into account the significant structural challenges currently at play in the country as well as the current state of readiness of the key stakeholders – providers, clinicians and patients.



"

A key step towards maximizing healthcare quality is for institutions to pivot away from talking about quality as a perception to quality as a metric, externally with patients. Many Indian hospitals already provide great value when you look at a cost versus outcomes curve. But with escalating costs, this is not well appreciated by the patients or regulators. Defining external metrics for quality, measuring and reporting outcomes data and voice-of-patient data beyond just Google reviews and incorporating quality metrics in doctor-engagement models are steps towards driving value-based care with patients at the center.

The cultural aspect of driving quality as a metric cannot be understated. Quality cannot be the responsibility of a department; it is a decision, action and communication at every step of the way in a patient journey. This is where smart adoption of technology can go a long way in supporting and enhancing human interactions, if not minimizing or eliminating, which is a far cry in a healthcare context.

Mahadevan Narayanamoni
Senior Advisor – TPG Capital

02 Barriers to **breakthrough**

“

We should recognize that the bulk of the healthcare delivery in the country is done by thousands of small establishments. Therefore, it is imperative that the quality journey of the ecosystem factors in the realities and resources of this large segment and thus makes the insurance empanelment processes and compliances relevant, simplified and specific to drive the transition towards minimum quality standards. The path to a formal accreditation can follow. Such a quality system should also accommodate significant regional imbalances in health system maturity and aim for differential objectives for various segments.

Dilip Jose
MD and CEO, Manipal Health Enterprises Pvt. Ltd

“

India's healthcare must pivot to be both high-quality and financially sustainable. At HCG, value-based care goes beyond a framework. It is our steadfast commitment to always put patients first in every decision we make. True care means delivering world-class outcomes while ensuring financial sustainability, so that access to treatment is never compromised. Through evidence-based diagnosis and treatment planning, we enable faster recovery, reduce unnecessary procedures and strengthen trust through transparency. We believe the future of healthcare in India must be outcome-driven, where quality is rewarded over volume. Robust accreditation, transparent reporting and innovative insurance models will empower patients with the right information while driving providers to consistently raise standards. At HCG, we are fostering a culture of quality through collaborative engagement, clear reporting and digital innovation that personalizes care and amplifies patient voices. This is our path to making healthcare equitable, sustainable and truly patient-first.

Dr. Manish Mattoo
CEO and Executive Director, HealthCare Global Enterprises Ltd

As we develop our solution framework, it is important to acknowledge the significant scale and structural challenges that exist in the Indian healthcare delivery landscape that need to be solved

Continuing structural lack of access and affordability at scale	Out-of-pocket expenditure (OOPE) still a significant share of spend; insurance coverage inadequate	Wide supply disparities – metros and tier 1 cities still drive most of the quality supply
Thrust on episodic and not longitudinal care	Fee-for-service approach and lack of linkages between providers across lifecycle	Preventive and primary care backbone remains underdeveloped
Quality systems, measures are limited in scope and adoption	While accreditation standards exist for various provider types, adoption is not uniform	Standards potentially inadequate in scope; enforcement and transparency are critical challenges
Limited digitization key constraint for tracking, measuring and reporting quality parameters	Digitization of health records and clinical data still fragmented; NABH digital standards right step	ABDM vision robust but adoption needed to drive quality agenda and standardization
Reimbursement models not aligned on quality	Limited linkages to provider outcome-based measures; nascent wellness behavior linkages	Nascent and low availability of OPD and longitudinal care-linked products
Continued cost pressures on key stakeholders	Rising financial pressure on providers; costs of quality care exceeding reimbursement rates	Limited viability of insurers – due to suboptimal risk pooling, pricing; low empanelment, frauds

“

Value-based care in India must move from intent to measurable action, by aligning payer incentives, fostering a culture of quality and transparency among providers and leveraging digital tools to track outcomes. The real question every policy, reimbursement and innovation must answer is: does this improve patient outcomes? Providers must become champions of outcomes and hospitals that embrace transparency will define tomorrow’s healthcare. India’s challenge is not just access but delivering meaningful outcomes at scale with the patient’s voice at the center.

Mitesh Daga
Partner at TPG Capital

Continuing structural lack of access and affordability at scale

Continuing structural lack of access and affordability at scale

Out-of-pocket expenditure (OOPE) still a significant share of spend; insurance coverage inadequate

Wide supply disparities – metros and tier 1 cities still drive most of the quality supply

OOPE still a significant share of spend; insurance coverage inadequate with a significant "missing middle"

India's health coverage is mostly fragmented across public schemes, private insurance and OOPE:

- Government subsidized health insurance schemes (PMJAY and state schemes for low-income households)
- Social Health Insurance schemes (CGHS/ECHS for state employees and ESIC for all organized sector employees)
- Private Health Insurance (individual/family and group)
- OOPE

Key insurance schemes and their coverage

Insurance scheme	Individuals covered as per NITI Aayog 2021 *(in crore, % of population)*	Estimated no. of individuals covered as of FY24 *(in crore, % of population)*	Target demographic	Key characteristics and benefits
AB-PMJAY (National)	~49 (36%)	~55 (38%)	Lower income group (bottom two quartiles) and all senior citizens aged 70 years and above	▪ 2018 national scheme under Ayushman Bharat for UHC ▪ Targets poorest households; cashless, portable hospitalization coverage nationwide (cashless cover of INR5 lakh per family annually covering 1,500-2,000 procedures)** ▪ Some state schemes can have expansive coverage and benefits (higher cover, etc.)
AB-PMJAY State Extensions Schemes	~20 (15%)	~22 (15%)		
Employees' State Insurance Scheme (ESIS)^	~14 (10%)	~14 (11%)	Private establishment workers and dependents	▪ Social insurance for formal private workers (<INR21,000 monthly income) and dependents ▪ Employer-employee financed; OP + IP, maternity, diagnostics and cash benefit packages
Private Health Insurance (PHI)	~16* (12%)	~31 (21%)	High-income group (top quintile)	▪ Voluntary commercial plans primarily for higher-income urban households ▪ Covers private hospitals; premiums and benefits vary widely
Central Government Health Scheme (CGHS)	~0.4 (0.3%)	~0.5 (0.3%)	Central government employees and dependents	▪ Government-funded cover for central government employees, pensioners; nationwide. ▪ Empaneled networks, fixed rates; OPD and inpatient benefits

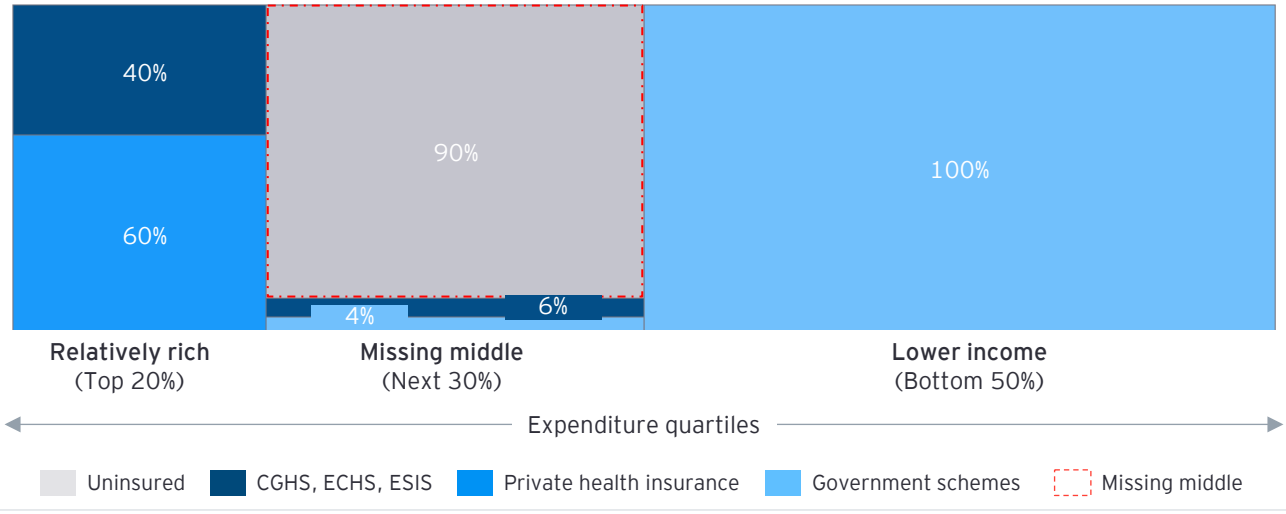
^Coverage % can also have some overlap between ESIS and Private Health Insurance ; **At empaneled hospitals
Source: EY-Parthenon analysis, NITI Aayog's Health Insurance for India's Missing Middle -2021, IRDA, National Health accounts 2022, PIB, ESIC annual report FY24

Public schemes – government-subsidized programs and Social Health Insurance – cover 60%-65% of the population and accounted for 45%-50% of total healthcare spend in FY22.

While Private Health Insurance (PHI) accounted for 8%-10% of overall healthcare spend in FY22, its penetration has risen significantly from 120 million in 2018 to 310 million in 2024, driven by increasing awareness, rising affluence and increase in number of private insurers. However, private insurance is still concentrated on formal sector employees with greater depth of coverage.

The top 20% of the population is covered either under private voluntary health insurance or social health insurance schemes like ESIC, ECHS and CGHS (as of FY21), which typically cover private establishment workers and central government employees, respectively. Government subsidized health insurance schemes (AB-PMJAY and its state extensions) provide coverage to the bottom 50% of population.

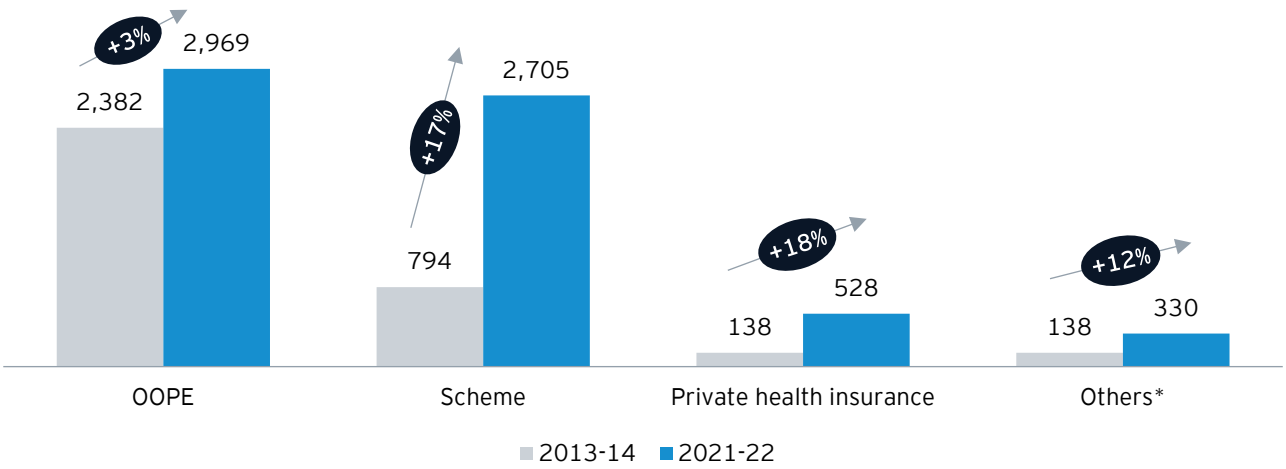
Estimated differential population coverage mix across expenditure percentiles (2021), %



Source: EY-Parthenon analysis, NITI Aayog's Health Insurance for India's Missing Middle -2021

Given the fragmented nature of India's insurance landscape, there is a significant segment of the population – the "missing middle" – that relies on out-of-pocket expenditure (OOPE). OOPE is a substantial component of healthcare spend (~45% of overall spend in FY22, down from ~69% in FY14) and disproportionately impacts the 'missing middle,' which lacks financial protection and no coverage under any insurance scheme. OOPE also continues to form a considerable share of Monthly Per Capita Expenditure (MPCE) at ~5% (in 2022).

Per capita expenditure by healthcare financing scheme as per NHA FY14-22 (INR)



* Includes non-profits and NGOs

Source: EY-Parthenon analysis, NITI Aayog's Health Insurance for India's Missing Middle -2021, National Health Accounts 2013-14 and 2021-22, Report of Technical group on population projections 2020

The 'missing middle' lacks adequate financial cover, with the key drivers being ineligibility for government schemes and inability to afford private insurance and lack of awareness

The 'missing middle' comprises non-poor, mostly informal sector workers (rural self-employed, urban informal/semi-formal) and accounts for 25%-30% of the population. However, their income levels make them ineligible for government-subsidized and Social Health Insurance schemes. PMJAY and state schemes target the bottom 50% (BPL) while CGHS/ECHS/ESIC cover state and organized sector employees.

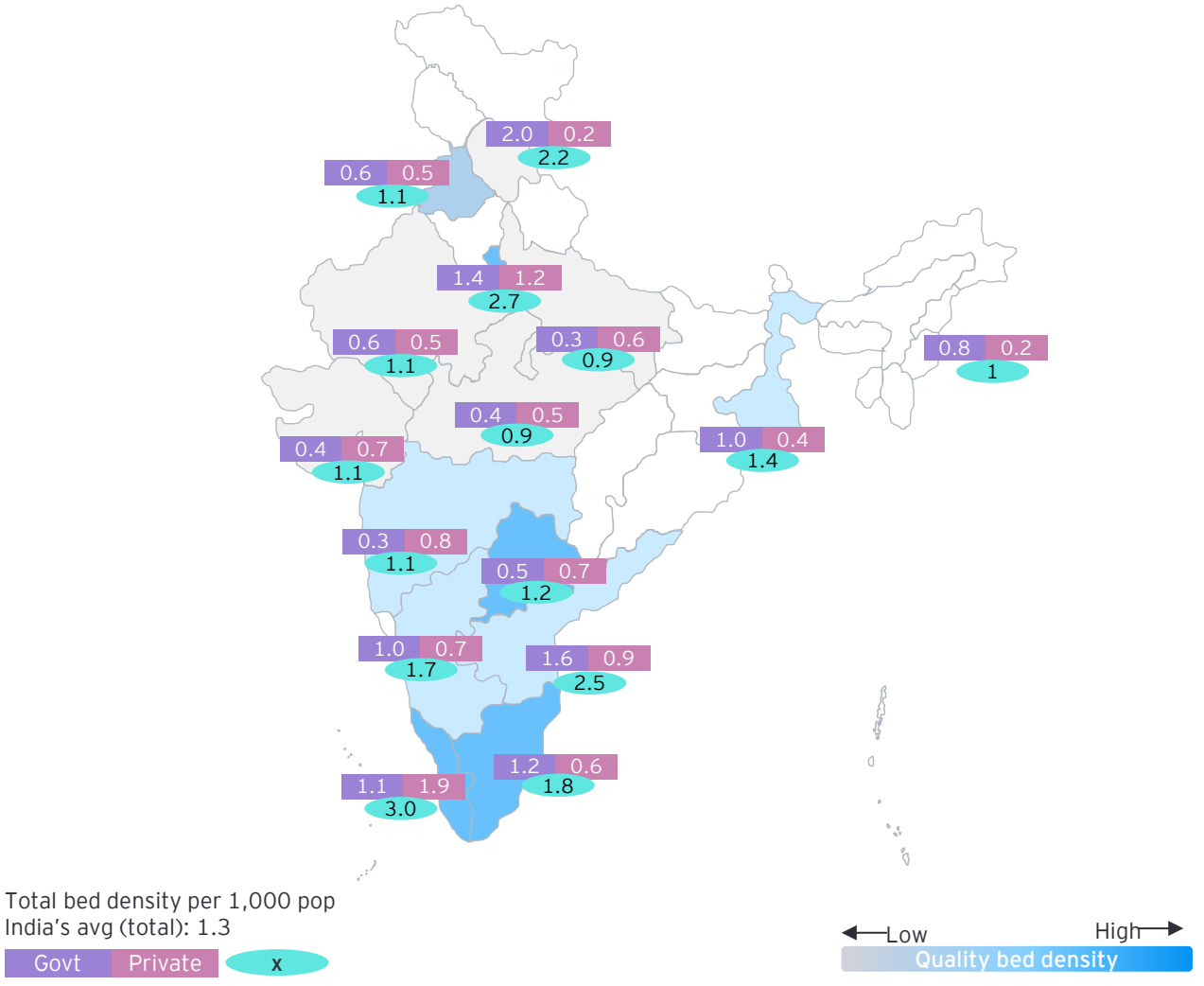
Private insurance is generally designed for higher-income groups, costing 2-3x of what the missing middle can afford. Insurers have also been reluctant to design low-cost, broad-coverage products due to challenges like high cost of distribution and servicing. Lack of awareness, long wait periods and complex insurance products also contribute to lower penetration of insurance for the 'missing middle'.

Wide supply disparities remain, with many parts of the country significantly lacking access to good quality care

While India has made strides in increasing capacity and improving access, it continues to be constrained by bed supply (bed density of 1.3 per 1,000 vs. WHO norm of three per 1,000)

Southern states (Kerala, Tamil Nadu, Karnataka, Andhra Pradesh and Telangana) have a higher total bed density (1.7-3.0) compared to other Indian states (0.9-1.4).

Total government and private bed density
(per 1,000 population by state)



Source: EY-Parthenon analysis

* EY resource; Map not to scale

Metro markets today have a higher bed density (2.0-3.0) compared to T1/T2+ markets (1.0-2.0). Quality beds in metro markets and key tier 1+ markets account for 20%-30% of total beds – dominated by large national and regional chains.

Total bed density in metro and tier 1/2+ cities

Metro			
Markets	Total bed density	Quality bed density	Share of national and regional chains
Delhi NCR	2.0 – 2.5	0.5 - 0.7	55%-60%
Bengaluru	2.5 – 3.0	0.5 - 0.7	70%-75%
Pune	1.5 – 2.0	0.5 - 0.7	25%-30%
Kolkata	2.5 – 3.0	0.5 - 0.7	55%-60%
Chennai	2.5 – 3.0	> 0.7	25%-30%
Mumbai	2.5 – 3.0	0.5 - 0.7	45%-50%
Hyderabad	3.5 – 4.0	> 0.7	60%-65%

Tier 1/2			
Markets	Total bed density	Quality bed density	Share of national and regional chains
Jaipur	1.5 – 2.0	0.5 - 0.7	20%-25%
Nashik	1.0 – 1.5	< 0.5	60%-65%
Nagpur	2.0 – 2.5	< 0.5	30%-35%
Kolhapur	0.5 – 1.0	< 0.5	30%-35%
Bhubaneswar	2.0 – 2.5	0.5 - 0.7	55%-60%
Raipur	1.0 – 1.5	< 0.5	55%-60%
Indore	1.5 – 2.0	< 0.5	65%-70%

Source: EY-Parthenon analysis

“

Quality in healthcare cannot be built only around apex hospitals; it must reflect the reality of India's market, where nursing homes and small facilities remain the backbone, yet the weakest link. Any framework for quality must focus on what can be realistically adopted here: simple early warning and triage tools, digitized care protocols, integrated records and pooled procurement. These are practical, scalable levers that protect patients, strengthen trust and lift outcomes across the board. By bringing nursing homes into the quality fold, we not only raise standards at the margins but build resilience for the entire healthcare system.

Sunil Thakur
Partner and Head of Asia, Quadria Capital

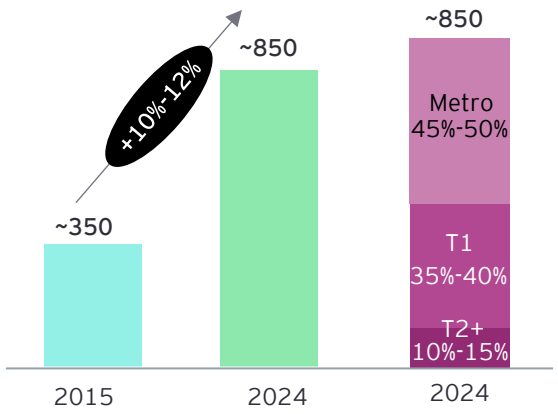
High-end medical equipment are primarily concentrated in metro markets and tier 1 cities despite significant additions in tier 2/3 cities in the last 10 years

LINACs are high-cost medical equipment (~INR15 crore). Thus, metro and tier 1 markets continue to drive 80%-plus share of the installed base. However, with emerging adoption of radiation therapy equipment and strong governmental push of LINAC coverage across all districts in India, tier 2+ markets are expected to see significant uptick.

Soft-tissue robots have seen strong growth in the last five years due to increasing patient affordability and awareness, growing adoption of robotic-assisted surgeries (RAS) and reducing outflows on installations driving adoption. While metro and tier 1 markets drive growth (80%-90% of installed base), tier 2+ markets are expected to see increased adoption in the next five years.

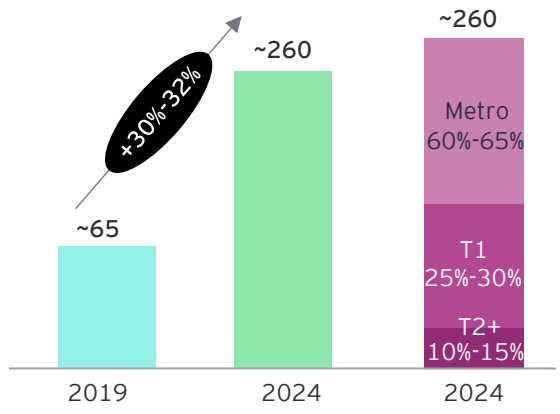
While metros and tier 1 markets account for 50%-60% of installed Cath labs and MRI, there is greater penetration of these equipment compared to other high-end equipment. This is primarily due to lower capex costs, higher clinician preference, higher scheme coverage (cardiac) and increased patient awareness driving tier 2 adoption.

Installed base (IB) of LINACs
(historical growth and split by metro and Tier 1/Tier 2+ markets)



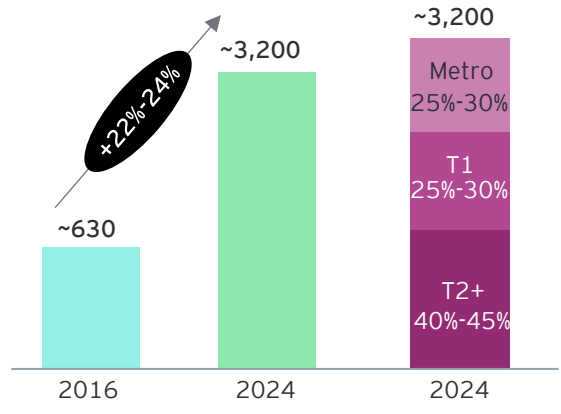
Source: AERB; EY-Parthenon analysis

Installed base (IB) of soft-tissue robots
(historical growth and split by metro and Tier 1/Tier 2 + markets)



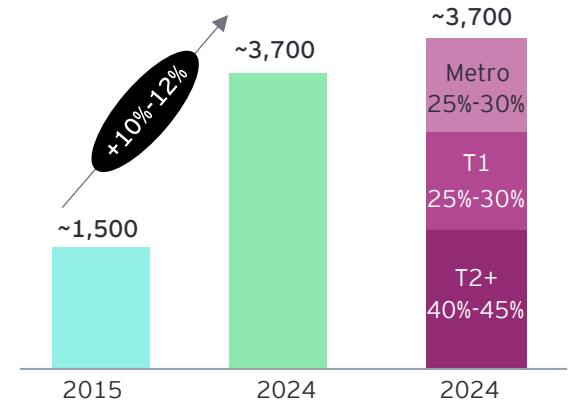
Source: Primary research, EY-Parthenon analysis

Installed base (IB) of Cath labs
(historical growth and split by metro and Tier 1/Tier 2 + markets)



Source: National Interventional Council Registry; EY-Parthenon analysis

Installed base (IB) of MRIs
(historical growth and split by metro and Tier 1/Tier 2 + markets)

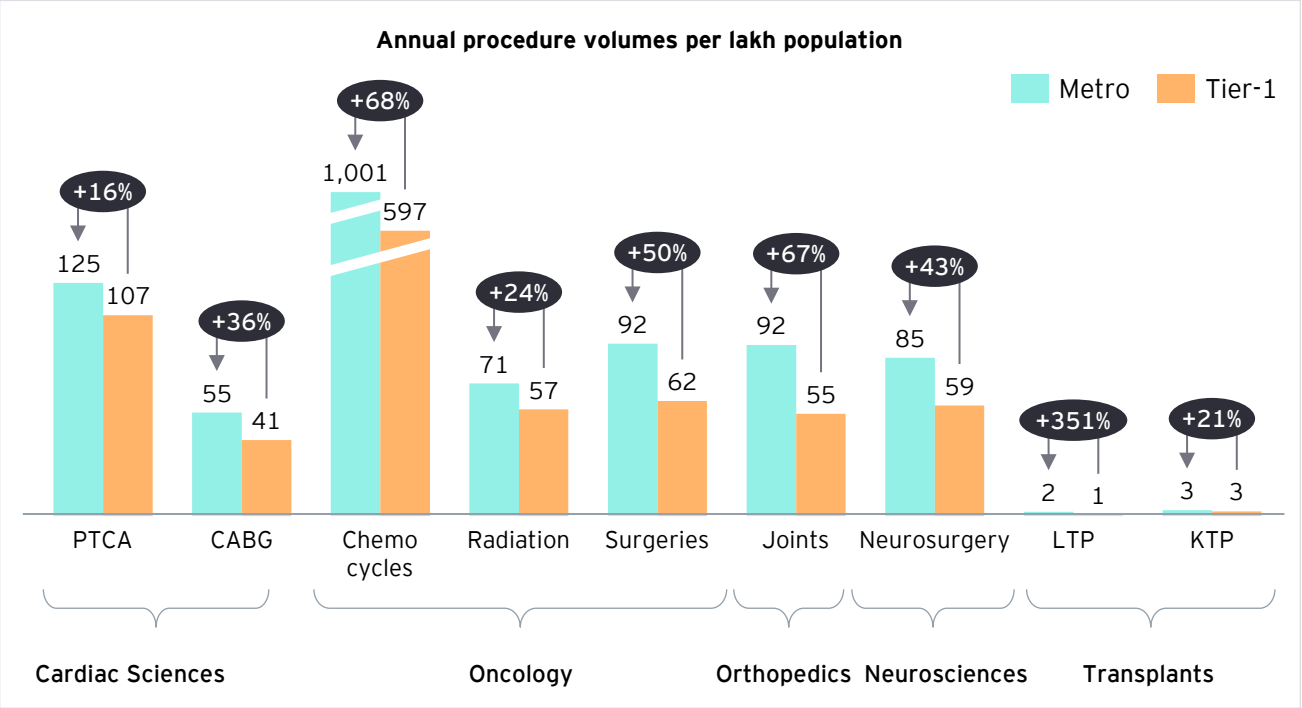


Source: Primary research, EY-Parthenon analysis

Consequently, procedure penetration rates are highest in metros and 50%-60% lower in tier 1/tier 2+ markets

Metro markets have a higher procedure penetration compared to tier 1+ markets in key procedures and specialized procedures in CONGO specialties and transplants, with the gap particularly wide in oncology, joints, neurosciences and liver transplants.

Tier 1+ markets have been able to lower the gap in Cardiac Sciences, particularly in PTCAs, due to increased adoption and penetration of Cath labs. Penetration for other key procedures is expected to rise in tier 1/tier 2+ markets in the next five years, primarily due to rising disease burden, increasing affordability and awareness and ramp-up in quality supply.



Source: EY-Parthenon analysis (basis research undertaken in six metros and six tier-1 cities)

India's under-indexed total bed supply and wide regional disparities are due to historically lower healthcare spend, uneven expansion geared towards metros and T1 markets and high operating costs

Lower healthcare spend in India has historically constrained supply in tier 2+ markets and rural areas, resulting in under-investment in healthcare infrastructure.

Most new capacity expansion has been focused on key metro and tier 1 markets, with high rates of hospitalization, rising affluence and increasing insurance penetration driving expansion. Growth in government supply catering to mass segment has been slower. This has resulted in skewed expansion towards metros and key tier-1 markets.

Hospitals in tier 2+ and rural markets face significant operational costs, making expansion unviable. Sub-optimal doctor engagement models, high capex on infrastructure (physical and medical) and lack of scale on fixed costs are major challenges.

Thrust on episodic and not longitudinal care

Thrust on episodic and not longitudinal care

Fee for service approach and lack of linkages between providers across lifecycle

Preventive and primary care backbone remains underdeveloped

Fee-for-service approach and lack of linkages between providers across lifecycle

Fee-for-service approach often incentivizes volumes over continuity and outcomes.

India's healthcare delivery remains predominantly fee-for-service (FFS), with payments tied to episodic encounters rather than long-term health outcomes. Not only does this limit the scope of the practitioner's purview, but it also has implications on continuity of treatment and multi-disciplinary treatment, which are critical for management of non-communicable and chronic diseases. Few providers have shifted to a salaried model while organizing their clinicians into departments or units to enable greater collaboration and sub-specialization. However, the linkage to outcomes and quality of care remains largely absent. In contrast, many systems globally tie incentives to outcomes. For example, in the UK, general practices are accountable for their registered population's health and rewarded for targets on chronic disease control and preventive care[13].

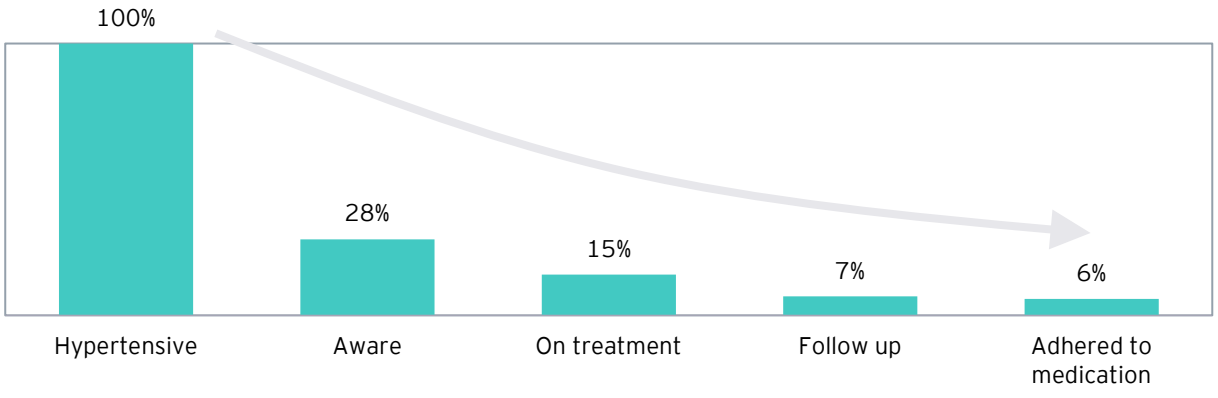
Lack of integrated Health Management Information Systems (HMIS) and limited digitization also make handoffs and monitoring between providers challenging

Digital fragmentation compounds these issues. Lack of interoperable systems and digital records cause information blind spots, which can have a cascading impact on treatment in later stages. Even within public healthcare systems, while there has been some initiative to digitize solutions lack interconnectedness and adoption remains low. Some independent localized studies show that <20% PHCs 'fully' utilize HMIS systems.[14]

Consequently, health systems operate in silos, fragmenting treatment and driving inconsistencies in treatment adherence, appropriateness of care and overall quality

In the absence of coordination between providers, patients are left to navigate the system on their own, without adequate information or support. This has been found to drive duplicative tests, misdiagnoses, delays in treatment and drop-offs in chronic care management. For example, a study based on the National Non-communicable Disease Monitoring Survey 2017-18 shows a steep drop-off between disease awareness and treatment status[15], while another study on the efficacy of the Indian Hypertension Control Initiative in select states showed further losses to follow-up.[16]

Drop-offs in patient journey: Evidence from two large-scale studies on hypertension treatment journeys in India



Note: This chart offers an illustration of the patient journey and is not based on exact statistics

Source: Hypertension treatment cascade in India: results from National Noncommunicable Disease Monitoring Survey, India Hypertension Control Initiative: Blood Pressure Control Using Drug and Dose-Specific Standard Treatment Protocol at Scale in Punjab and Maharashtra, India, 2022

[13] "Patients with high need should get own GP, says government", BBC Media Report "GPs 'focus on pay reward patients", UK, The Standard Media Report,

[14] "What is Stopping Primary Health Centres to Go Digital? Findings of a Mixed-method Study at a District Level Health System in Southern India", Public Library of Science/NCBI PMC, 2021 ;"Driving digital transformation of comprehensive primary health services at scale in India: an enterprise architecture framework", NCBI PMC, BMJ Global Health 2021,

[15] "Hypertension treatment cascade in India: results from National Noncommunicable Disease Monitoring Survey", Journal of Human Hypertension, Nature, Springer Research, 2022,

[16] "India Hypertension Control Initiative: Blood Pressure Control Using Drug and Dose-Specific Standard Treatment Protocol at Scale in Punjab and Maharashtra, India, 2022"

Beyond hypertension, similar lapses play out across conditions and span across continuum of care. These fall into six systemic categories.

Care fragmentation drives six types of system lapses that compound inefficiency and weaken outcomes

Lapse type	Effect (how it arises)	Impact (why it matters)
Data and information gaps	Patient records and diagnostics do not flow across facilities; no interoperable HMIS	Missing history, duplicative tests, delayed decisions, inconsistent care
Fragmentation and poor handoffs	Weak referrals between GPs, specialists, hospitals; patients act as couriers	Loss of continuity, inappropriate escalation/de-escalation, care mismatches
Throughput-over-quality trade-offs	FFS rewards volume; short consults and rushed screenings	Inadequate assessment, premature closure, misdiagnoses carried downstream
Weak accountability for outcomes	Incentives tied to encounters, not long-term results	Limited follow-up, poor chronic care management, weak multidisciplinary collaboration
Judgment and decision errors	Decisions made in silos, without multidisciplinary input	Misdiagnoses or suboptimal treatment (e.g., chest pain not recognized as IHD)
Treatment discontinuity and adherence failures	Lack of structured chronic care pathways, financial protection, or follow-up scaffolding	Patients drop off treatment, adherence remains low, complications and costs escalate

India's healthcare system must move from incremental process improvements to transformational accountability. True value-based care requires transparency in outcomes, scientific patient feedback and reimbursement models that reward quality over volume. Unless doctors and hospitals are incentivized to both share data and avoid unnecessary care, the system will remain cost-heavy and distrusted. It is time to build a framework where patients, providers and payers are aligned through trust, evidence and outcomes — only then can we ensure quality healthcare at sustainable costs.

Dr. Shuchin Bajaj
Founding Director, Ujala Cygnus Healthcare Services

Preventive and primary care remain underdeveloped due to systemic delivery gaps, limited private sector participation and demand-side barriers

Preventive care, disease management and primary care have a high relevance in containing the deterioration of outcomes and costs, especially in a high NCD load setting.

As discussed in the previous chapter, preventive and primary care have been found to drive a significant impact on both outcomes and cost. In fact, the WHO cites primary healthcare as the "most cost-effective approach to enhance people's health and well-being"[17], especially underpinning its importance in the context of low- and middle-income countries such as India. Echoing a similar sentiment, NITI Aayog acknowledged that "increased focus on disease prevention at the primary care level through for Health and Wellness Centers (HWCs) are long-term, sustainable solutions for reducing the disease burden and consequently out-of-pocket expenditure on health."[18]

Several localized and meta studies have found evidence to support the efficacy of preventive and primary healthcare interventions both at the individual and institutional level

40%-50%
potential reduction in NCD-related premature deaths, if India can address key lifestyle-related risk factors

~3.5 years
increase in life expectancy, from primary healthcare interventions in low- and middle-income countries

15%-20%
lower cost per diabetic patient, through early interventions and disease management vs. cases with late-stage complications

Source: "The Burden of Non-Communicable Diseases in India", Cameron Institute, 2010, WHO Note on Primary Healthcare in LICs and MICs, 2025, "An economic evaluation of diabetes mellitus in India: A systematic review; Diabetes & Metabolic Syndrome: Clinical Research & reviews, 2022

Despite its promise, preventive and primary care remain underdeveloped given systemic and operational challenges with public provision and a lack of commercial model alignment in the private sector

The government has improved emphasis on primary and preventive care, driving capacity expansion and wider access; however, service delivery remains a challenge

Since the launch of the National Health Mission in 2005, India has expanded access to primary and preventive care through its referral system of ASHAs, Anganwadi workers, Sub-Health and Primary Health Centers. Notably, this period has coincided with significant reductions in maternal and infant mortality, down from 254 to 88 and 58 to 25 (2005 to 2023), respectively.[19]

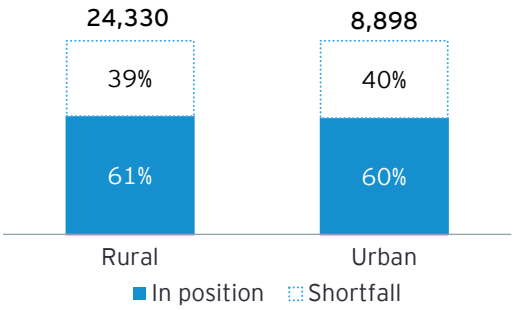
More recently, the conversion of SHCs and PHCs to Aarogya Mandirs and widening services to include NCD screening, mental health and wellness in lifestyle reflect a cognizance of the shift in India's disease profile. The Ministry of AYUSH and the Allied Professionals Act 2021 further empowers paramedical and allied workers to provide select services, easing pressure on doctors and broadening access.

However, access to quality primary care remains uneven. Only half of the required number of PHCs (as per population coverage norms) are functional and only <10% of PHCs and SHCs meet Indian Public Health Standards.[20] Additionally, they are impacted by staff shortages[21], broken water and power supply and frequent stock-outs.[22]

[17] WHO Note on Primary Healthcare in LICs and MICs, 2025
[18] "Investment Opportunities in India's Healthcare Sector", Niti Aayog, 2021
[19] Sample Registration System, 2005, 2023
[20] Update on National Quality Assurance Standards, 2024, MoHFW press release, Health Dynamics of India: Infrastructure and Human Resources 2022-23,
[21] Health Dynamics of India: Infrastructure and Human Resources 2022-23
[22] Rural healthcare in tatters, some centres without power and water in Punjab, Haryana and Himachal Pradesh, Times of India Media Report

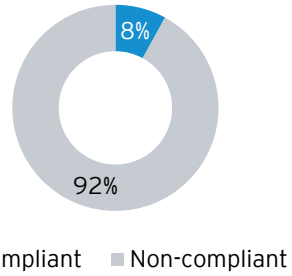
Only ~60% PHCs of required number in-position and <10% of them meet Indian Public Health Standards

Number of functional PHCs in rural and urban areas
% of total PHCs, 2023



Source: Health Dynamics of India: Infrastructure and Human Resources 2022-2023

Share of PHCs/SHCs that meet Indian Public Health Standards
% of total PHC/SHCs, 2023



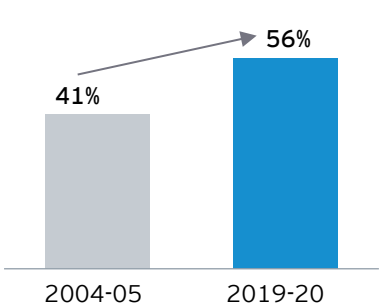
Source: Health Dynamics of India: Infrastructure and Human Resources 2022-23, Update on National Quality Assurance Standards, 2024, MoHFW press release

Indian Public Health Standards define standards for infrastructure and manpower sufficiency

Screening for cervical and breast cancer is still limited in India, where < 2%[23] of eligible women have been screened. This is very low compared to Nepal, a peer low-middle-income country, which has about 16% coverage[24]. Meanwhile, high-income countries like the UK and the US have much higher rates, over 70%[25]. Despite being well-recognized, these limitations persist due to systemic issues: grassroots workers are reported to be overburdened with administrative tasks, while being undercompensated, alongside delayed payments.[26] And while per-capita primary healthcare spend has risen over two decades, it remains far below peers.

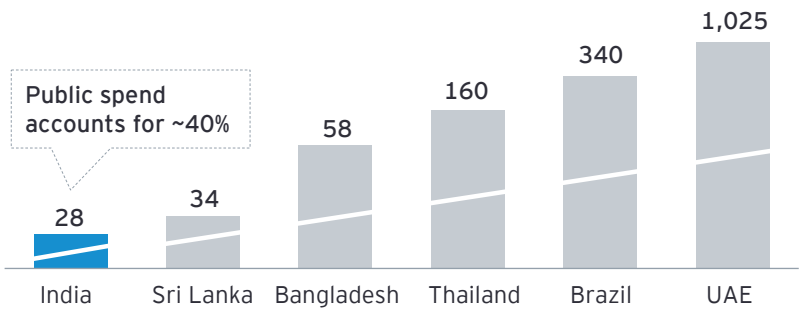
While government allocation towards primary healthcare has grown, per capita spend on primary healthcare (including private and OOP spend) remains lower than peer countries

Share of government CHE allocated to primary healthcare



Source: National Health Accounts (2004-05, 2019-20)

Primary health care spend per capita, India vs. peers, 2022, US$



Source: Population Reference Bureau, 2022, National Health Accounts (2004-05, 2019-20)

[23] National Family Health Survey (NFHS - 5), 2019-21
[24] For women aged 15-49 Cervical cancer screening utilization in Nepal, age range not defined WHO Reports
[25] "Asha workers protest salary delays at civil surgeon office", Hindustan Times 2025
[26] Health Dynamics of India (Infrastructure and Human Resources) 2022-23

Private sector participation in the provision of preventive and primary care has remained muted. Challenges with commercial models in an OOP-driven context have deterred the emergence of scaled players

While acute healthcare has attracted significant capital and competition, primary and preventive care remain underpenetrated, with few players achieving scale.

OPD consultations are low-margin and volume-dependent, but low-entry barriers allow individual practitioners to set up clinics easily, driving fragmentation of volume.

Further, fee-for-service revenue-share models result in low margins for providers. Players who experimented with salaried models historically have found it challenging to build a viable customer pipeline given demand-side constraints (low uptake, low willingness to pay) and competition from either fragmented unorganized providers and hospital OPDs. Without quality norms or accreditation, organized players also failed to differentiate. Together, these factors have challenged the commercial model, driving high customer acquisition costs, asset underutilization and weak unit economics.

In response, leading players have shifted from mass retail OPD models to corporate or government-financed partnerships, where patient sourcing and payment are embedded. Digital-first entrants are bundling primary and preventive care with insurance to drive uptake. Their learnings underscore the value of payer-led solutions to unlock value in private primary healthcare business. Pooled payments and capitation models realign incentives and globally, successful private primary care has relied on such mechanisms.

Low awareness, high financial burden and low trust drive demand-side barriers to mass adoption.

Primary and preventive care adoption is constrained by weak demand, mistrust of health systems and low awareness. Patients often remain undiagnosed and uninformed about complications. High out-of-pocket costs worsen drop-offs, with OPD expenses driving 80%–85% of catastrophic health spending, compared to 45%–50% from hospitalization.[27]

> The future of healthcare will be built on patient-centricity, appropriate technology and innovation enabled ecosystems with measurable outcomes. By integrating all elements of the ecosystem spanning acute care, chronic care, wellness and prevention into a seamless continuum, we can deliver equitable, outcome-driven care. This will fulfill our nation's goal of universal health with True Value Care.

Gautam Khanna
CEO, PD Hinduja Hospital & Medical Research Centre

[27] "Health Insurance for India's Missing Middle", NITI Aayog, 2021

Quality systems and measures are limited in scope and adoption

Quality systems, measures are limited in scope and adoption

While accreditation standards exist for various provider types, adoption is not uniform

Standards potentially inadequate in scope; enforcement and transparency are critical challenges

While accreditation standards exist, adoption is voluntary and low

Indian healthcare has advanced in quality through multiple organizations such as NABH under QCI, though their adoption remains voluntary in nature

In the 1990s, India witnessed rapid growth across industrial and service sectors, including healthcare. However, the existing quality assurance mechanisms were fragmented and lacked uniformity, making it difficult to maintain consistent standards nationwide. To address this challenge, the Government of India established the Quality Council of India (QCI) in 1997 as an autonomous body with a clear mandate to define and promote quality standards and develop national accreditation frameworks. Over the years, QCI has emerged as the apex organization driving quality across multiple sectors through its specialized boards.

While QCI's mandate spanned across sectors, healthcare emerged as a particularly crucial area where quality and patient safety demanded immediate attention. To address this, QCI established the National Accreditation Board for Hospitals & Healthcare Providers (NABH) in 2005, creating a structured framework for standardizing hospital operations and improving patient outcomes. Prior to NABH, there was no unified national system for evaluating hospital performance, which led to significant variations in the quality of care. NABH was introduced to fill this gap by formulating evidence-based standards in line with global best practices yet tailored to the Indian healthcare context. It acts as a catalyst for continuous improvement, promoting accountability among healthcare institutions and enhancing the overall trust of patients in the system. The framework has been made voluntary to encourage adoption through motivation and market-driven credibility rather than regulatory enforcement.

Alongside NABH, a few international accreditation frameworks such as Joint Commission International (JCI) also operate in India. These too are voluntary in nature and are primarily used by a handful of large corporate hospitals as a marketing tool especially to attract medical tourism. However, their overall presence in India remains limited compared to organizations like NABH. In parallel, the Ministry of Health & Family Welfare launched the National Quality Assurance Standards (NQAS) in 2013 to strengthen quality benchmarks in public health facilities under the National Health Mission, providing a government-led complement to NABH's voluntary framework for private hospitals.

> "Quality management systems in healthcare in India at present primarily consist of healthcare accreditations and certifications like NABH and focus on clinical outcomes at individual hospitals is lacking. There is a need to integrate accreditation tools, clinician involvement, focus on clinical outcomes and reimbursements/ cashless insurance services. Payers need to actively participate in nationally controlled system which has benchmarked clinical outcome indicators, patient safety indicators, infection prevention and control indicators and patient satisfaction indicators. We must focus on development of centers of excellence super specialties in each hospital for good clinical quality service and patient trust.

Col. (Dr.) Sunil Rao
COO and Director Medical Services,
Sahyadri Hospitals Private Limited

Various accreditation programs in India

QCI

1988	NABL (National Accreditation Board for Testing & Calibration Laboratories)	Accredits labs for reliable and globally benchmarked results
1998	NBQP (National Board for Quality Promotion)	Drives quality awareness and capacity building
2005	NABH (National Accreditation Board for Hospitals & Healthcare Providers)	Sets hospital standards for quality and patient safety
2005	NABCB (National Accreditation Board for Certification Bodies)	Accredits bodies certifying healthcare and management systems
2012	HSSC (Healthcare Sector Skill Council)	Builds skills and certifies the healthcare workforce

Government entities (Under MoHFW)

2013	NQAS	Government-led standards to assess and improve quality in public hospitals

Other international bodies

	CAP	World's most prestigious laboratory accreditation
	JCI	Global gold standard for hospital accreditation
	ISO	Universal benchmark for quality and safety systems

Source: NABH, JCI, QCI, NABL, NQAS, CAP, ISO website

While NABH continues to expand its programs rapidly over the years, overall adoption could scale up; NABH certificate, often seen as a star on the chest, however, needs to have a strong feedback and continuous monitoring mechanism to enable consistent quality

NABH today operates through 24 programs covering diverse categories of healthcare providers and over the past decade, the scope of the programs has been evolving to cover Centers of Excellence like stroke care, eye, lab, radiology, etc. However, they still need to cover the missing areas such as IVF, daycare centers (surgical, chemo), etc.

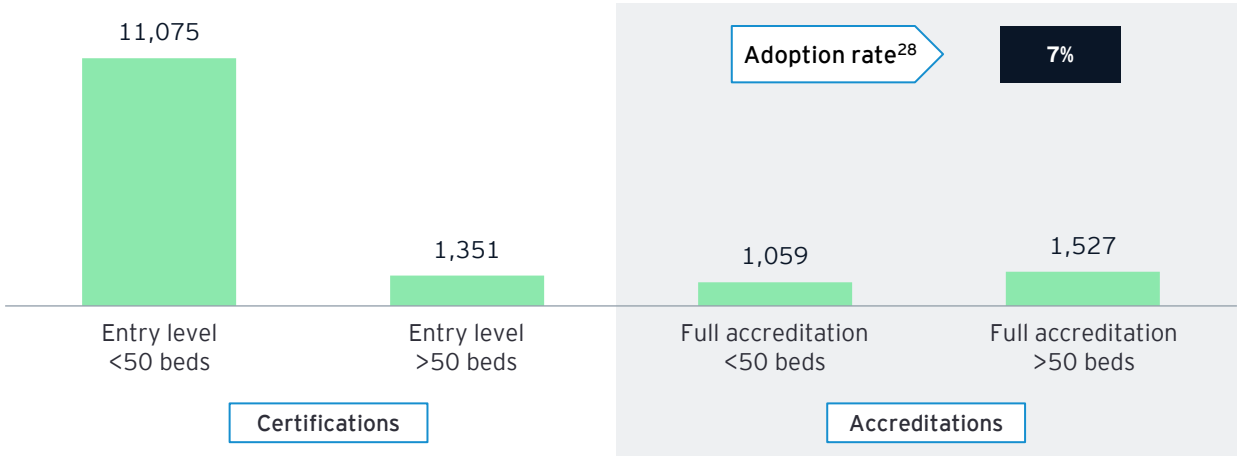
At a national level, adoption of NABH standards is only 7% across private healthcare providers. Though comprehensive standards and guidebooks are available, NABH does not appoint consultants or provide direct implementation support to hospitals, which also limits the adoption. The voluntary nature of the framework further constrains widespread adoption and impact.

Key dimensions	Certification (Entry level)	Full Accreditation
Depth	Basic starter certification; **<50 standards, no KPI mandate**	Full-standard accreditation; 100+ standards with **50 mandatory KPIs**
Purpose and use	Compliance tool for small hospitals to gain TPA empanelment	Comprehensive framework for large hospitals, insurer trust and **mandatory for >300 beds by 2026**

NABH run programs

	Multispecialty hospitals	Single specialty hospitals	Clinics and Ayurveda	Digital Programs	Others
Accreditations	▪ Hospitals ▪ Small healthcare organizations	▪ Eye care ▪ Dental care	▪ Ayush hospitals ▪ Panchakarma clinics ▪ Home care	▪ Digital health	▪ Blood bank ▪ Medical imaging ▪ Clinical trials
Certifications	▪ Entry level hospitals ▪ Entry level small healthcare organizations ▪ Primary stroke centers	▪ Advanced stroke care ▪ Entry level dental clinics	▪ Entry level Ayush centers ▪ Entry level Ayush hospitals	▪ Digital health ▪ Digital health standards	▪ Nursing excellence ▪ Medical laboratory ▪ Emergency departments

Hospital enrolments



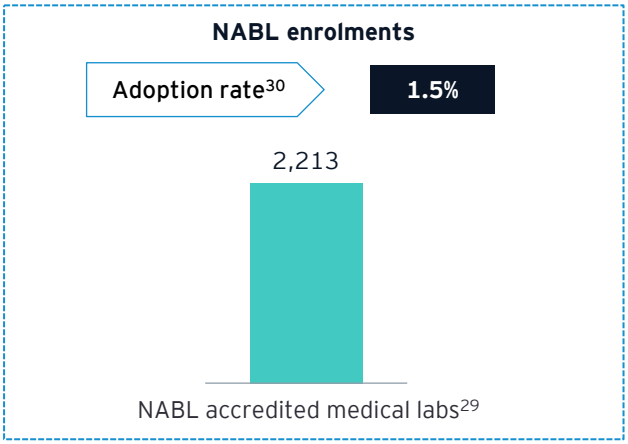
Source: NABH website

[28] Adoption rate calculated for full accreditation basis 35,000-40,000 private hospitals in India

Much like NABH, adoption of NABL remains limited, with laboratories perceiving little tangible benefit from accreditation

NABL plays a critical role in bringing quality, reliability and safety in medical diagnostics by accrediting **Medical Laboratories[29], Testing Laboratories, Calibration Laboratories, etc.** In the medical domain, NABL accredits laboratories based on internationally recognized standards like ISO 15189. This accreditation **process evaluates a lab's technical capabilities, quality management systems and adherence to standardized testing and calibration procedures. However, as** most diagnostic labs in India are small, unorganized setups operating on thin margins, **NABL accreditation is not widely adopted at present.**

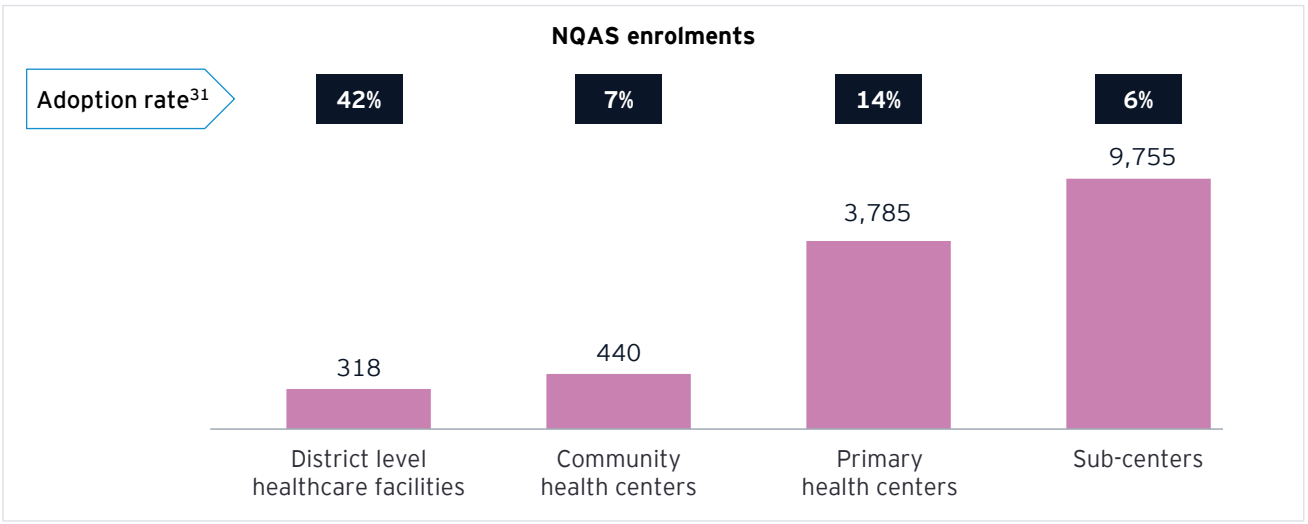
Many labs are unable to invest in infrastructure, trained staff and strict compliance with ISO 15189 standards to gain **accreditation.** In addition, as **NABL accreditation is voluntary, limited patient awareness and lack of perceived business benefits discourage labs from adopting it.**



Source: NABL Report 2025, EY-Parthenon analysis

National Quality Assurance Standards (NQAS) have enabled many public hospitals to improve quality assurance; room exists to improve adoption

The National Quality Assurance Standards (NQAS) is a comprehensive framework developed by MoHFW, Government of India, in 2013, to ensure and enhance the quality of care in public health facilities. NQAS evaluates facilities across eight key areas of concern: **Service Provision, Patient Rights, Inputs, Support Services, Clinical Care, Infection Control, Quality Management and Outcomes.** The government has focused on NQAS heavily and targets to achieve 100% coverage by 2026*. This serves as a strong example of increased adoption when the payer links reward to high quality. (**Letter from Union Health Secretary, Ministry of Health and Family Welfare, Government of India, dated 03 February 2024)*



Source: NHSRC India, NHM

[29] Medical labs include diagnostic labs and imaging services spanning pathology, genetics, molecular testing, X-ray, CT, MRI, ultrasound, & nuclear medicine.

[30] NABL Adoption rate is calculated for full accreditation basis ~1,50,000 Private pathology Labs in India

[31] NQAS Adoption rate is calculated for full accreditation basis 700-800 District level healthcare Facilities, 6,000-6,200 CHCs, 26,000-27,000 PHCs & 1,60,000-1,70,000 SHCs

Scope of standards could be expanded; enforcement and transparency are critical challenges

While the current framework provides robust standards around diagnosis and hospital-based treatment, At present, there is limited focus on systematically assessing whether an intervention is optimally indicated or whether the procedure is delivered by the most suitable clinician. Addressing this dimension would not only enhance clinical quality but also reduce potential costs and risks for both patients and insurers. Similarly, patient-reported outcome measures (PROMs) are recognized within the standards. Making PROMs a core and mandatory component of quality assessments could accelerate the transition toward outcome-driven healthcare delivery.

Finally, NABH has made significant strides in attempting to address the full patient journey within the hospital. Still, there is potential to expand into post-treatment areas such as home care, remote care and transition care centers. Extending accreditation touchpoints across these domains would help create a more seamless, end-to-end quality framework that reflects the evolving needs of patients and the healthcare ecosystem.

NABH's current KPIs

Patient journey	General KPIs	Specialty focused KPIs
Initial consultations	▪ Waiting time for OPD consultation ▪ Return to ER within 72 hours with similar complaints ▪ No. of variations observed in mock drills (O) ▪ % of safe and rational prescriptions	Limited / no KPIs
Diagnostic evaluation	▪ No. of reporting errors/1,000 investigations ▪ % adherence to safety precautions during investigations ▪ Waiting time for diagnostics ▪ Rate of needlestick injuries (O)	▪ Time to CT/MRI in emergency stroke patients (Neuro)
Decision making: Treatment appropriateness and operator competence	Limited / no KPIs	
Admission and Procedure	▪ Initial assessment of IP patients ▪ Incidence of medication errors ▪ % of inpatients developing adverse drug reactions ▪ % of unplanned return to OT ▪ % of transfusion reactions ▪ Standard mortality ratio for ICU ▪ Return to ICU within 48 hours ▪ % of near misses ▪ Incidence of patient falls	▪ Door-to-Balloon Time in STEMI patients (Cardiac) ▪ Cesarean Section Rate (OBGYN) ▪ Maternal Mortality Rate (OBGYN) ▪ Postpartum Hemorrhage Incidence (OBGYN)
	▪ Incidence of hospital associated pressure ulcers ▪ Catheter associated urinary tract infection ▪ Ventilator associated Pneumonia rate ▪ CL associated bloodstream infection rate ▪ Surgical site infection rate ▪ Compliance to hand hygiene practices ▪ Appropriate handovers during shift change	▪ Mortality rate following CABG (Cardiac) ▪ Time from diagnosis to initiation of chemotherapy (Onco) (O) ▪ SSI rate post joint replacement (Ortho) (O) ▪ Mortality rate for Craniotomy (Neuro)
	▪ Nurse-Patient ratio for ICU and wards ▪ TAT for issue of blood and blood components ▪ % of rescheduling of surgeries ▪ % of cases receiving appropriate prophylactic antibiotics within specified time ▪ % of stockouts of emergency medicine ▪ Surgical safety checklist	▪ ICU Mortality Rate ▪ VAP Rate
Discharge	▪ Time taken for discharge ▪ % of medical records having incomplete/improper consent (O)	▪ ALOS for TKR/THR (Ortho) ▪ ICU ALOS (Critical care)
Post-discharge care	Limited / no KPIs	▪ 30-day readmission rate after cardiac surgery (Cardiac) ▪ Mortality within 30 days of chemotherapy (Onco) ▪ Unplanned hospital readmissions during chemotherapy cycles (Onco) ▪ Reoperation within 30 days (Ortho)

KPIs mandatory to be reported for fully accredited hospitals

Notes: STEMI: ST-Elevation Myocardial Infarction; CABG: Coronary Artery Bypass Grafting; SSI: Surgical Site Infection; VAP rate: Ventilator-Associated Pneumonia rate; ALOS: Average length of stay; TKR: Total Knee Replacement; THR: Total Hip Replacement

Source: NABH website

State programs and insurance companies reward NABH accredited hospitals with higher reimbursement rates and therefore there is incentive for hospitals to comply to this accreditation, especially in areas with high insurance penetration. For nursing homes and smaller hospitals, especially in cities where insurance coverage is poor, this incentive does not always help in driving adoption. High cost of quality, lack of appropriate incentivization and lack of awareness among patients regarding essential quality checks in hospitals, are key reasons for low adoption of quality accreditation amongst small providers.

Appropriate rewards, as well as penalties, for players in smaller towns and tier 2, tier 3 cities could boost adoption.

The Clinical Establishment Act as well as the ICMR Standard Treatment Workflows are steps in the right direction towards driving minimum clinical standards adoption. Formal mechanisms for broader adoption or enforcement would enhance impact.

India enacted the Clinical Establishment Act in 2010, notified in 2012, with the intent of standardizing regulations across India's fragmented provider base. Key provisions under this Act included mandatory registration, minimum standards of infrastructure, staffing and services and display of charges and record-keeping. However, health being a state subject, only ~11 states and six UTs have adopted the Act. Large healthcare markets such as Maharashtra, Gujarat, Tamil Nadu and Karnataka have opted out, citing preference for state-level regulation. Poor adoption and weak enforcement in adopting states have been among the key reasons for low uptake. Key limitations of the Act included its focus on structural compliance rather than clinical quality and outcomes, underutilized data collection provisions and lack of system to report, collect and benchmark data.

Similarly, ICMR, in collaboration with the National Health Authority (NHA) and WHO India, has developed and released a series of evidence-based Standard Treatment Workflows (STWs) with the aim is to ensure uniform, optimal and rational treatment practices across the country. In July 2024, ICMR released 32 new STWs covering five specialties: cardiothoracic vascular surgery, pediatric cardiology, interventional radiology, neurosurgery and orthopedics. These are in addition to the 125 STWs released earlier across 23 specialties in 2019 and 2022. While ICMR is working to integrate these workflows into medical education and disseminate them widely to healthcare professionals, insurance companies and healthcare centers, broader adoption may require a mechanism to regularly update these, broaden inclusiveness of key stakeholders in the design process and account for flexibility to accommodate case specific complexities. While the goal is to make these guidelines a routine part of clinical practice and medical training, it may need multiple levers to enhance adoption and compliance.

“

2047- Viksit Bharat, India shall achieve this. We must move ahead with a positive mindset and the key drivers will be on the strong foundation of Health and Education. Maximizing healthcare delivery impact efficiently needs to be built on robust outcome frameworks. Irrespective of whether it's public or private sector, patient outcomes need to be tracked. This should be a government led mandate and reimbursements should be linked to outcomes. Quality Council of India should mandate outcome tracking for NABH accredited hospitals. Quality must remain paramount. There is a need to develop India Specific Standard Sets and build a National Outcomes registry. We should seek inspiration from global benchmarks, collaborate with bodies like International Consortium for Health Outcomes Measurements (ICHOM) led by NABH. Disease specific outcome sets, functional recovery metrics, cost effectiveness indicators, all these will help us have an effective Universal Value Based Healthcare delivery system in place. Medical Value Travel which Government of India is keen to enhance will grow further, by having an effective Value Based Healthcare delivery system in place.

Dr. Bishnu Panigrahi
Medical Strategy and Ops | Fortis

Metrics tracked today are not published publicly or used to systematically continue driving accredited providers up the quality curve; publishing and driving continuous improvement remains a voluntary exercise initiated by select providers

None of the accreditation programs in India at present publishes or shares data, assessment reports or gradings in the public domain. Despite collecting vast KPI datasets from hospitals, there is little evidence of transparent reporting, benchmarking, or feedback with corrective action when red flags emerge, reducing the overall accountability and impact of the system.

The onus today lies with the accredited healthcare service providers to consistently strive to ensure continuous quality improvement. Some national healthcare chains have voluntarily expanded their tracking to include additional outcome measures as part of their quality healthcare initiatives. This approach enables them not only to evaluate hospital operations more effectively but also to deliver higher standards of patient care. The change becomes important as these hospitals aim to attract and compete with global peers for medical value tourism.

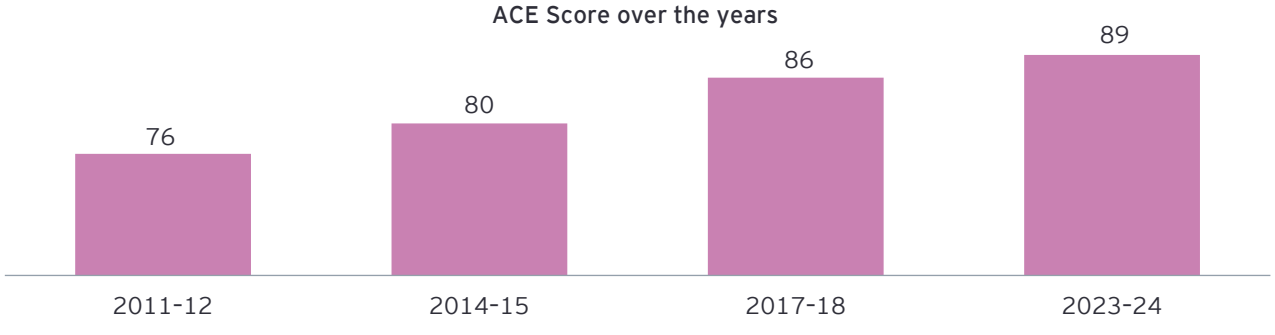
While public reporting of healthcare KPIs is voluntary, several healthcare chains have already embarked on this journey. Apollo Hospitals, for instance, monitors multiple processes for clinical quality, patient safety, operations and service excellence; the performance of these metrics is regularly monitored and reviewed. The clinical outcomes are published as the Apollo Hospitals' Clinical Balanced Scorecard (ACE), as a pioneering initiative since 2010.

Another example is Fortis Healthcare Limited, which was one of the early organizations to join the Coronary Heart diseases ICHOM working group in 2014; the Group has over the time also standardized several operational processes for greater efficiency and enhanced patient satisfaction. These processes are monitored regularly through the Fortis Operating System (FOS) and are reported in the public domain.

Apollo Group's Apollo Clinical Excellence (ACE) Score

ACE 3.0 is the latest version of the Apollo Hospitals' Clinical Balanced Scorecard and it focuses on clinical outcomes across various clinical specialties. The scoring system features a set of key parameters including complication rates, mortality rates, average lengths of stay after major procedures, such as CABG, TKR, THR and endoscopy, infection rates, satisfaction levels with pain management and medication errors.

Ongoing evaluation of outcome measures across the group has facilitated informed decision-making and continuous quality improvement across all treatment areas. As a result, the group's average annual score has risen from **76** in 2011-12 to **89** in 2023-24.



Source: Apollo website, 43rd AGM report and Annual Report

"In India today, there is widespread awareness of accreditation and regulatory standards and quality metrics. Many hospitals are driving compliance and seeing an improvement in patient safety, clinical outcomes and operational efficiency. There is now a need to start focusing on appropriateness of care, to ensure that the right patient gets the right treatment in the right setting at the right time by the right provider, thereby ensuring optimal outcomes. This approach combines clinical expertise with evidence-based guidelines and patient-centered considerations to deliver care that is patient-centric.

Dr. Rohini Sridhar
Chief of Medical Services, Hospitals Division, Apollo Hospitals Enterprise Limited

Limited digitization of data; ABDM adoption to scale up

Limited digitization key constraint for tracking, measuring and reporting quality parameters

Digitization of health records and clinical data still fragmented; NABH digital standards right step

ABDM vision robust but adoption needed to drive quality agenda and standardization

Digitization of health records and clinical data still fragmented; sees limited adoption

Digital infrastructure remains concentrated in large public and private hospitals

Over the past decade, India's healthcare sector has made steady progress in digital adoption, with large public and private hospitals investing in core infrastructure such as HIS, EMR and PACS and gradually moving toward automation, cloud and emerging technologies like AI and GenAI. However, these advancements remain concentrated in large private institutions in metropolitan cities.

In contrast, adoption among smaller clinics and nursing homes, particularly in tier 1 and tier 2 cities, remains limited. While digital health startups have attempted to bridge this gap through provider education, low-cost solutions and flexible payment models, most standalone facilities continue to rely on basic software for billing and accounting, with clinical processes still largely paper-based. Patient registration and documentation often remain manual, reflecting both limited infrastructure and reluctance to invest in comprehensive digital platforms.

Even within hospitals that have the basic building blocks for digital adoption, we are far from being a digitally mature healthcare system which can track quality parameters effectively

India's healthcare system continues to face significant challenges in capturing, standardizing, and leveraging patient data across the continuum of care. Ideally, every interaction, from wellness and prevention to diagnosis, treatment and follow-up, should generate structured data that can be monitored and analyzed to track care quality metrics and health outcomes at individual, institutional and populations levels.

In practice, the absence of integrated digital infrastructure has shifted the burden of care continuity onto patients, who often carry physical records across providers. This results in incomplete, redundant or missing information. Even where digital systems exist, data remains siloed, with paper-based workflows still prevalent. Such fragmentation undermines care coordination, efficiency and patient safety, highlighting the urgent need for a unified, interoperable ecosystem.

Within hospitals, too, tracking critical quality metrics remains a persistent gap. In digital infrastructure, EMR adoption is often inconsistent, audit processes remain manual in many cases and there is little standardization of what data must be captured. Incident reporting, RCA and CAPA workflows are still paper-based, limiting visibility and responsiveness. For instance, ICU conditions such as ventilator-associated pneumonia (VAP) are often tracked manually due to lack of structured clinical documentation, increasing the risk of underreporting and compromising reliability.

Finally, even when quality metrics are captured, mechanisms for systematic reporting do not exist at present. As a result, the end-to-end journey of quality data—capture, tracking and reporting, remains fragmented and ineffective.

However, for leading providers, priorities seem to be shifting in the right direction. In the recent study done by EY – Unleashing digital momentum to shape the future of healthcare – monitoring and improving clinical outcomes was reported as one of the top two priorities by 90% of CIOs for future investment.

Key challenges in the path of implementing data-driven quality measurement and reporting

Health data capture	Lack of infrastructure	Lack of adoption of EMR
Outcome measurement	Lack of visibility of longitudinal patient journey	Lack of standardized templates for tracking
Outcome reporting	No mandate	Lack of process

NABH digital standards will enhance standardization and adoption of digital technologies in healthcare

NABH has taken proactive steps to build an enabling ecosystem for hospitals to accelerate digital health adoption. Its digital standards provide structured guidance across the lifecycle, from identifying and certifying HIS/EMR partners as well as supporting hospitals through onboarding and implementation, to ultimately accrediting institutions on the maturity of their digital transformation. The framework emphasizes how effectively technology is leveraged to improve clinical outcomes, enhance patient experience, strengthen data security and streamline operational workflows, while aligning with national initiatives such as ABDM, National Health Claims exchange (NHCX) and Digital India.

In addition, NABH has collaborated with national health bodies to design disease-specific EMR modules. For example, in partnership with the National Cancer Grid, NABH has released EMR standards for oncology, with similar modules expected for other high-burden conditions. Hospitals seeking NABH digital accreditation will need to demonstrate compliance with these standards, particularly in the structured collection and use of clinical data.

While these measures mark a significant step toward digitization, the framework must be complemented with capabilities to systematically capture, track and report both input and outcome quality metrics. Automating this journey will be critical to driving measurable impact on care quality. Equally important will be enabling broad-based adoption and sustained compliance, as these standards mature into becoming the backbone of India's digital health ecosystem.

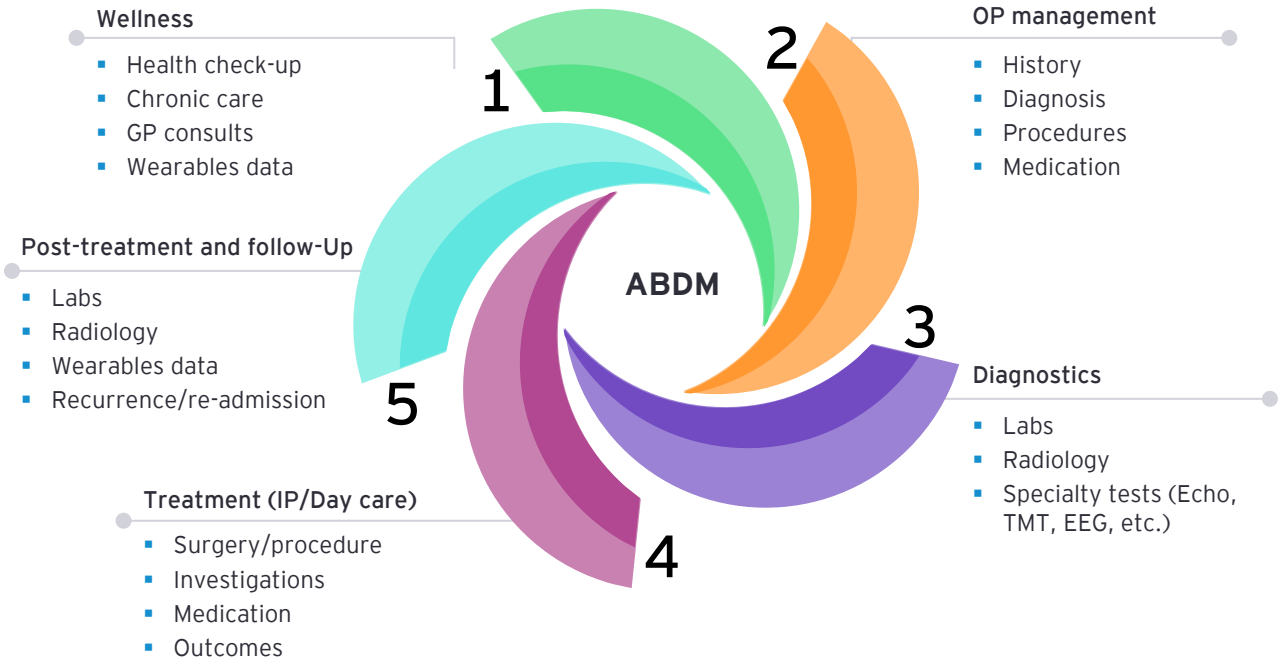
ABDM vision robust but adoption needed to drive quality agenda and standardization

The government has embarked on an ambitious journey towards healthcare digitization through the ABDM, will also help in accelerating quality assurance.

The Ayushman Bharat Digital Mission (ABDM), launched in 2021, provides the blueprint for building a secure and interoperable digital health ecosystem in India. Its core pillars include a unique ABHA ID for every citizen, registries of health professionals and facilities and a consent-driven framework for seamless exchange of health records.

By enabling longitudinal visibility into patient journeys, ABDM can enhance access, transparency and accountability while improving clinical outcomes through timely interventions. The availability of structured and interoperable data across the care continuum will further enable systematic tracking of quality metrics, ongoing performance monitoring and publication of mandated outcomes.

Health data across patient lifecycle



ABDM implementation underway with measurable progress so far; still a long way to go

ABDM has made measurable progress in building the foundations of a national digital health ecosystem. As of September 2025, over 810 million ABHA IDs have been created, over 70,000 healthcare professionals and 420,000-plus health facilities have registered on ABDM and more than 720 million records have been linked to ABHA accounts. These adoption metrics reflect the scale of engagement across the country. However, adoption across the ecosystem is still nascent and will need a powerful implementation strategy.

A recent study by EY found that out of the healthcare CIOs interviewed across private healthcare organizations, only 50% reported to have partial adoption of ABDM; 40% said they were planning to adopt ABDM and 10% were still not ready.

One of the key reasons for the low adoption of ABDM by healthcare providers is the incompatibility of legacy HIS systems with the ABDM sandbox. This problem multiplies in tier 2 and tier 3 cities where nursing homes and small hospitals lack basic systems to capture data and staff are not equipped to handle digital tools. This, coupled with a lack of connectivity and poor infrastructure in villages and small cities, lack of awareness about the ABDM initiative, reservations among service providers regarding their billing data being shared by the government and fear of unknown regulatory interventions are key reasons why ABDM adoption has been slower.

Realizing this vision at scale will require robust implementation of Digital Personal Data Protection (DPDP) Act to safeguard sensitive health information and broad-based adoption across all levels of healthcare providers, beyond large urban institutions.

“

For me, value-based care is about one simple principle — every patient deserves the best possible outcome, regardless of where they come from or what they can afford. In India, this means designing a healthcare system where quality and affordability go hand in hand; not at odds with each other. When we put the patient at the center, the path forward becomes clear: deliver excellence in care but do so efficiently and sustainably. High-quality, frugal medical devices are playing a critical role in making this vision real. They prove that world-class outcomes do not always require world-class costs. By creating technologies that are accessible without compromising on safety or efficacy, we open the door to better recovery, wider access and greater trust in the system. At TI Medical, our vision of ‘Make in India, Make for the World’ is rooted in this belief. India has the talent, the ingenuity and the resilience to design solutions that serve our own people while setting new benchmarks globally. But more than anything else, it is about dignity for patients — the assurance that they are receiving care that is not only affordable, but truly effective. That is the real measure of progress and that is the future of healthcare India can proudly lead.

Prashant Krishnan
CEO, TI Medical Private Limited

Key reasons for low adoption

Legacy system compatibility issues	Digital infrastructure deficiencies	Connectivity challenges in remote areas	Low patient awareness	Privacy and data security concerns
Legacy **HIS/LIS/ EMR systems incompatible** with ABDM standard, leading to delayed integration	Lack of **basic hardware** and **digital storage in standalone hospitals and nursing homes**	**Poor internet access** in rural and remote regions limits ABDM usage and data exchange	Only **8%*** of patients in **urban hospitals** have heard of the ABDM initiative	Patients often lack clarity on **data consent; accountability** for breaches is unclear

Source: *PMC National Library of Medicine Knowledge, Attitude and Practice about Ayushman Bharat Digital Mission and Digital Health among hospital patients

In conclusion, establishing a robust digital backbone for India's healthcare system would require hospital-level digital transformation to monitor internal metrics and enable interoperability of patient records across providers along with longitudinal tracking of patient journeys. Leveraging this data for use by insurers in claims processing and by public health authorities for epidemiological insights . While there are many roadblocks in this journey, Government will have to extend support right from enabling infrastructure, to training of staff, implementation of technology and finally adoption of implemented technology stack to complete the circle of data collection, data monitoring and data reporting.

> "Providers must focus on transparent outcome reporting by implementing standardized electronic health records (EHRs), adhering to NABH standards, focusing on metrics like reduced readmissions, reduced infection rates and tracking and reporting of recovery period. This involves publishing quality data with safeguards for confidentiality, using AI-driven diagnostics, tracking and reporting tools.
>
> **Rushank Vora**
> Senior Director, ICICI Ventures

Reimbursement models not aligned on quality

Reimbursement models not aligned on quality

Limited linkages to provider outcome-based measures; nascent wellness behavior linkages

Nascent and low availability of OPD and longitudinal care-linked products

Limited linkages to provider outcome-based measures; nascent wellness behavior linkages

India's reimbursement system is largely focused on rewarding procedures rather than outcomes. Fee-for-service models dominate, leaving little scope to incentivize quality, preventive interventions or continuity of care. Linking payments to outcomes could align incentives across patients, providers and insurers, but adoption could be constrained by structural, operational and governance barriers.

Structural barriers – Limited data and usability

Disconnected clinical data – EHR adoption is still at early stages to enable interoperable measurements. Patient information is fragmented across hospitals, labs and pharmacies, while primary health centers, clinics, diagnostics and physiotherapy centers are mostly outside insurer networks.

Limited linkage to outcomes - Even where data exists, mechanisms to drive objective linkages to treatment protocols, disease variations and patient compliance levels are still under development. Variability in reporting and limited standardization of and adherence to protocols and disease or ailment classifications further reduce the ability to model such linkages.

Operational barriers – Limited standardization

Fragmented Clinical Pathways - Guidelines are usually locally defined and inconsistently applied. Limited consensus among doctors—even for common conditions – can make it difficult to benchmark care quality.

Provider–Insurer Misalignment - Disagreements between claim-review and treating doctors can trigger disputes or claim rejections. Fear of losing customers can discourage insurers from linking payments to outcomes.

> Value-based care in India holds transformative promise — but the true power lies in reimagining the system with the patient at the center. Payers must adopt differentiated reimbursement models that reward measurable outcomes, not volume. Providers need to commit to the culture of transparency — publishing outcome reports, engaging clinicians in co-designing care pathways and embracing digital tools that empower shared decision-making. Placing the patient's voice at the center is not just a moral imperative — it's the only way for sustainable, high-quality care that India needs.

Dr. S Chandra Kumar
Founder and Executive Chairman, Kauvery Group of Hospitals

Governance barriers – Lack of alignment

Absence of independent oversight for standardization, while Quality Council of India (QCI) provides accreditation frameworks like NABH, focusing primarily on input and process standards; validation of actual clinical outcomes or longitudinal care effectiveness is not covered. There is no independent oversight authority to define, standardize and validate outcome measures across insurers and hospitals. Without such alignment, if individual insurers develop their own guidelines, hospitals may resist as adhering to multiple, differing criteria would be impractical, making system-wide adoption difficult.

Limited systemic linkage to outcomes beyond data and governance gaps, contracting, reporting and incentive structures are not yet equipped to support scalable outcome-linked reimbursement. Even forward-looking insurers face practical challenges in measuring, standardizing and rewarding quality across the system.

> The future of healthcare in India lies in moving from volume to value, with the patient at the very heart of every decision. True Care means aligning all stakeholders — providers, payers and policymakers — around outcomes that matter to patients, not just activity metrics. This calls for bold moves: rewarding quality through smarter reimbursement models, building a culture where outcome reporting and continuous improvement are the norm and harnessing digital as a force multiplier for trust, transparency and access. When we succeed, we don't just create efficient healthcare systems — we create healthier communities and a stronger India.

Dr. Nitish Shetty
Regional CEO, Krishna Institute of Medical Sciences (KIMS) Hospitals, Bengaluru

Limited cover for OPD and longitudinal care

A few new-age players have begun building rudimentary linkages to wellness behaviors at the consumer end.

However, broader product basket remains inpatient focused. At the same time, formal products with multiple providers to deliver longitudinal care or products for condition management remain absent.

Insurance products	Inpatient cover	Daycare surgeries	OP consultations	OP investigations	OP medicines	Wellness benefits	Pre-hospitalization	Post-hospitalization
Policy 1	✓	✓	✗	✗	✗	✓	✓ (60 days)	✓ (180 days)
Policy 2	✓	✓	✓	✓	✗	✓	✓ (30 days)	✓ (60 days)
Policy 3	✓	✓	✓	✓	✓	✓	✓ (60 days)	✓ (90 days)
Policy 4	✓	✓	✓	✓	✓	✓	✓ (60 days)	✓ (180 days)
Policy 5	✓	✓	✗	✗	✗	✓	✓ (60 days)	✓ (90 days)
Policy 6	✓	✓	✓	✓	✓	✓	✓ (60 days)	✓ (180 days)
Policy 7	✓	✓	✗	✗	✗	✓	✓ (30 days)	✓ (60 days)
Policy 8	✓	✓	✗	✗	✗	✗	✓ (30 days)	✓ (60 days)
Policy 9	✓	✓	✓	✓	✓	✓	✓ (60 days)	✓ (180 days)
Policy 10	✓	✓	✗	✗	✗	✓	✓ (60 days)	✓ (90 days)
Policy 11	✓	✓	✗	✗	✗	✓	✓ (60 days)	✓ (180 days)

Note: This is an indicative list, not exhaustive and not for product comparison. Terms and benefits may change as per insurer policies.
Source: Individual insurance company websites – accessed on 23 September 2025

Continued cost pressure on key stakeholders

Continued cost pressures on key stakeholders

Rising financial pressure on providers; costs of quality care exceeding reimbursement rates

Limited viability of insurers due to suboptimal risk pooling, pricing; low empanelment, frauds

Rising financial pressure on providers; costs of quality care exceeding reimbursement rates

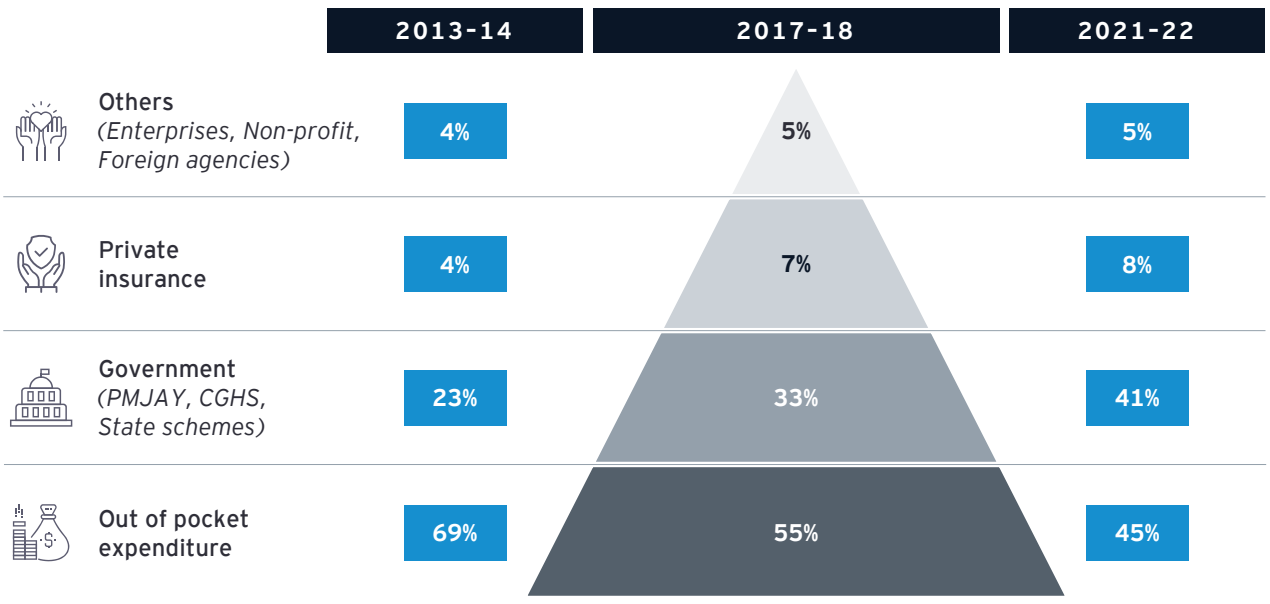
In the past four to five years, prevailing macroeconomic conditions have challenged sustainability of healthcare providers. While most of the challenges have been in play pre-pandemic as well, some have seen accelerated trends in recent years, which points to increased financial pressures on healthcare providers going forward.

Internal and external factors challenging sustainability of healthcare providers

Increasing insurance and scheme coverage

Share of out-of-pocket expenditure for healthcare services has seen a significant reduction from 69% in 2013-14 to 45% in 2021-22, while share of government and private insurance has nearly doubled in the same period.

Current health expenditure breakup by mode of financing



Source: NHA

In a country where access to quality healthcare services remains constrained for a large segment of population due to affordability challenges, rising insurance and scheme coverage is a much needed and welcome trend.

At the same time, increasing coverage of schemes limits flexibility in pricing and impacts realizations for providers as reimbursement levels are less than 50% vis-à-vis cash (out-of-pocket) tariffs.

A quick comparison of reimbursement rates for key procedures reveals variations in structure and price points across various health schemes:

- Differentiation by city tier and accreditation status, for example:
  - PMJAY follows a three-tiered pricing (tier 1/2/3) across all procedures. Additionally, PMJAY offers 10%-15% as incentive to hospitals for NABH accreditation, metros, aspirational districts and running PG/DNB course in empaneled specialty.
  - CGHS follows two levels of pricing basis NABH and non-NABH hospitals.
  - States such as Maharashtra and Andhra Pradesh have flat pricing and do not differentiate by city tier or by accreditation status, while states such as Rajasthan define tariffs separately for NABH and non-NABH hospitals.
- Differentiation by complexity or risk stratification, for example:
  - PMJAY has only one code for PTCA, which is inclusive of diagnostic angiogram, while CGHS and most state schemes have separate codes for PTCA and coronary angiogram.
  - PMJAY has one code for CABG including IABP if required, while CGHS has separate codes for CABG and CABG + IABP as well as a standalone IABP code.
  - PMJAY has four codes for Cholecystectomy – with/ without exploration of CBD and open/ lap albeit with same pricing. In case of CGHS, there are three codes – Cholecystectomy, Cholecystectomy and exploration of CBD, Lap Cholecystectomy.
- Differentiation across reimbursement levels on like-to-like basis, for example:

Like-to-like tariff comparison for NABH hospitals in metro (in INR lakh)

Procedure	Cash	TPA	National Schemes		State Schemes			
	Cash	GIPSA	PMJAY	CGHS	MH	RJ	WB	AP
PTCA inclusive of Angiogram and 1 Stent	2.7-2.8	2.0-2.1	1.1	1.4	0.9	1.2	1.2	0.8
CABG Off Pump with IABP	3.8-4.0	3.4-3.5	2.5	1.9	1.3	1.7	1.5	1.4
Total Knee Replacement with Implant	2.7-2.8	2.4-2.5	1.1	2.3	0.6	2.2	1.9	-
Laparoscopic Cholecystectomy without CBD Exploration	1.0-1.1	0.8-0.9	0.5	0.3	0.2	0.2	0.2	0.3
Lower Segment Cesarean Section	1.2-1.3	0.6-0.7	0.2	0.2	-	0.1	0.2	0.1

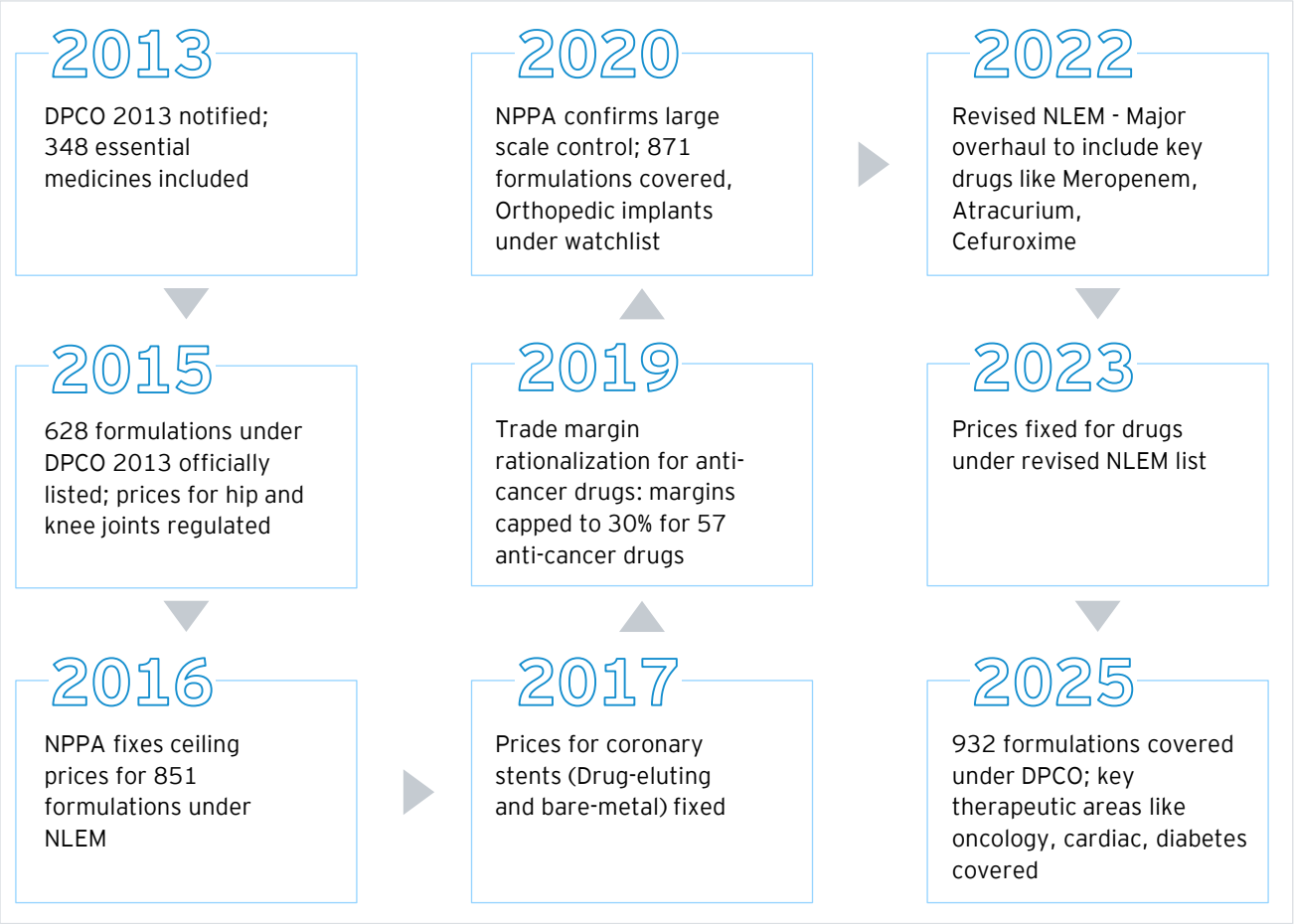
Source: PMJAY, CGHS, MJPJAY, RGSH, Swasthyasathi, Dr NTR Vaidya seva- Portals, EY-Parthenon analysis

As indicated in the table, existing reimbursement structures often ignore true clinical complexity and risk adjustment remains minimal, leaving procedure variability unrecognized and provider incentives misaligned. Providers are effectively reimbursed on a 'one size fits all' approach even when risk and resource use are highly variable.

While the definitions and price points continue to evolve, as seen in case of PMJAY wherein the revised HBP 2.2 expands the number of packages and procedures along with introducing stratification on few procedures, the current landscape remains inconsistent, undermining provider economics and patient safety incentives.

Expanding DPCO coverage

Over the past decade, India's drug price control framework has steadily widened in both scope and impact. Beginning with the implementation of DPCO 2013, which brought 348 essential drugs under price regulation, the coverage has progressively expanded to include over 930 formulations as of 2025, including 131 anti-cancer drugs.



Source: NPPA (National Pharmaceutical Pricing Authority), PIB, NLEM (National List of Essential Medicines), DPCO

This expansion, while aimed at improving patient affordability, has introduced significant margin pressures for Indian hospitals. In 2022, when major critical care drugs like Meropenem and Cefuroxime were brought under DPCO, estimated impact on hospitals was 1%–1.5% of revenue.

Growing competitive intensity

Hospital infrastructure across major Indian cities is steadily expanding. This expansion means patients today have more choice than ever, with multiple tertiary providers competing for the same catchment.

Greater awareness and access to information among 'patient-consumers' has led to shopping for healthcare services. As a result, pricing is often market-driven and the ability of hospitals to command premium pricing is constrained.

Rise of online platforms and retail diagnostic chains has added to the traditional competitive intensity from peer hospital chains. These models offer significant discounts on medicines, health check packages and diagnostic tests. Such aggressive pricing has forced hospitals to recalibrate their pricing on outpatient services to maintain footfall.

Retail diagnostic pricing for common tests

Test/ service name	Hospital	Pricing offered by diagnostic players				
	Sample pricing	Peer 1	Peer 2	Peer 3	Peer 4	Peer 5
CBC	1X	0.8X	0.6X	0.5X	0.3X	0.5X
HbA1C	1X	0.5X	0.3X	0.2X	0.2X	0.4X
TSH	1X	0.4X	0.2X	0.5X	0.3X	0.4X
Urine Culture	1X	0.6X	0.5X	0.5X	0.4X	0.5X
Serum Electrolytes	1X	0.6X	0.5X	0.3X	0.6X	0.5X
Vitamin D	1X	0.5X	0.4X	0.3X	0.3X	0.4X
RFT	1X	0.4X	0.4X	0.9X	0.4X	0.8X
Ferritin	1X	0.3X	0.3X	0.3X	0.2X	0.2X
Blood Sugar (Fasting)	1X	0.3X	0.3X	0.3X	0.3X	0.3X
Calcium	1X	0.5X	0.5X	0.4X	0.4X	0.4X

Source: Secondary research, EY-Parthenon analysis

Rising input costs

While hospital revenues are impacted by increasing coverage of schemes and insurance, expanding coverage of medicines under DPCO and growing competitive intensity from traditional and non-traditional channels, there is no corresponding relief on cost heads which are on the rise, thereby constraining hospital margins.

Material cost

- Rising import costs
- Shift towards high complexity procedures (e.g., Immunotherapy, TAVI) which have higher unit costs

Talent cost

- Wage inflation
- High replacement costs

Doctor cost

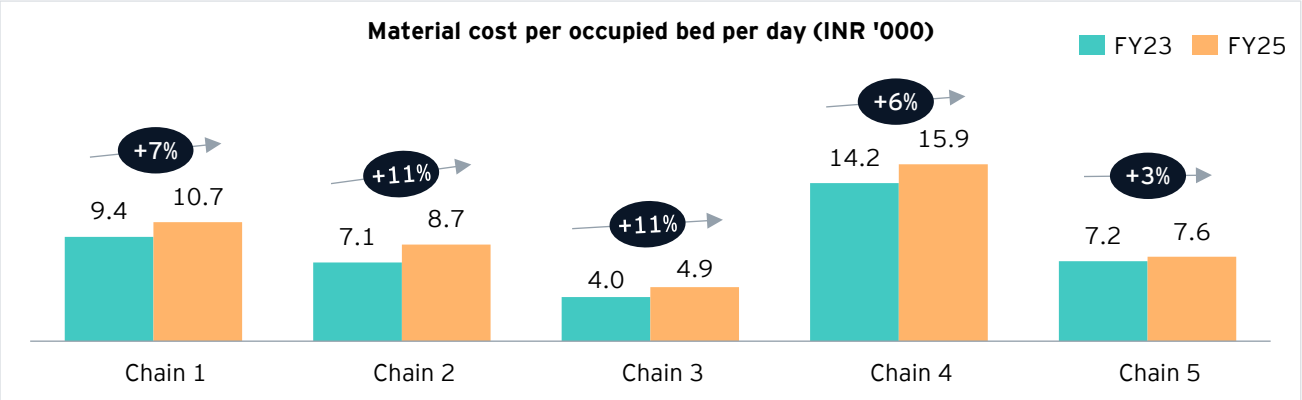
- High acquisition cost, especially with growing competition
- Relocation costs given limited availability of specialists and super-specialists in tier 2/3 cities

Overheads

- Annual increases in rent, electricity, R&M

Rising input costs of materials

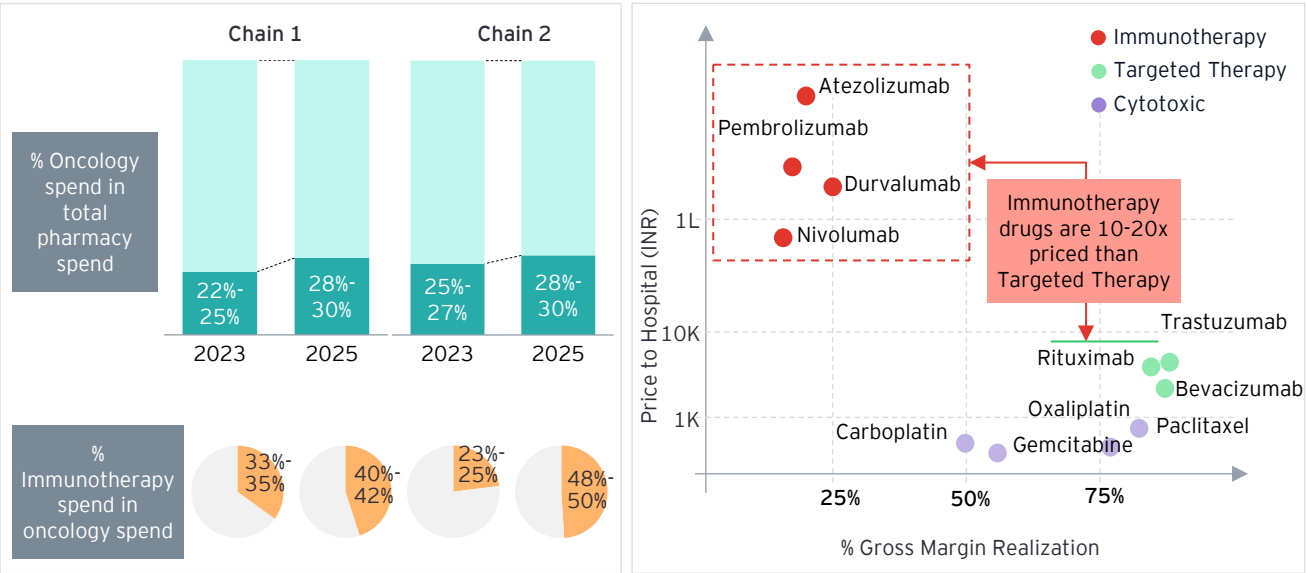
Despite hospitals undertaking targeted initiatives to optimize procurement costs through supplier renegotiations and driving formulary compliance, material costs per occupied bed per day has seen an average increase of 7-8% over last two years.



Source: EY-Parthenon analysis; Company annual reports; investor presentations

One of the key drivers for this increase in material cost is shift in specialty and case mix towards more complex procedures and advanced therapies, many of which are cost intensive procedures involving usage of proprietary drugs and high-end implants.

Most hospital chains are witnessing rapid increase in cancer cases, which has led to share of oncology drugs in hospital pharmacy purchases going up by 3%-5% in recent years. Within oncology, there is a visible shift towards immunotherapy, which has a much higher per-unit cost and lower gross margin for providers compared to traditional targeted or cytotoxic therapies.

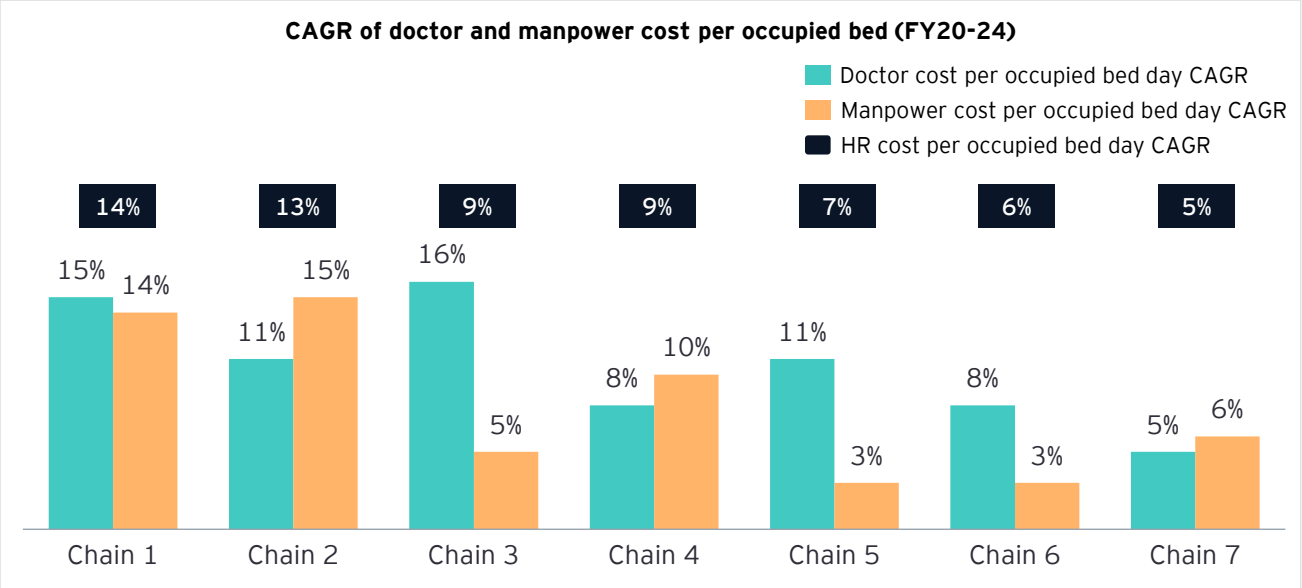


Source: EY-Parthenon analysis

Complex procedures like Deep Brain Simulation (DBS) and Transcatheter Aortic Valve Implantation (TAVI) are also seeing increased cases in hospitals. These procedures are associated with high-end implants, which increases overall material costs. For example, TAVI valves are 10-20x the cost of a traditional heart valve.

Many of these proprietary drugs and high-end implants are imported and are thus influenced by various factors such as exchange rates, supply chain disruption from global events and government policies such as increased tariffs, further leading to increase in costs.

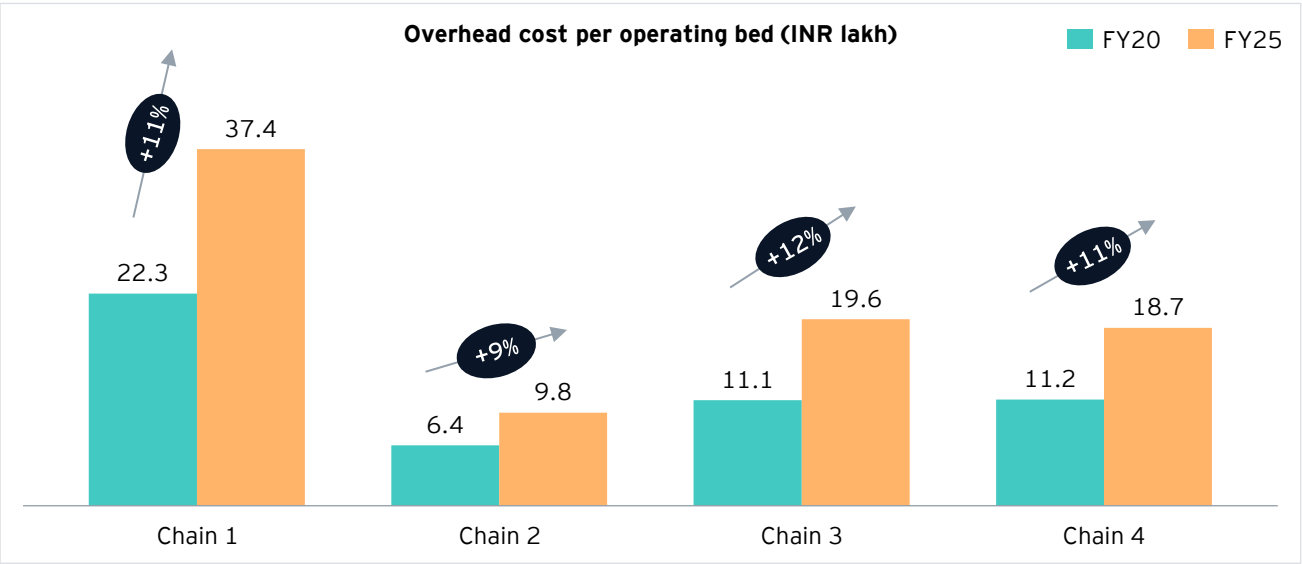
Wage inflation, high attrition and high doctor costs



Source: EY-Parthenon analysis; company annual reports; investor presentations

HR cost per occupied bed day has also seen an average increase of 7%–8% over the last two years. In the context of escalating clinician costs and high attrition levels, especially in some core functions like nursing, increasing competition and overall shortage of skilled healthcare workforce, hospitals will need to develop compelling benefits packages and compensation models along with enabling a flexible, engaging and supportive workplace culture to meet the evolving needs of healthcare workers.

Annual increase in overhead costs



Source: EY-Parthenon analysis; Company Annual Reports; Investor Presentations

Fixed overhead costs per operational bed have increased by ~10%-12% p.a. across geographies even for the highest quality organized players. Continued annual increases in commercial utilities rates, rentals, IT-related expenses and repairs and maintenance costs have fueled this persistent cost inflation.

Financial pressures creating a persistent cost-quality dilemma in healthcare

In the context of the rising financial pressures challenging sustainability, hospitals face a 'cost-quality dilemma' which is expected to intensify going forward.

Embedded tax burden for healthcare providers

Most of the inputs procured by healthcare establishments, ranging from Capital Goods (e.g., medical and surgical furniture, electronic appliances and gadgets, storage equipment, vehicles, plant and machinery), Input Goods (e.g., drugs and medicines, chemicals, power and fuels where applicable, paper and stationery) and Input Services (e.g., rent, leasing charges, IT licenses, legal fees, housekeeping services) are taxed.

Recent GST reforms effective from September 22, 2025, have provided some relief by reducing the GST rate on most drugs, medicines and medical devices from 12% to 5%, with zero-rating applied to 33 life-saving drugs (e.g., for cancer and rare diseases) and certain critical care items. Additionally, health and life insurance premiums for individuals are now exempt from GST (previously 18%), easing costs for hospitals procuring such services. The growing adoption of technology, such as AI-driven diagnostics and telemedicine platforms, further increases GST on inputs like IT services and software licenses (typically taxed at 18%), adding to the cost burden. However, these taxes cannot be set off against the output tax liability because most healthcare services are exempt from GST. The GST framework also creates disparities, as related activities like hospital pharmacies are often taxable allowing partial ITC for those providers but not for hospitals focused on exempt healthcare services.

The blocked credit, which remains unutilized in the value chain, becomes a cost and gets passed on to the end user, raising the cost for healthcare services and diluting the government's objective of making India an affordable healthcare destination. Industry estimates suggest that blocked ITC adds 4-8% to operational costs for hospitals, depending on the input mix, even after the 2025 rate cuts. This issue disproportionately affects smaller hospitals and rural healthcare providers, who lack the financial flexibility to absorb embedded tax costs, potentially limiting their ability to serve underserved populations. This ITC blockage compounds other sector challenges, such as rising labor costs and regulatory compliance, making it a critical financial pressure point.

This calls for urgent discussions among stakeholders, including the GST Council, Ministry of Health and healthcare industry associations, to explore solutions such as zero-rating healthcare services- which would maintain no net tax on consumers while enabling full ITC on inputs or introducing a low GST rate on output services for hospitals. Such reforms would alleviate the embedded tax burden for healthcare service providers while supporting India's goal of affordable and accessible healthcare.

> "On both health insurance and life insurance, GST which was previously charged at 18% has been reduced to 0%. This will give a huge boost to health insurance which was expensive – it will be become much more affordable. Similarly, medical equipment and other diagnostic kits used in hospitals have been reduced to 5%. This will also make equipment much more affordable and even small nursing homes, which are 10 or 12 bedded can get more of this equipment in rural areas. The focus on changes in the GST regime for healthcare seems to be on preventive care and primary care. The voice of the common man, medical professional and healthcare industry has been heard by them.

Dr. Harsh Mahajan
Chair, FICCI Health Services Committee and Founder & Chairman, Mahajan Imaging & Labs

Delivering **high-quality care** requires investments in skilled staff, advanced technology, rigorous protocols and patient safety measures, which often come with **significant fixed and variable costs.**

Cost containment is important as chronic losses can lead to unfavorable scenarios such as hospital closures, service cutbacks, deferred maintenance and inability to invest in new technologies, which **can impact quality of health outcomes.**

Over the years, providers have been adopting frugal approaches and undertaking various cost control initiatives to sustain their operations. Targeted material and talent cost optimization programs have enabled improvement in EBITDA and ROCE from previous levels and are expected to continue as a long-standing strategy.

However, despite these initiatives, the minimum cost of delivery for quality healthcare is often higher than the scheme reimbursement rates for a few procedures. This re-emphasizes the need for having smart reimbursement models which factor in risk complexity and justify the minimum threshold costs required to deliver quality outcomes.

Reimbursement rates vis-à-vis total procedure cost (in INR lakh)

Procedure	National schemes		State schemes			Estimated procedure cost per case
	PMJAY	CGHS	MH	RJ	WB	
PTCA inclusive of Angiogram and one stent	1.1	1.4	0.9	1.2	1.2	0.9-1.1
CABG Off Pump with IABP	2.5	1.9	1.3	1.7	1.5	2.2 - 2.5
Total Knee Replacement with Implant	1.1	2.3	0.6	2.2	1.9	1.8-1.9
Laparoscopic Cholecystectomy without CBD Exploration	0.5	0.3	0.2	0.2	0.2	0.5-0.6

Source: PMJAY, CGHS, MJPJAY, RGSH, Swasthyasathi, Dr NTR Vaidya seva- Portals, EY-Parthenon analysis

In a market where cost pressures are ubiquitous and the macroeconomic trends indicating financial pressures are expected to intensify going forward, there is a growing concern that extreme focus on frugality will impact quality of care. If a hospital focuses only on cost-cutting without a parallel emphasis on quality of care, the consequences can be serious and far-reaching. Some of the potential long-term risks in an environment where cost-focus unilaterally dominates are listed below:

	Extreme cost-cutting measures	Long-term risks
People management	▪ Reduced staffing levels without acuity or occupancy considerations ▪ Reliance on less experienced staff including critical areas	▪ Understaffing and burnout ▪ Lower staff morale and retention ▪ Increased medical errors ▪ Continuity and quality issues
Process and protocol adherence	▪ Sub-optimal administrative support for protocols, checklists, audit functions ▪ Deferred preventive maintenance (air handling units, OTs, sterilization, etc)	▪ Higher complication rates ▪ Hospital acquired infections ▪ Compromised patient safety ▪ Revenue and billing leakages
Performance improvement initiatives	▪ Delay in equipment upgrades, opting for cheaper consumables from non-qualified companies ▪ Delayed investments in technology	▪ Compromised infection control, surgical outcomes, diagnostic accuracy ▪ Missed opportunity for technology-driven efficiencies

Reputational risk

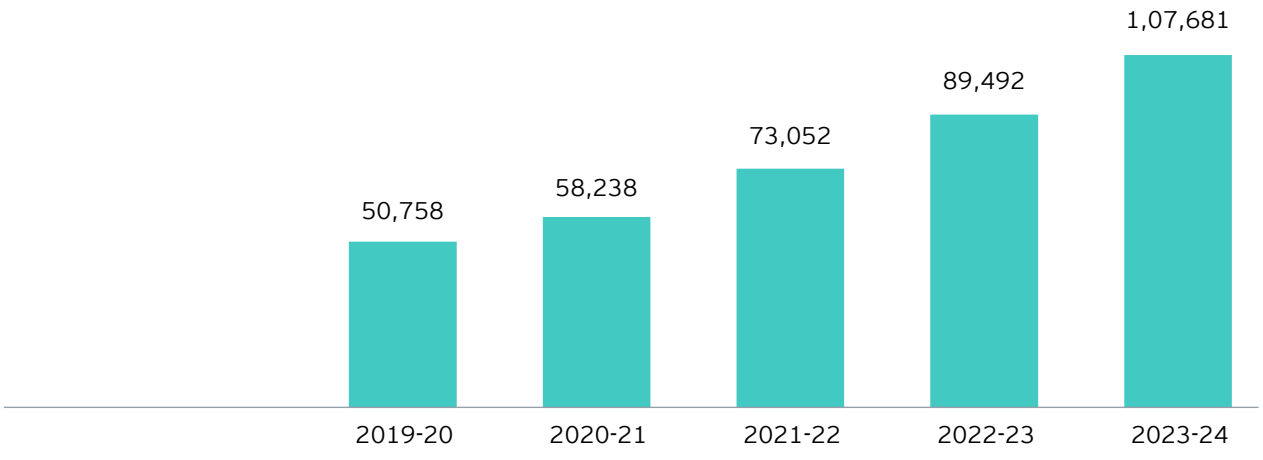
Negative patient experiences, outcomes, or public scrutiny (especially in the age of social media) can damage the hospital's brand, which can also affect accreditation status (e.g., NABH, JCI).

Limited viability of insurers – suboptimal risk pooling and pricing; low NH empanelment; high frauds

India's health insurance system is evolving – without deeper risk pools, smarter pricing and claims validation, financial sustainability may likely remain elusive.

Health insurance premiums in India have grown at ~23% CAGR over the last four years, driven by the fillip given by COVID to average premium per life covered (~20% CAGR); coverage expansion has remained muted (~4% CAGR).

Health premium (within India) underwritten by General and Health Insurers (INR crore)

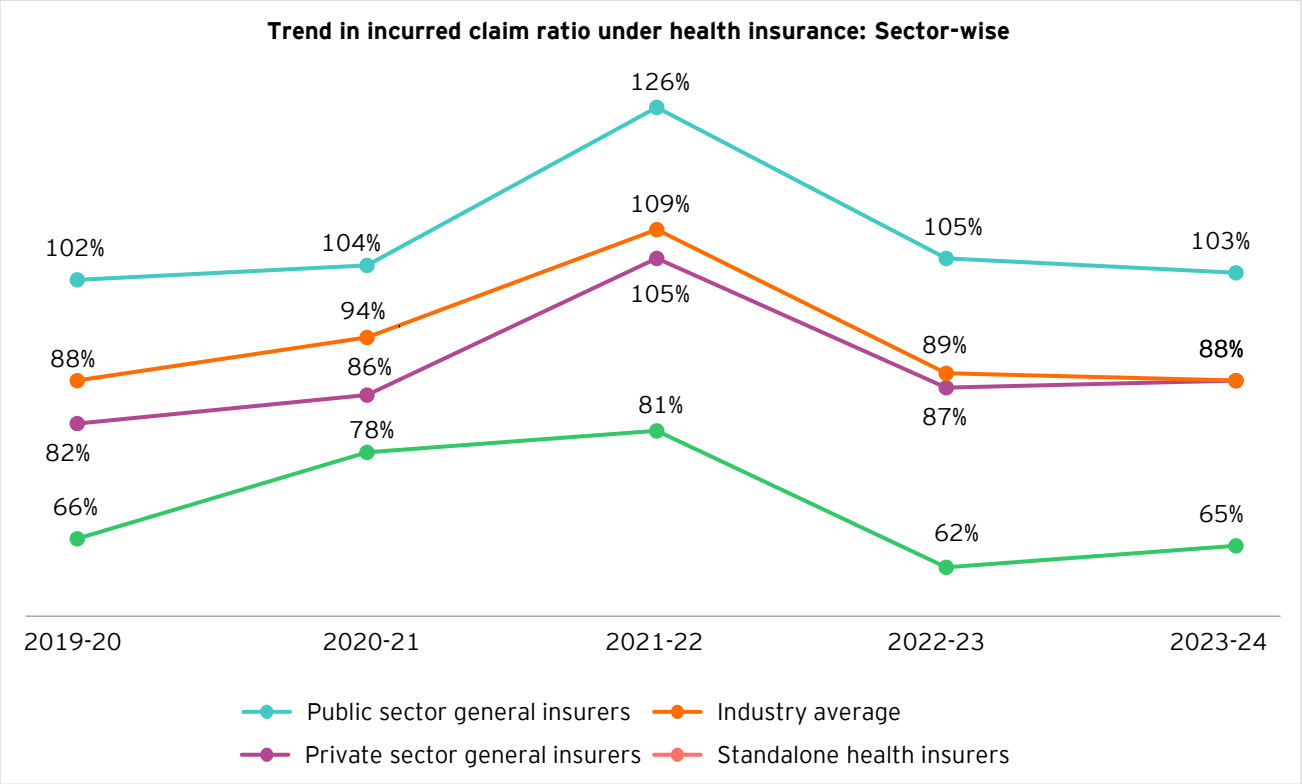


	2019-20	2020-21	2021-22	2022-23	2023-24
# of lives covered* (crore)	50	51	52	55	58
Avg premium per life covered	₹ 1,140	₹ 1,208	₹ 1,547	₹ 1,739	₹ 2,066

Source: IRDAI Annual Reports

* IRDAI reported coverage does not include numbers from ESIS, CGHS, ECHS, RELHS and RHS data, as these schemes are administered through separate agencies under their respective ministries.

Even though average premiums have grown at ~16% CAGR (faster than medical inflation) in the last few years, Incurred Claim Ratio(ICR) and Combined Ratio remain suboptimal today. Thus, the health insurance business model profitability remains challenged.



Source: IRDAI Annual Reports

Three key drivers of low profitability that need to be addressed:

Suboptimal risk pooling leading to suboptimal cost structure

India's risk pool is distorted. Government schemes offer wide but shallow coverage at a marginal premium, while retail insurance attracts a larger pool of older and sicker customers, as evidenced by the higher claims frequency as well as average claims value below.

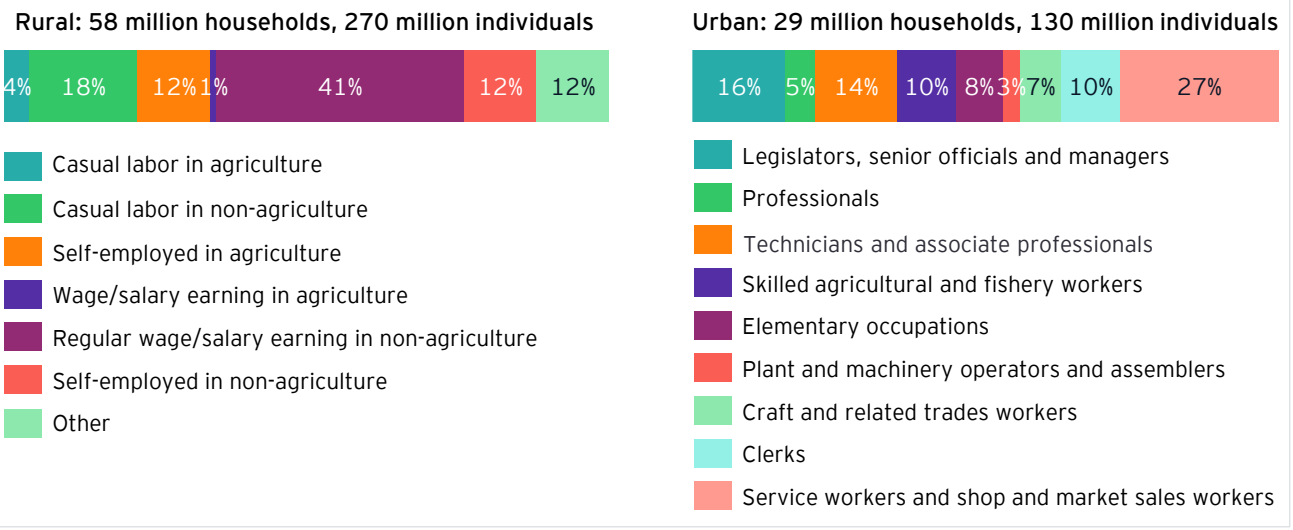
FY 24

Business category	Govt. sponsored business	Group business	Retail business	Total
Avg. claim amount per incidence (INR)	14,000 - 16,000	30,000 - 33,000	50,000 - 55,000	30,000 - 33,000
Annual claim frequency *(per 1,000 lives)*	27	55	98	47
Premium per life covered (INR)	400 - 450	2,000 - 2,500	7,500 - 8,000	2,000 - 2,500
Incurred claim ratio	115.3	93.8	75.1	88.1

Source: IRDAI Annual Reports

The retail insurance risk pool can be potentially improved by getting the "missing middle" population segment under the insurance net. However, the uninsured population is distributed geographically, has significant affordability constraints and typically seeks hospitalization in the unorganized space.

Primary occupation composition of rural and urban 'missing middle' households (MM HH)



Source: NITI Aayog report on "Health Insurance for India's Missing Middle"

Risk pricing models remain rudimentary

Though Indian health insurance is gradually moving beyond static factors like age, gender and BMI, pricing still relies predominantly on these measures. The structural gaps are deep, potentially forcing insurers to price conservatively, pushing premiums higher than they might otherwise be, especially when combined with suboptimal risk pooling, while losing the ability to reward healthier cohorts or providers delivering better outcomes.

Longitudinal blind spots: There is little systematic data capture across the continuum of care—preventive, primary, secondary and tertiary. As a result, insurers are unable to flag risks before they manifest into compounded claims, missing the chance for proactive interventions.

Fragmented ecosystem: Outpatient clinics and diagnostic centers remain disconnected from insurance systems. This weakens the ability to use existing customer portfolios to form meaningful risk cohorts, limiting smarter pricing strategies.

Data and guideline gaps: International classification of disease (ICD), Diagnosis related groups (DRG) and treatment coding are inconsistently adopted, leaving claims data unreliable in many cases. Clinical guidelines lack consensus and resistance from doctors may restrict adoption even for common conditions like dengue.

Provider-payer forums suboptimal: Limited data sharing and mechanisms to also translate clinical learnings from providers to insurers further limits capability to scale up understanding of nuances in clinical pathways and their linkages to outcomes.

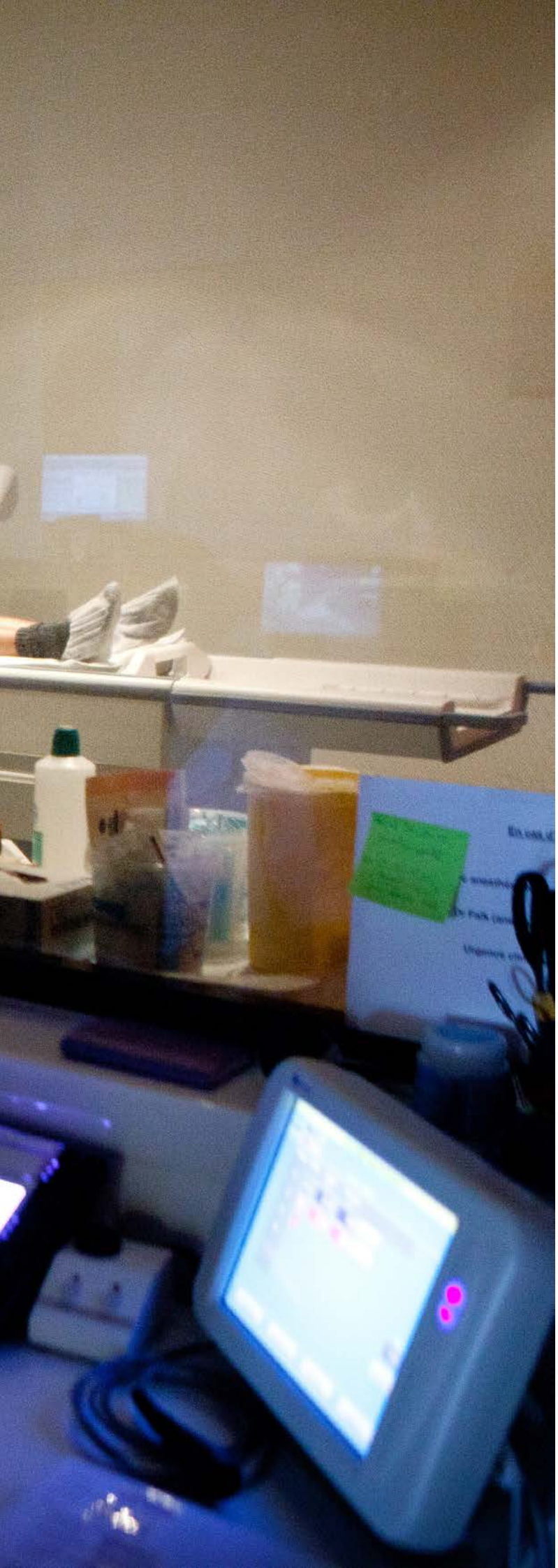
Source: *Primary interviews conducted by EY with industry leaders

Prevalence of high levels of fraudulent claims remains a challenge

With 13% of total claims being repudiated and standalone health insurers citing a 1:10 fraud-to-claim ratio*, rather than driving product innovation, insurers are caught in a cycle of investigations, denials and disputes.

A major contributor to the challenge of detecting and curbing fraudulent claims is the inconsistency in billing practices as well as adoption of standardized clinical protocols, resulting in insurers being unable to objectively validate claims. Without independent benchmarks for outcomes and tariffs, reimbursement negotiations often become volume-driven, opaque and contentious, leaving the true extent of fraudulent claims unresolved - a persistent "unsolved mystery."

Hospitals argue that rejection rates are unfair, while patients perceive disputes as arbitrary, further eroding confidence in the system. Current fee-for-service payments incentivize episodic care, which reinforces disputes, billing inconsistencies and misaligned incentives. Reimbursement must evolve to support longitudinal care, linking payments to outcomes and clinical pathway adherence backing appropriateness of care.



The concentration in Indian healthcare has moved from volume-driven to value-driven. As a CFO of a hospital, one cannot restrict only to budgeting and accounting. It is now about being a loud supporter and enabler of clinical excellence with financial discipline. The patient-centric revolution has kicked off with relentless focus on best clinical outcomes leveraging data. The system, be it doctor contracts, insurance coverage or government schemes – needs a revamp. The aim should not be being reactive but being proactive. The aim should not be incentive-based treatment of sick patients, but to keep the patients healthy. Regulatory reporting of clinical outcomes should become the new gold standard, empowering clinical patients and incentivizing clinical providers on quality and not just price. Insurance penetration and coverage is expected to be the biggest catalyst of growth in the upcoming years. Everyone understands that wider coverage bears a cost. It is good to see that the government has played a significant role in reducing that burden with the removal of GST on health and life insurance. Ultimately, the onus lies with healthcare providers. The change has to happen ground-up – this means precision prognosis and diagnosis, real-time reporting and redefining the engagement models with clinicians. When policies are designed to reward the patients for choosing high-quality efficient clinical providers, the entire ecosystem will rally towards excellence. At the heart of it, we will have to embrace digital transformation as a core enabler. Technologies like AI, electronic medical records and predictive analytics will not be just a fancy tool but the nervous system that will connect clinical and financial performance. This is a critical breakout moment for healthcare in India. We must aim to build a system that is both clinically and financially enabled with the patient being at the center of our overall plan. The challenge is massive, but so is the opportunity to build a healthier India.

Vishal Maheshwari
CFO, Quality Care India Limited (QCIL)

03 | Stakeholders **call for change**

“

At Apollo, accountable care rests on two inseparable pillars, clinical excellence and service excellence. Our outcomes match global benchmarks, with investments in proton therapy, robotics and genomics ensuring equitable access. Yet innovation must pair with kindness. Our ‘BeKind’ initiative underscores that dignity, clarity and compassion are as important as diagnostics and therapy.

The government’s mandate to standardize workflows across 28 specialties is timely. It provides a much-needed framework for ensuring consistency in care, reducing unwarranted variation and enhancing patient safety. Yet it must be backed by robust quality metrics, external accreditation and transparent reporting.

Sustainability also requires smarter pricing models. Shared infrastructure and differential reimbursement structures that recognize hospital tiering, infrastructure and clinical capability can ensure fairness. True accountable care puts patients first through public dashboards, outcome-linked payments and ABDM adoption, delivering not just longer life, but healthier and more dignified years.

Dr. Madhu Sasidhar
President & CEO, Apollo Hospitals Division,
Apollo Hospitals Enterprise Limited

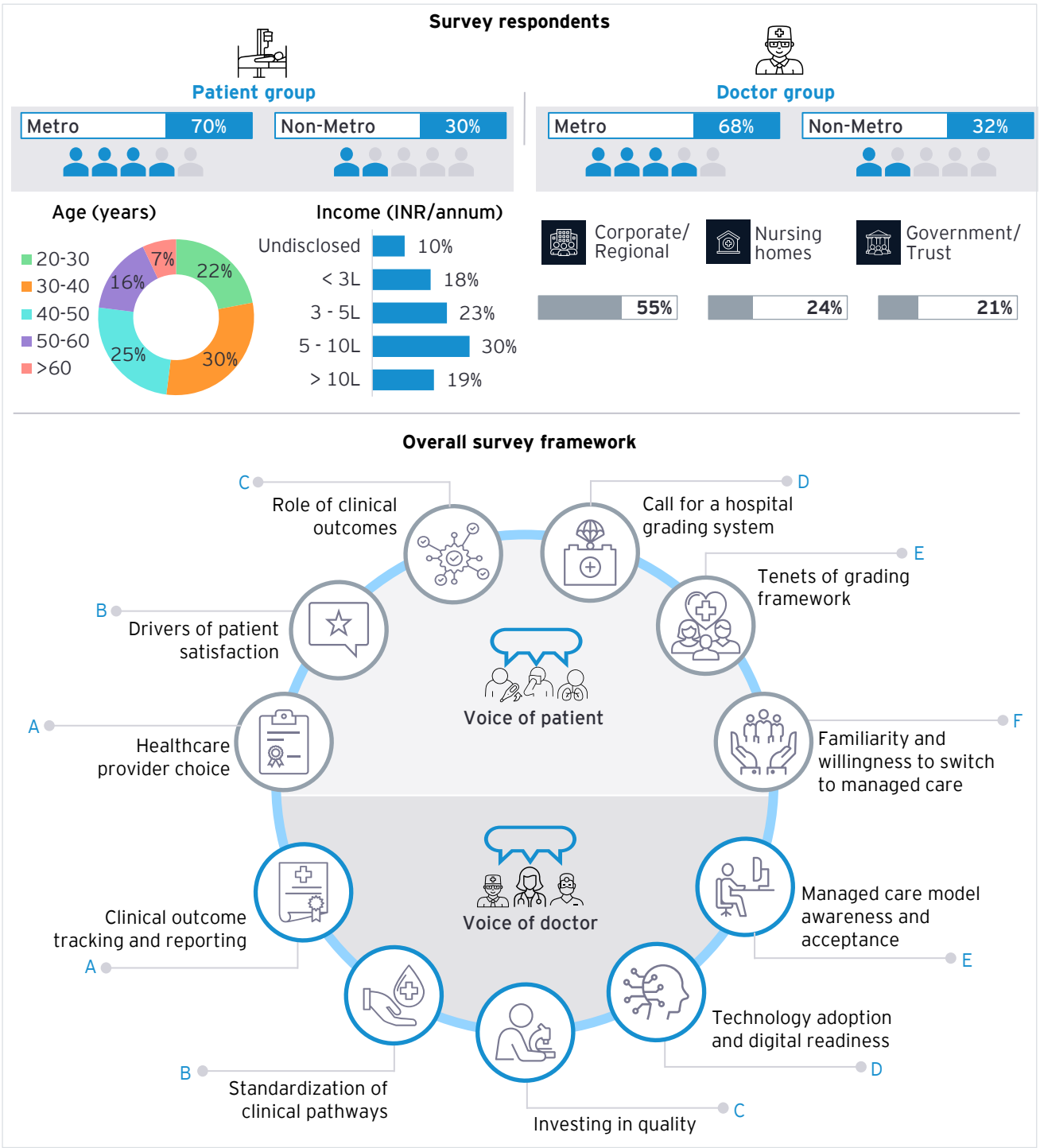
“

As one of the largest providers in Western India, we see first-hand the growing demand for quality care that is both affordable and outcome-driven. Our patients increasingly seek clarity on outcomes and demand better visibility into quality protocols. They need continuity, transparency and trust. The time to act is now. We cannot wait a decade for longitudinal data or full-scale digital adoption to understand what works. Instead, we must co-create clinical pathways, standardize outcomes, as well as collaborate with payers to build smarter, more inclusive insurance models. This is not just about reform, it’s about responsibility. Providers like us must lead the way in shaping a healthcare ecosystem that is equitable, data-informed and future-ready.

Mr. Abrarali Dalal
CEO and MD, Sahyadri Hospitals Private Limited

Voice of patients and doctors

As we evaluate the potential solutioning framework and pathway for India on its quality journey in healthcare, it is also important to keep in mind the current understanding and aspirations regarding quality among key stakeholders. To address this need, EY conducted an extensive survey involving over 1,000 patients and approximately 100 clinicians across both metropolitan and non-metropolitan cities in India. The objective was to assess the current importance of quality care and key sources that patients leverage to ascertain the quality rating of hospitals against their needs and thus understand the gap.



Source: EY-P's Patient and doctor survey

1 Choosing a healthcare provider: Brand, doctor reputation and quality of equipment proxies for "quality" today

Quality-related factors play a significant role across various touchpoints in a patient's healthcare journey and consistently rank among the top three criteria when choosing a healthcare provider. In the absence of a formal definition of quality, most respondents identified 'Brand' (34%) and 'Doctor Reputation' (19%) as key drivers—both of which are commonly associated with expected treatment success and quality of care—especially during the selection of OPD consultations or diagnostic services. For inpatient services, recommendations by family members or friends and local doctors (79%) along with service quality-related parameters (69%) emerged as top considerations. Within the quality domain, patient health outcomes, hospital reputation and brand recognition were highlighted as the most influential factors.

Factors influencing patients' choice

OPD + Diagnostics

Clinical quality — 57%
- Hospital brand and reputation
- Doctor's reputation
- Infrastructure / Medical technology and latest / advanced equipment

Price — 13%
- Affordability compared to other units
- Value for money

Recommendations — 21%
- From friends/family
- From family doctor

Service quality — 8%
- Service experience
- Location convenience
- TPA/insurance corporate empaneled

Question: What are the top three factors you consider most important when selecting the hospital/diagnostic center/ imaging center/ OPD clinic (ranking based)?

In-patient

Clinical quality — 60%
- Preferred consultant practices here
- Quality health outcomes
- Hospital reputation and brand

Service quality — 69%
- Experience with the same hospital
- Listed with government scheme / TPA empaneled

Recommendations — 79%
- From friends/family
- From family doctor/local physician

Question: In your opinion, what all factors do you consider for selecting a hospital for admission? (Multiple selections)

Source: EY-P's Patient Survey

2 Experience drivers: Quality-linked parameters are among the most critical in driving experience of patients

Across the care continuum, from OPD and diagnostics to in-patient care, ~30%-40% of patients reported being "not satisfied" with their overall experience. Elements linked to quality – whether clinical, process or service – were ranked as the most important drivers of sub-optimal experience; price or "value for money" was a driver of dissatisfaction for only 20% of patients. The importance of clinical quality experience was, as expected, the highest in an inpatient setting, where the stakes for health outcomes are higher.

% of respondents "Not Satisfied" across different parameters based on experience

OPD

Process quality – 52%
- Ease of getting an appointment
- Wait time at the hospital
- Ease of follow-up process

Service quality – 29%
- Courtesy, politeness and responsiveness of support staff
- Overall cleanliness, hygiene and comfort of the OPD area

Clinical quality – 31%
- Doctor consultation time
- Clarity of communication from the doctor

Price – 11%
- Pricing (e.g., correctness, reasonableness, value for money)

Question: On the following parameters, how would you rate your experience for OPD consultation? (Multiple selections)

Diagnostics

Process quality – 41%
- Ease of getting an appointment
- Wait time
- Turnaround time for receiving test results

Price – 27%
- Cost of tests

Clinical quality – 30%
- Quality of test process (pain /comfort during tests)
- Accuracy and reliability of diagnostic reporting

Service quality – 20%
- Courtesy, politeness of support staff
- Cleanliness and hygiene of the diagnostic facility

Question: On the following parameters, how would you rate your experience for diagnostics? (Multiple selections)

In-patient

Clinical quality – 38%
- Recovery and rehabilitation success
- Medical technology and infrastructure, advanced equipment

Service quality – 26%
- Hygiene / comfort and amenities
- Presence of experienced doctors

Process quality – 32%
- Support / guidance provided throughout the treatment journey
- Coordination during transitions (e.g., hospital admission and discharge planning)

Price – 19%
- Cost of treatment
- Equitable care (Equal access to care regardless of socioeconomic status, gender, or location)

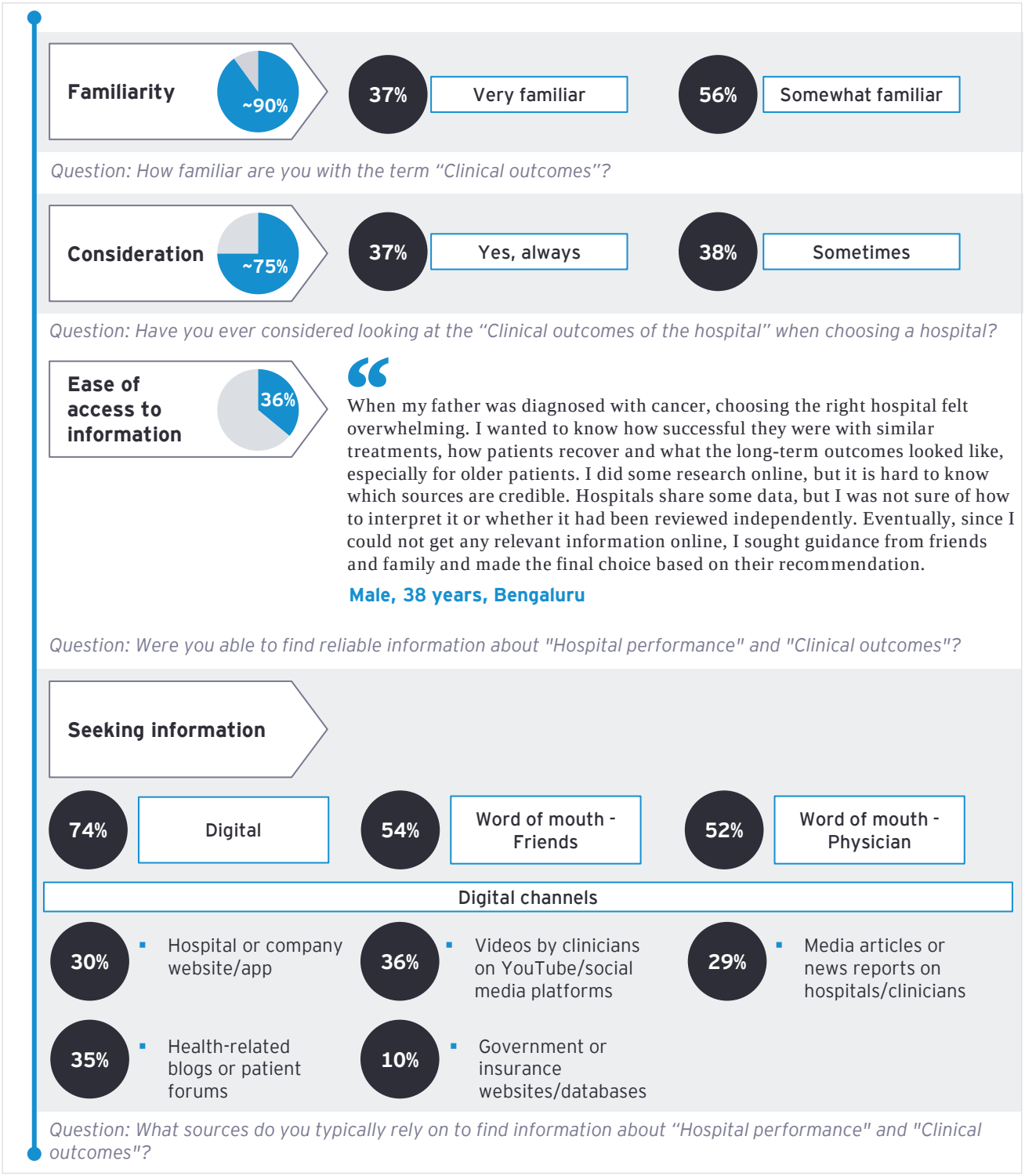
Question: On these parameters, rate your experience of the hospital you were admitted at? (Multiple selections)

Source: EY-P's Patient Survey

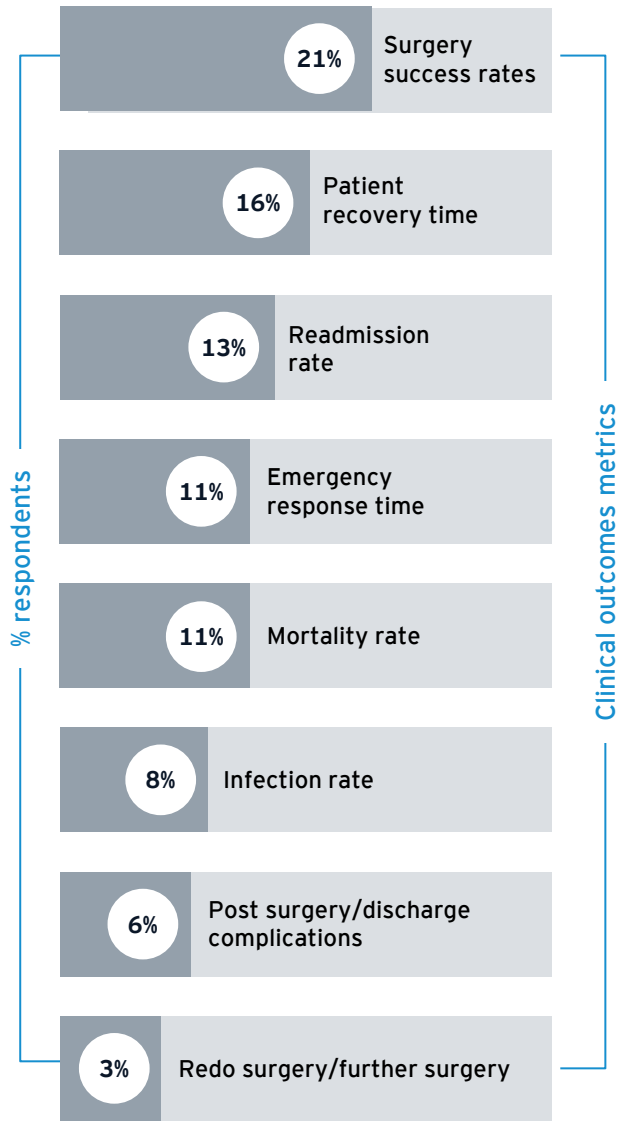
3 Role of clinical outcomes: Patients increasingly seek objective information on "outcomes" but lack easy means

Nearly 90% of patients reported being either very familiar or somewhat familiar with the term "clinical outcomes." Importantly, around 75% of them shared that they actively consider a hospital's clinical outcomes when choosing where to seek care. However, despite the high level of awareness and interest, there is a significant information gap. In the absence of a single reliable source that provides hospital ratings or rankings based on clinical outcomes, only 36% of patients said they were able to find the information they were looking for with ease – relying largely on videos by clinicians on YouTube and social media along with health-related blogs and patient forums.

This information gap has led to patients having to rely heavily on word-of-mouth recommendations: 54% consider input from friends and family while 52% rely on their referring physicians' advice.



Source: EY-P's Patient Survey



Question: Which clinical outcome metrics would be most useful when comparing hospitals?

Source: EY-P's Patient Survey

> “Before my knee replacement, I tried to find out which hospitals had the best outcomes—like how often the surgeries succeed, how quickly people get back on their feet and how many need follow-up procedures. There is a lot of information out there, but it is scattered and not easy to compare. I was not sure which numbers to trust or how to know if they reflect real patient experiences. And even when I did find some statistics, they did not tell me much about the softer aspects—like how supported patients feel during recovery, or how responsive the care team is. It would really help to have a reliable source that brings together both the numbers and the human side of care.
>
> **Male, 45 years, Pune**

Surgery success rates, patient recovery times and readmission rates have increasingly become key indicators that patients consider when evaluating clinical outcomes. These metrics are not only intuitive but also serve as proxies for broader dimensions of healthcare quality. For example, a high surgery success rate may reflect procedural competence and clinical expertise; shorter recovery durations may suggest effective perioperative care, pain management and rehabilitation protocols; and lower readmission rates may indicate continuity of care and proactive management of complications.

However, despite their relevance, publicly available data on such parameters remains limited. While in many cases, healthcare providers may publish such information selectively, there is currently no standardized framework or independent mechanism for consistent reporting and validation.

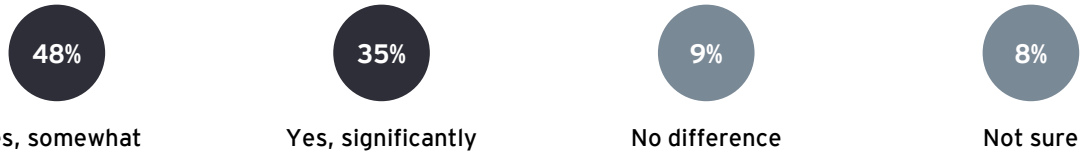
This gap in transparency can make it challenging for patients to make fully or well-informed decisions, particularly in high-acuity or elective procedures where outcome visibility is crucial. By encouraging more frequent and standardized reporting of such indicators—potentially supported by collaboration between industry bodies, healthcare institutions and regulatory agencies—stakeholders can earn greater trust, improve patient engagement and enhance the overall quality of care.

4 Need for a grading framework: Most patients seek a formalized framework and believe it would increase trust

More than 80% of the respondents stated that they would have more trust in the healthcare provider if there were a formalized single source establishing the quality standards for a provider or if they had visibility on the hospital's clinical outcomes.

Interestingly, this trend is evident not only in metro cities, where patients often exhibit more evolved healthcare consumption patterns due to greater access to medical infrastructure and health awareness, but also in tier-1 cities.

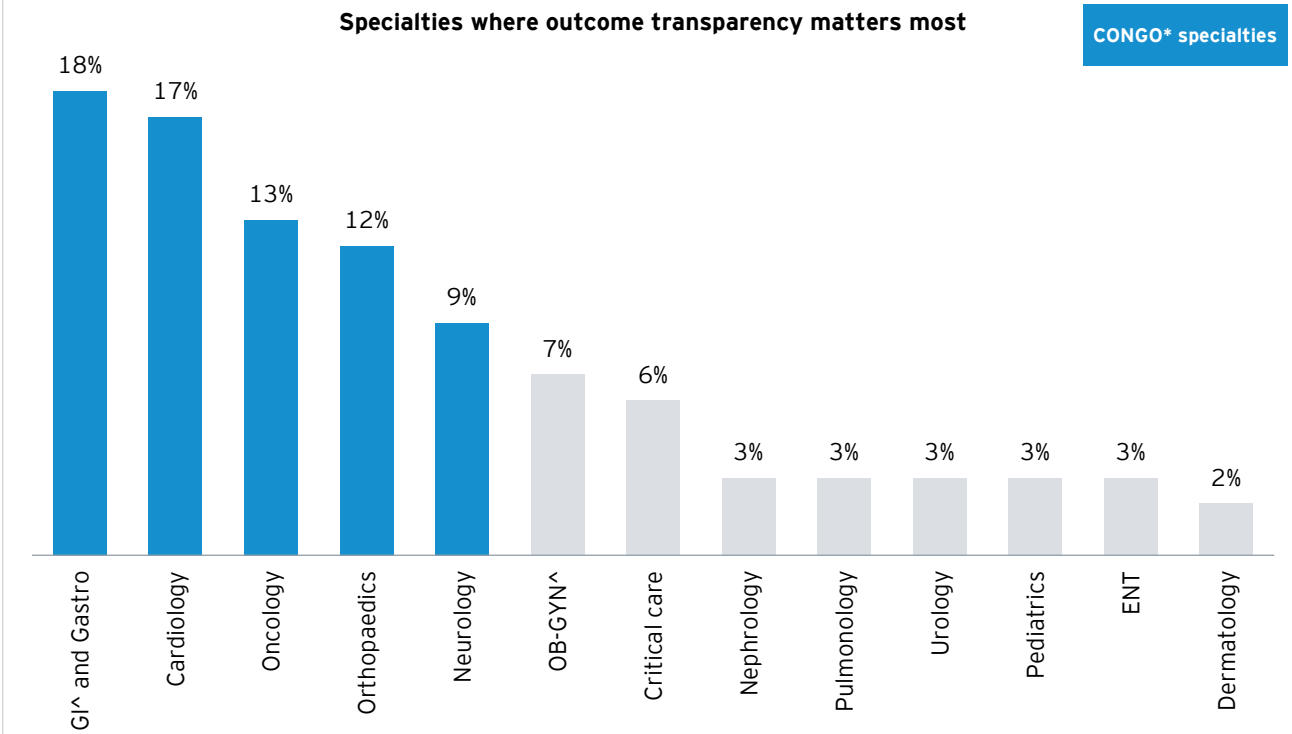
Outcome reporting as a driver of trust



Question: Would seeing a hospital clinical outcomes score / grade increase your trust in that hospital?

A lack of clarity and transparency around clinical outcomes becomes a greater concern for patients undergoing tertiary and quaternary procedures. These advanced treatments often involve high-risk, complex interventions where the stakes are much higher. In such cases, patients and their families seek not just access to care – they are also deeply invested in understanding the quality of care. This includes metrics like surgical success rates, complication rates, recovery timelines and long-term outcomes. The absence of such transparent data can lead to uncertainty, anxiety and difficulty in making informed decisions, especially when choosing between healthcare providers. As healthcare becomes more patient-centric, addressing this gap in outcome transparency will be critical to building trust and enabling better decision-making.

Specialties where outcome transparency matters most



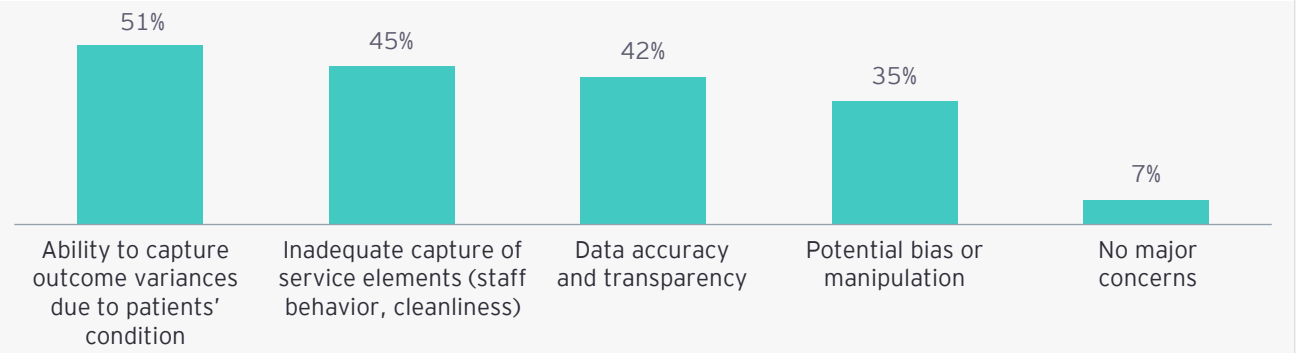
Question: In which of the following specialties is it most important for you to have access to specialty/condition-specific clinical outcome information when comparing hospitals? Rank top five.

*CONGO- Cardiology, Orthopedics, Neurology, Gastroenterology, Oncology
^GI- Gastrointestinal; OB-GYN- Obstetrics and Gynecology
Source: EY-P's Patient Survey

5 Tenets of grading framework: Credibility, Comprehensiveness and Comparability are most critical, with clear linkages to the demanded price premiums

With growing consensus among stakeholders about the need for a standardized quality grading mechanism in the Indian healthcare system, it is essential that such a framework is thoughtfully designed to reflect patient concerns. Key apprehensions regarding a grading mechanism include the potential for bias in evaluations, the challenge of accounting for variations in outcomes based on case complexity and patient condition and the inability of purely quantitative systems to capture softer yet critical aspects of care—such as staff behavior, wait times and hospital hygiene. For the grading system to be truly meaningful and trusted, it must balance clinical rigor with patient-centric insights.

Concerns about hospital grading system based on clinical outcomes

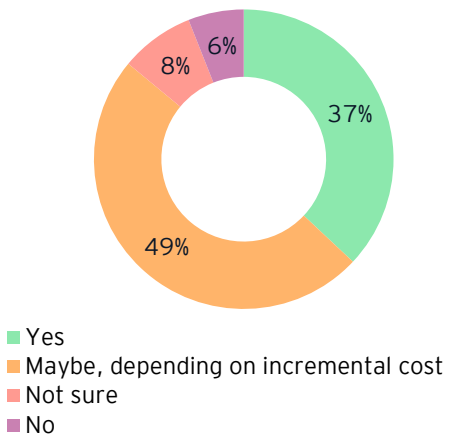


Question: What concerns would you have about a hospital grading system based on clinical outcomes?

Patients across all hospital types in the survey expressed a strong belief that a standardized quality grading framework would significantly enhance their trust in the hospitals they choose.

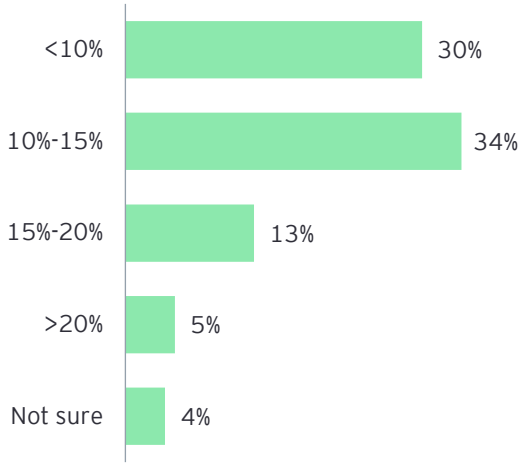
This trust is not just symbolic – it has the potential to be translated into tangible behavioral shifts. Nearly 90% of patients who are aligned to use a hospital grading framework for their decisions, indicated they would either be willing to pay more or at least seriously consider hospitals that are certified for quality. This willingness to monetarily reward quality underscores the perceived value of transparency, accountability and clinical excellence. It also signals a shift in patient mindset – from cost sensitivity to value sensitivity, where quality becomes a key differentiator in healthcare decision-making. For providers, this presents a compelling case to invest in quality improvement and transparent communication, as it directly correlates with patient preference and differentiation.

Shift in decision-making based on transparent outcomes



Question: Would your basis for selecting a doctor, diagnostic lab or hospital change if reliable grading and clinical outcomes data were made publicly available?

Willingness to pay for high-graded provider and incremental amount (among Yes/Maybe)



Question: How much more would you be willing to pay for a higher-graded provider with better clinical outcomes?

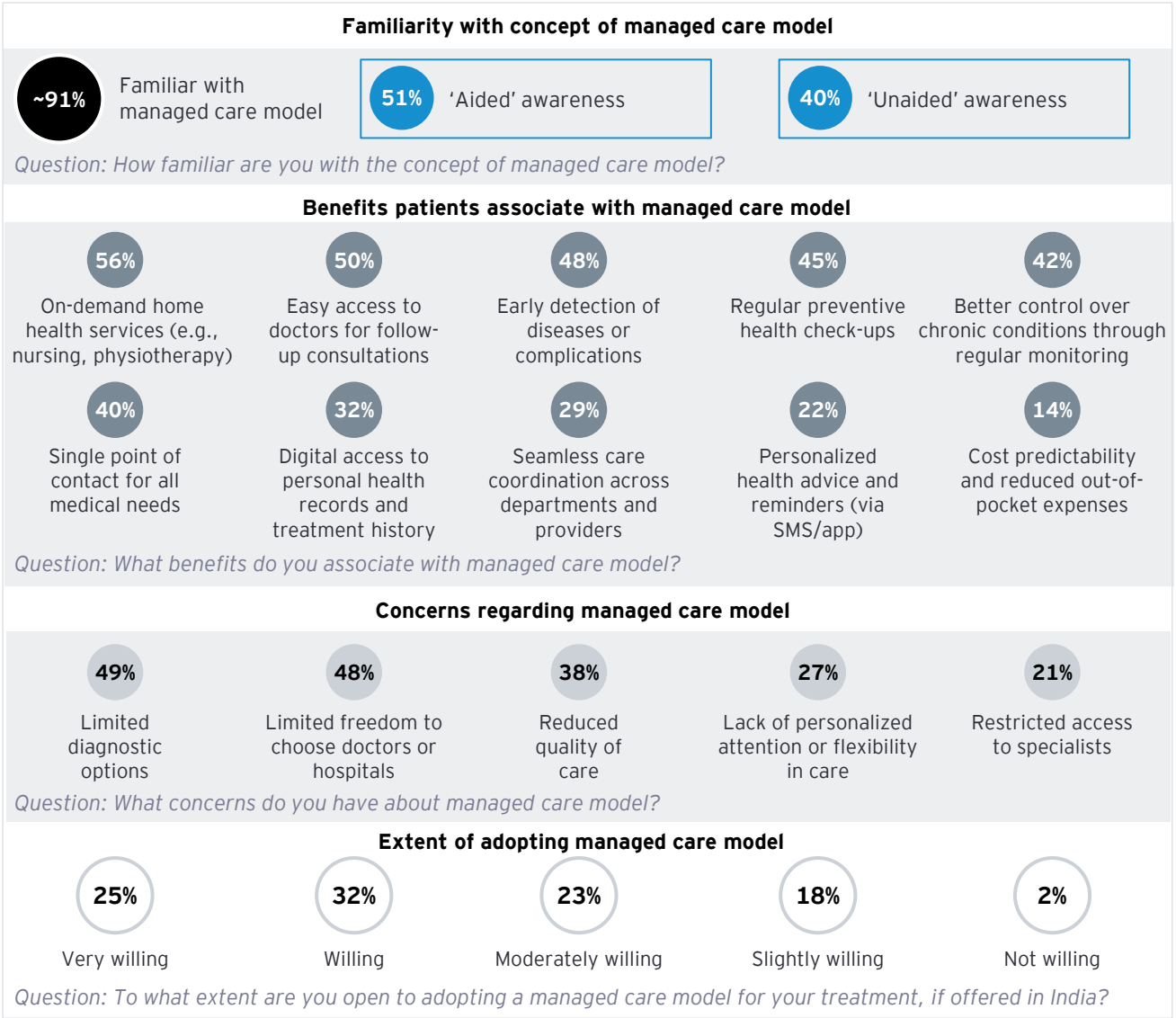
Source: EY-P's Patient Survey

6 Managed care models: Familiarity and willingness to switch exists

Managed care is still in its formative stages in India, with unaided awareness currently limited to around 30%. However, once the concept was explained, a significant number of respondents resonated with its core principles, indicating latent awareness and openness to the model. Core principles include continuity of care, preventive health focus and coordinated service delivery. Patients associated managed care with several high-value benefits: on-demand access to healthcare services, a stronger emphasis on preventive care and regular health monitoring, seamless coordination across departments and care touchpoints and easier access to doctor consultations and follow-ups. Post-COVID, the increased appreciation of teleconsulting, self-health monitoring and hospital collaborative platforms has further strengthened this expectation, with their features resonating particularly well with the growing demand for continuity of care, convenience and proactive health management.

Despite these advantages, patients also expressed several reservations. The most significant was the concern that managed care could limit their freedom to choose doctors and healthcare providers, as it often restricts access to a predefined network. This raised fears of reduced personalization and flexibility in care delivery. Additionally, some worry that access to specialists may be constrained and that the model could prioritize efficiency over individualized attention. These concerns highlight a critical tension: while patients value the structure and support that managed care offers, they are equally wary of losing autonomy and the ability to tailor care to their specific needs.

For managed care to gain broader acceptance in India, it must evolve beyond a cost-containment tool and be positioned as a patient-centric ecosystem. This means designing programs that preserve choice, ensure access to high-quality specialists and incorporate mechanisms for personalized care. Transparency, flexibility and trust will be key to driving adoption and long-term engagement.



Source: EY-P's Patient Survey

Doctor survey findings

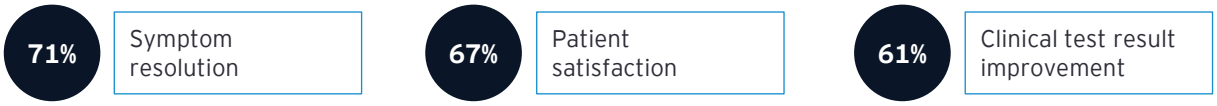
1 Outcomes: Measured with intent but lack comprehensiveness

Post-COVID (in the last five years), outcome tracking has gained momentum, with ~50% of clinicians noting hospitals have adopted it in the last five years. Majority of the doctors in the survey (~65%) endorsed sharing outcomes and promisingly, over a third (35%) are willing to do so proactively – upfront, without waiting for patient requests.

However, what gets tracked often reflects an individual doctor's view of "treatment success", resulting in ad hoc, fragmented and non-standardized metrics across hospitals and departments. Simpler outcome proxies, such as pain relief, investigation test parameter results and patient reported symptom resolution, are prioritized, while more comprehensive and objective clinical measures like Major Adverse Cardiac and Cerebral Events (MACCE), Target Lesion Revascularization (TLR) and Target Vessel Revascularization (TVR) remain underused. This reinforces the need for standardized metrics and better training in outcome interpretation.

Among the criteria that clinicians opted for to measure treatment success, patient satisfaction (e.g., symptom resolution, reported relief) was considered significant as a clinical outcome. This trend was prominent in metro cities, where a higher share of clinicians (~75%) focused on patient satisfaction versus only ~55% in non-metro cities.

Measures of a treatment's effectiveness



Question: How do you measure the success of treatments or interventions? (Multiple selections)

In the absence of objective and standardized clinical outcomes, clinicians rely on subjective and intuitive measures –such as surgical complications (~70%) and proxies for recovery rates (~90%) – to gauge treatment success, with long-term outcomes like survival and mortality typically tracked subsequently.

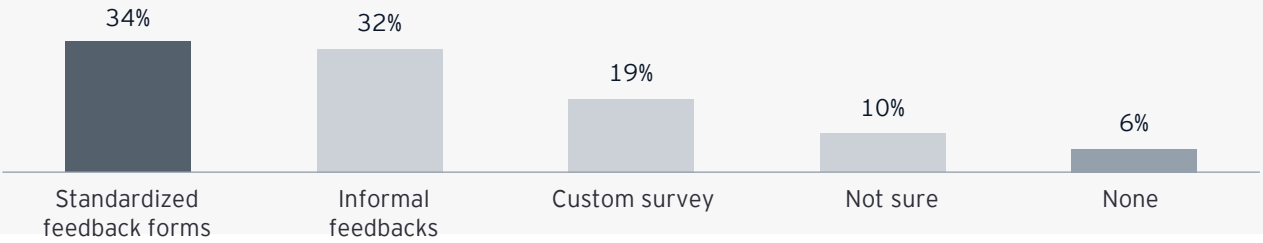
Key clinical outcomes tracked

Question: Which clinical outcomes do you think are typically tracked?

*Recovery: pain relief, quality of life, time to recovery
^Surgical complications: readmission, complication rate and redo surgery

Patient-reported outcomes are gaining ground, but standardized feedback systems are still evolving. Currently, ~35% of clinicians shared they use structured feedback forms, with large hospitals leading the way (~45%) and nursing homes showing room for growth (25%).

Methods of tracking patient-reported outcomes

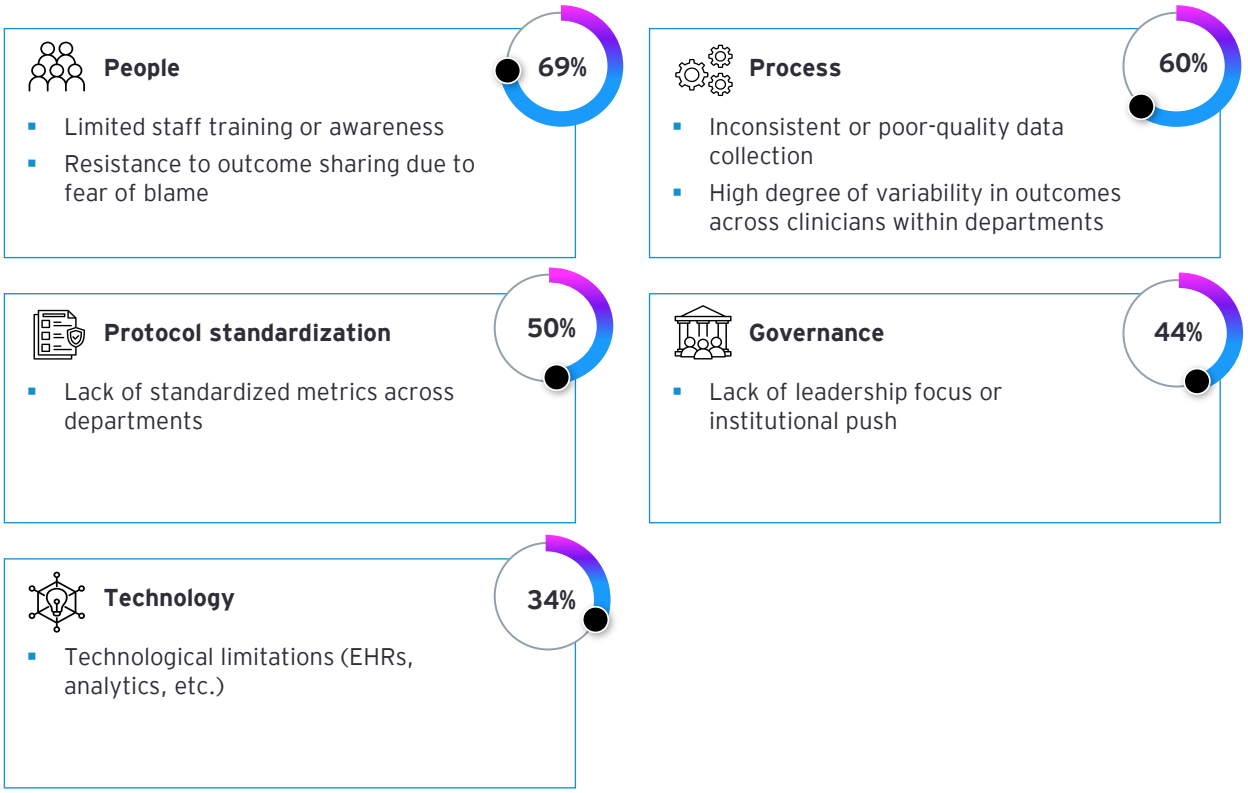


Question: How do you track patient reported outcomes?

Source: EY-P's Doctor Survey

Strong intent exists among clinicians to share outcomes with patients (~65%), with about one-third prepared to do so proactively. However, the transition is constrained by the absence of standardized protocols (~50%) and people-related challenges (~70%). High process variability across clinicians (~60%) further limits consistency and comparability.

Key challenges in improving outcome transparency



Question: What are the key challenges in improving outcome transparency in your hospital? (Multiple selections)

Source: EY-P's Doctor Survey

> Quality in healthcare has two dimensions; service quality and clinical quality. Service quality is about communication and empathy towards patients and families, while clinical quality relates to patient safety, following standard treatment guidelines and monitoring clinical outcomes. Institutionalizing quality starts from the top management leading quality initiatives from the front and the second step is about empowering teams of clinicians, nursing staff and administration to the extent that they take ownership of their processes based on established quality system. Regular audits, management reviews and sharing outcomes with teams will lead to continuous quality improvement and in time quality will get institutionalized.

Dr. Girdhar Gyani
Director General, Association of Healthcare Providers (India)

2 Standardized clinical pathways: Recognized as a key enabler for improving clinical outcomes

Protocol standardization is seen as a way to not only improve clinical outcomes but also achieve them cost-effectively – by optimizing resources, enhancing efficiency and driving higher patient satisfaction. However, as implementation progresses, it is important to ensure that protocols remain practical and adaptable. They should allow flexibility for patient-specific variations, avoid unnecessary complexity and include mechanisms for consistent enforcement so that all stakeholders remain aligned.

There is strong consensus among doctors in the survey on the key levers for improving outcomes. Nearly 90% emphasized the importance of adopting clinical guidelines and standardized outcome measures to enable consistency in care. Around three-fourths highlighted the need to streamline processes with a focus on patient centricity and systematic quality approaches. While about 64% endorsed people-focused strategies, including training and multidisciplinary teamwork, technology – though of lower priority at 49% – is still recognized as a vital enabler through tools like electronic health records (EHRs) for real-time tracking and decision support.

Levers for enhancing clinical outcomes and patient experience

Protocol standardization – 89%
- Implementing clinical guidelines and standardized care protocols
- Adopting standardized clinical outcome measures (e.g., PROMs, mortality)

Process – 75%
- Promoting patient-centered care practices
- Using structured quality improvement models (e.g., Lean, Six Sigma)
- Strengthening follow-up care and discharge planning processes

People – 64%
- Training medical and support staff in evidence-based decision-making
- Fostering multidisciplinary teamwork across specialties and departments

Technology – 49%
- Leveraging electronic health records (EHRs) for real-time outcome tracking and decision support

Question: What are the areas of improvement, from the options, that can enhance the quality of clinical outcomes and patient experience? (Multiple selections)

As discussed earlier, standardization of clinical pathways was identified to be a key intervention to promote higher reporting of patient outcomes. Standardization efforts can potentially drive a fourfold impact – better outcomes, cost optimization, patient satisfaction and operational efficiency, as highlighted by ~80% of the respondents. This reflects strong clinician support for pathway-driven care as a cornerstone of quality and value.

Effectiveness of standardized clinical pathways to improve key metrics

- 83% Operational efficiency
- 83% Clinical outcomes
- 79% Patient satisfaction
- 71% Cost reduction

Question: How effective are standardized clinical pathways in improving clinical outcomes, operational efficiency, patient satisfaction and cost reduction?

Protocol adherence is critical for improving outcomes, yet challenges persist. Among the reasons cited, the majority are process related concerns which need to be aligned before design initiation.

Lack of consensus among doctors (52%) and variations in clinical judgment hinder adherence more than technology. Complex or impractical protocols (43%) and limited flexibility (41%) further reduce compliance, highlighting the need for simplified, adaptable and locally relevant protocols, along with strong clinician engagement and peer champions.

Barriers to protocol adherence in clinical practice

- 52% Lack of consensus among doctors
- 50% Inadequate infrastructure or support systems
- 43% Complex or impractical protocols
- 41% Lack of monitoring or enforcement
- 41% Limited flexibility for patient-specific needs

Question: What is the most significant barrier to protocol adherence in clinical practice? (Multiple selections)

Source: EY-P's Doctor Survey

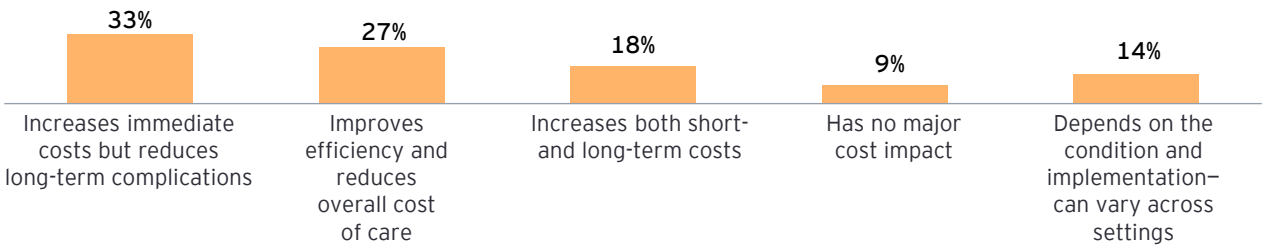
3 Investments in quality: Recognized as lowering longitudinal costs; needs to go beyond accreditation and infrastructure to people and processes

Majority of the doctors recognized the positive impact of superior care quality on lowering longitudinal costs of care. While corporate, government and Trust hospitals (~80%) strongly advocated for it, nursing homes sought support to tide over short-term profitability challenges while recognizing the long-term benefits.

Although hospitals are investing in quality, the focus remains largely on regulatory compliance and digital infrastructure (EMR, telehealth, patient monitoring). Greater emphasis on continuous improvement and patient engagement is needed to realize true value.

On the cost and its impact on delivering quality healthcare, ~60% of the doctors perceived this move to be a long-term cost optimizer, with stronger endorsement from government/Trust doctors (~80%) as compared to corporates (~60%) and nursing homes (~45%).

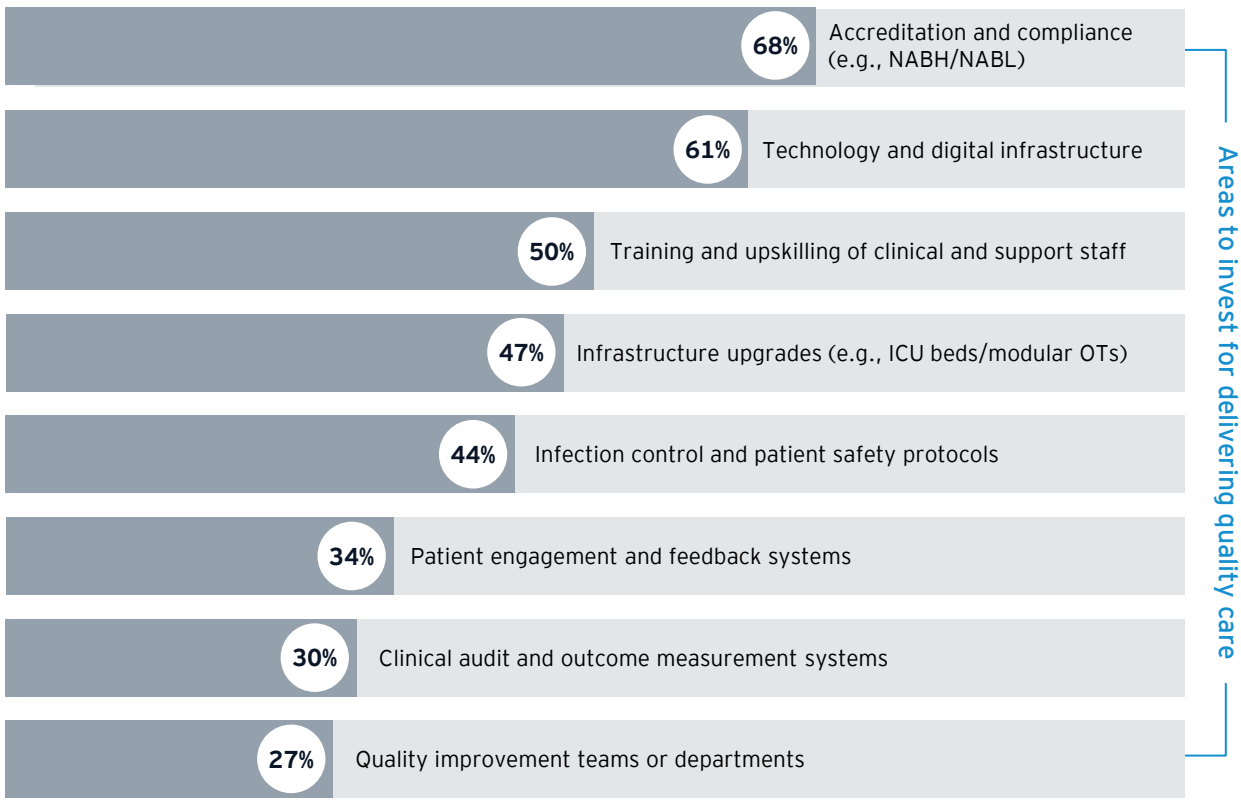
Impact of high-quality care on overall cost



Question: How does delivering high-quality care typically affect the cost of care? (Select one)

While ~90% of doctors agreed hospitals invest in quality, they felt the focus is largely on regulatory compliance and infrastructure. Greater emphasis is needed on continuous improvement, training, audits and patient engagement to drive holistic quality outcomes.

Investment areas for improving quality of care



Question: Which areas are hospitals most willing to invest in to improve quality of care? (Multiple selections)

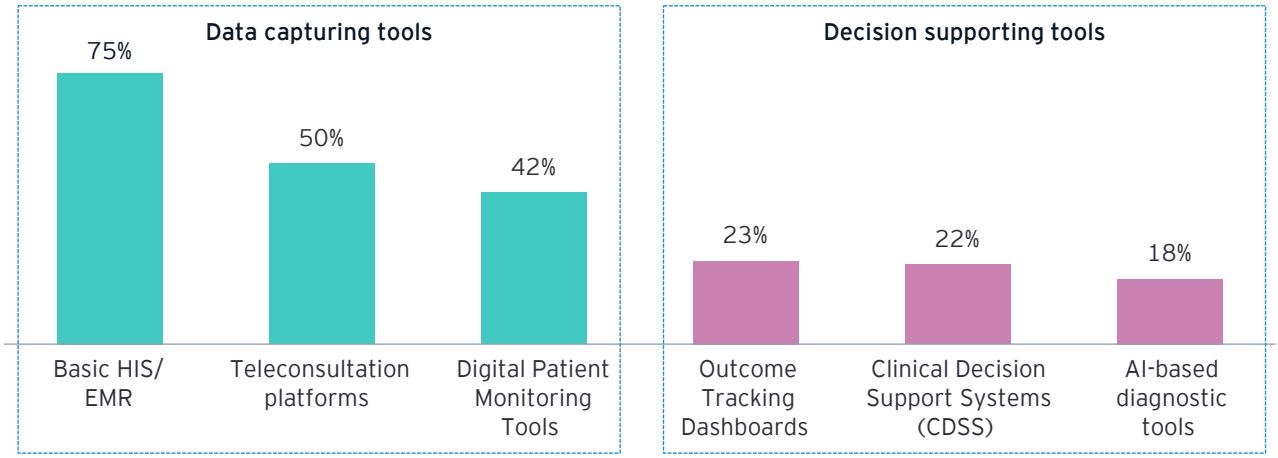
Source: EY-P's Doctor Survey

4 Leveraging technology: Moving beyond data collection to impact care

While most doctors support investments in technology and digital infrastructure, current capability is mostly limited to capturing patient data. Access to advanced tools remains low due to limited awareness and staff capability to interpret insights, hindering the shift toward outcome-driven quality. The real need is to move from data collection to truly data-driven care – improving outcomes while strengthening adherence to clinical protocols.

Most doctors reported having adequate access to basic data collection tools, with 75% having some form of basic Hospital Information System (HIS)/ Electronic Medical Record (EMR) systems and nearly half equipped with patient vital monitoring systems and teleconsulting platforms. In contrast, advanced decision-support tools, such as Clinical Decision Support Systems (CDSS) (22%), outcome dashboards (23%) and AI-based diagnostics (18%), remain limited. This reflects a clear opportunity, especially in more mature clusters, for patient data to be leveraged for smarter, outcome-driven care.

Access to digital tools in healthcare organizations



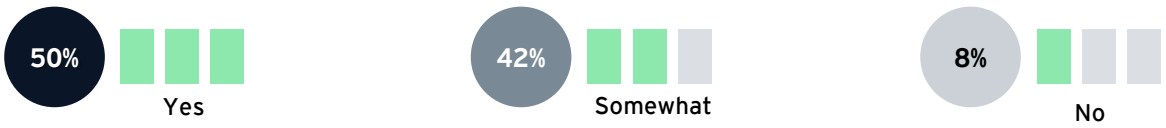
Question: Which of these digital tools are used / implements by your organization? (Multiple selections)

Among doctors with EMR access, 20% voiced that at present they do not use it daily, despite intending to. A similar pattern is seen with digital patient monitoring tools, where usage lags availability. For both basic and advanced tools, daily adoption hovers around 50% – pointing to a double-gap of access and adoption that must be addressed to unlock full digital value.

While nearly all clinicians recognize the value of clinical data analytics, only 50% felt fully equipped to use it, largely due to training gaps (60%), poor workflow integration and investment barriers (58%).

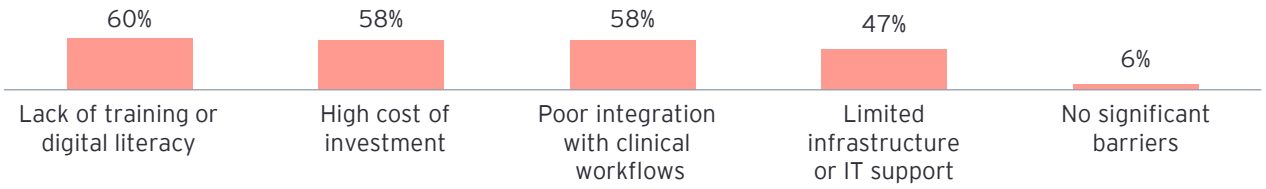
Adoption is not limited only by intent, but also by the skills, systems and support needed to embed digital tools into practice.

Clinician pulse on whether equipped to interpret and use clinical data analytics



Question: Do you feel equipped to interpret and use clinical data analytics (e.g., outcomes, trends, benchmarks) to improve patient care? (Select one)

Key barriers to adopting digital tools



Question: In your view, what are the key barriers to adopting digital tools in your hospital? (Multiple selections)

Source: EY-P's Doctor Survey

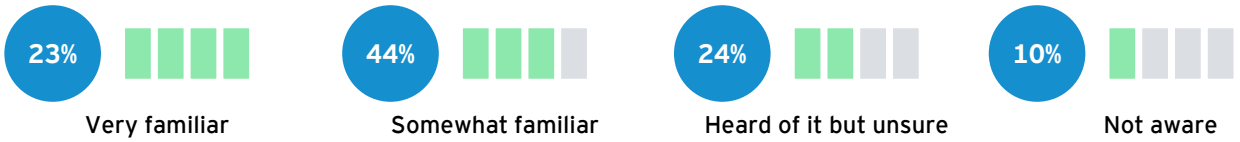
5 Managed care: Growing awareness with significant scope for adoption

Only a small proportion of clinicians in the survey indicated being well-versed in managed care, while many had partial awareness. This reflects broad support for value-based care but limited familiarity and adoption in practice. Among those aware, most believe managed care can improve care quality if models are well-designed – showing intent is not the barrier.

Effective models must embed digital tools into daily practice, allow flexibility in decision-making and use standardized outcome metrics to reduce ambiguity across stakeholders.

Only 23% of clinicians indicated being very familiar with managed care; ~45% had some awareness, highlighting the need for structured education.

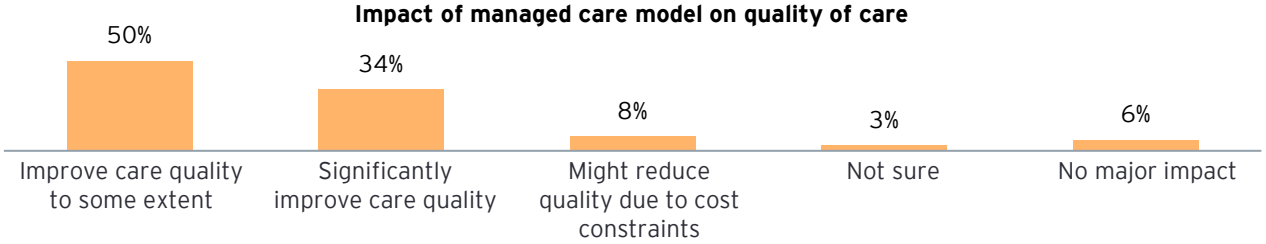
Familiarity with managed care model



Question: How familiar are you with the concept of a managed care model (outcome-based, prepaid care)? (Select one)

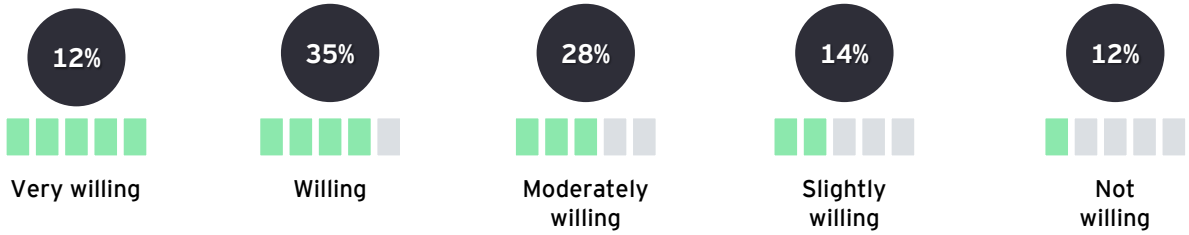
~85% believe managed care can improve care quality if models are well designed.

Impact of managed care model on quality of care



Question: How do you think transitioning to a managed care model would impact the quality of clinical care? (Select one)

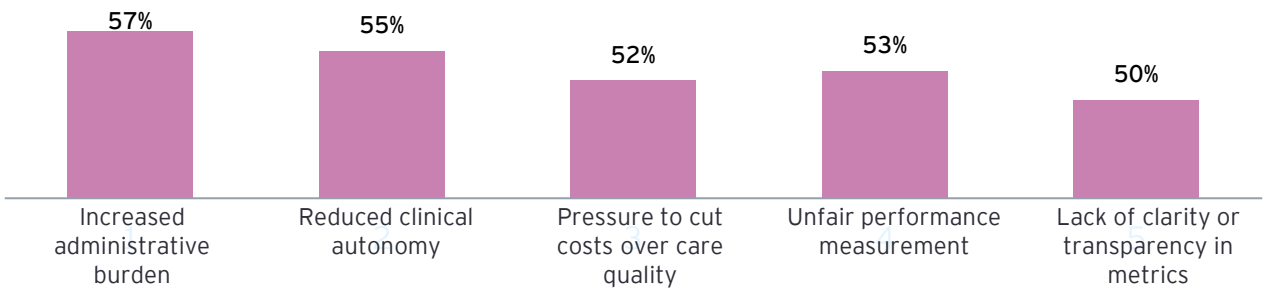
Clinicians' willingness to participate in managed care models



Question: How willing are you to participate in a managed care model where physician compensation is linked to clinical outcomes and care efficiency?

Reduced clinical autonomy and higher administrative burden are the key concerns with existing model.

Clinicians' concerns on managed care model



Question: What are your top concerns about managed care models? (Multiple selections)

Source: EY-P's Doctor Survey

The healthcare pulse: Patient and doctor perspectives

1

Quality in healthcare is universally valued, but its definition varies across stakeholders. Standardization can help drive focus and lower ambiguity

Doctor's lens: From the clinicians' standpoint, quality is measured equally by clinical effectiveness (~60%) and patient satisfaction (~70%), with intuitive indicators used including pain relief, quality of life, recovery time, readmission rates and complication rates.

Patient's lens: In the absence of standardized and unbiased clinical outcome reporting, patients rely on proxies such as recommendations by trusted family, friends or doctors (~80%), brand reputation (~60%) and overall service experience (~70%) to assess quality, equating it with doctor credibility.

Differences in metrics used by patients and doctors highlight the need for a standardized set of quality metrics that span the breadth of services, remain simple to interpret and carry minimal ambiguity.

2

There is an intent to seek and track clinical outcomes meaningfully, but reporting remains limited. A centralized, authentic mechanism can improve transparency

Doctor's endeavor: Majority of doctors (~65%) support publicly reporting results to enhance transparency. However, their intent is tempered by concerns over reputational risk from reporting unstandardized metrics (~50%) that lack risk adjustment for case complexity, resulting in high outcome variability across clinicians (~70%).

Patient pulse: Eight out of ten patients actively seek clinical outcome data — such as treatment success rates, recovery times and readmissions — when choosing a hospital, yet only 40% can access reliable information. In the absence of audited and regulated sources, they rely predominantly on digital channels like hospital websites (~30%), social forums (~40%) and media articles (~40%).

This underscores the need for a centralized and authentic mechanism to standardize and report outcomes that are risk-adjusted, easy to interpret and trusted by both doctors and patients, improving overall transparency.

3

Standardization and tiering offer a pathway to align clinical rigor with patient expectations on outcome improvement and reporting

Doctor's opinion: Nine out of ten clinicians suggest protocol-driven pathways are key to improving outcomes. They emphasize the need for design to be simple and flexible (~60%) while accommodating patient-specific needs (~40%) as well as have the intent to build broader consensus (~50%) to ensure smooth adoption.

Patient's ask: Eight out of ten patients believe standardized grading would strengthen trust in hospitals; they seek comparability (~50%), comprehensiveness to include service aspects (~50%) and credibility (~40%) in such a system.

For aligning both stakeholders a practical, provider tiering framework that blends clinical rigor with patient-centric measures can bridge this gap and create a shared definition of quality.

4

Quality delivery is recognized by both patients and doctors as critical to drive longitudinal value. Mechanisms to incentivize and broaden investments are critical

Doctor's endorsement: Majority (~90%) of doctors recognize that investing in quality is key to unlocking lifetime value for patients. Nursing homes, however, seek support to tide over short-term profitability challenges while recognizing the long-term benefits.

Patient's affiliation: Patients are ready to make the shift from cost sensitivity to value sensitivity: nearly 80% reported being willing to pay more for certified care and quality.

This willingness reframes quality from an expense to an investment that can drive both trust and revenue.

5

Digital adoption is progressing in data capture, with opportunities to expand decision-support use

Doctor's acknowledgment: ~60% of doctors recognize digital investments as critical for delivering quality outcomes. Yet, constrained by workflow integration issues and capability limitations, access remains largely limited to basic tools such as HIS or EMRs (~70%), with only about 20% having access to advanced decision-support tools like CDSS and dashboards.

Patient's alignment: Post-COVID, teleconsulting adoption and self-health monitoring has accelerated. An integrated hospital-patient app can offer patients access to their results, enabling seamless follow-up consultations and delivering personalized guidance for proactive health management.

Integrating advanced digital tools into patient-centric care pathways can transform data into meaningful insights for both doctors and patients, driving consistent quality and fostering long-term adoption.

6

There is growing recognition among doctors and patients of managed care's potential, with interest contingent on preserving autonomy and choice

Doctor's opinion: ~90% doctors acknowledge managed care's potential to improve quality, yet more than half express concerns over loss of autonomy and increased administrative burden.

Patient's acceptance: Nine out of ten patients are familiar with the managed care model, with about half demonstrating unaided awareness. Moreover 50%+ recognize its potential for prevention and chronic disease management. Key concerns for implementation that will need to be addressed include restriction of provider choice and limited personalization of care.

A patient-centric, flexible and tech-enabled managed care model that aligns incentives to quality can address these concerns and pave the way for sustainable adoption.

Source: EY-P's Patient & doctor survey

04 | Inspiring **global insights**

Healthcare delivery in India remains deeply complex, shaped by the country's vast diversity, resource constraints and evolving patient expectations. To meet the demands of our expanding healthcare ecosystem, we must evolve a truly patient-centric model, one that is focused not only on access but also on outcomes and patient experience. As healthcare financing expands—especially through insurance—there is a pressing need for innovative coverage models that include outpatient services, preventive care and elderly care. Such reforms can help reduce overall healthcare costs and improve long-term health outcomes.

We must also shift the national discourse on quality beyond accreditation. Quality should be measured through tangible parameters such as patient safety, clinical outcomes, affordability and patient-reported experiences. Countries like the UK (via NICE) and Germany have developed cost-outcome frameworks that balance quality and expenditure. India, too, needs an independent body to define cost benchmarks for common conditions, irrespective of the provider being from the public or private sector. These benchmarks should be updated regularly to reflect changes in medical technology, practice and population health needs.

Ultimately, quality of outcomes must determine the cost of care, especially in elective procedures. Imagine a scenario where hospitals are incentivized to achieve better surgical recovery rates or lower readmission rates—this would fundamentally shift the system from volume to value.

Only by embracing this paradigm where quality governs cost can we hope to deliver equitable and high-quality care at scale for India's diverse and growing population.

Dr. MI Sahadulla
Founder Chairman and MD,
KIMS Healthcare Management Limited

Delivering the highest quality of healthcare is the very reason Medanta exists. Our model of care rests on the inseparability of clinical excellence, medical ethics and human values such as empathy and compassion. Quality is not a department — it is the soul of Medanta, embedded in our DNA. For India, embedding quality in healthcare delivery is not just desirable but essential and striving for standards equal to or better than the best in the world is a responsibility that should be shared by the entire healthcare ecosystem in India

Pankaj Sahni
Group CEO, Global Health Limited (Medanta)

Learnings from global systems

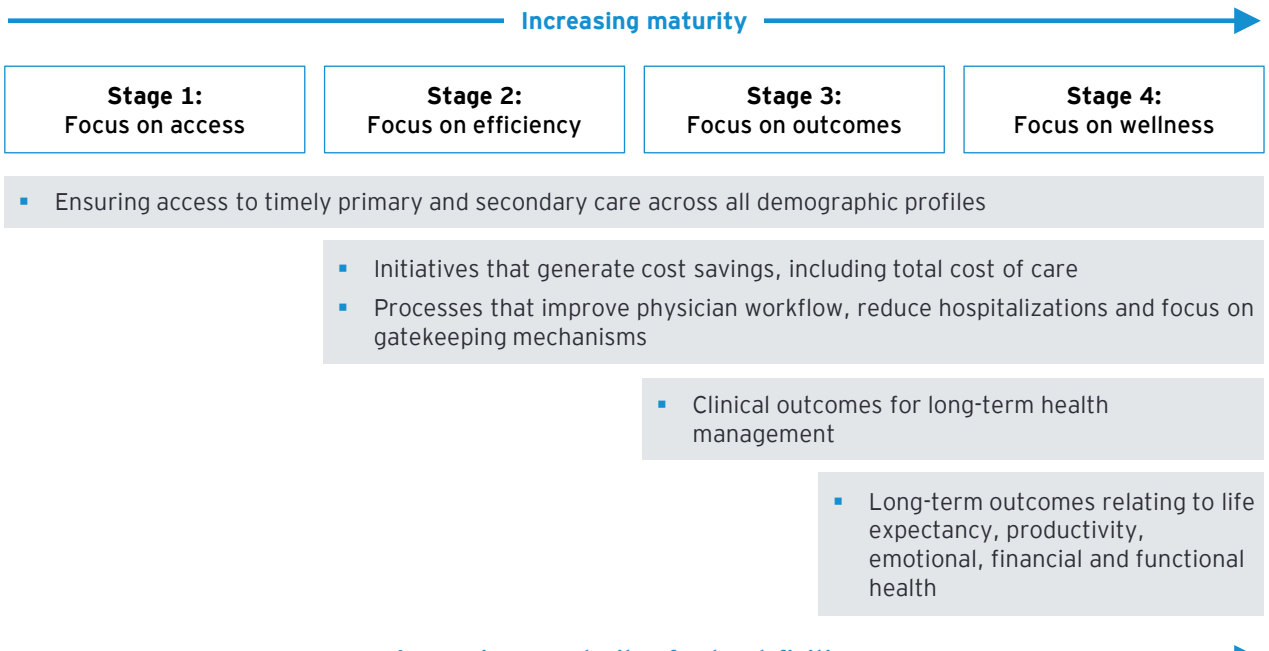
There is no silver bullet even globally. Countries and provider-payers have adopted diverse and nuanced approaches to balancing quality and cost.

Across the world, healthcare systems have experimented with diverse approaches to balance the, often competing, objectives of quality, efficiency, equity and cost sustainability. While no single country has achieved a perfect equilibrium, each has pursued models that reflect its policy priorities, institutional maturity and socio-economic context. These efforts range from outcome-linked reimbursement and nationwide quality reporting in advanced economies, to incremental adoption in emerging systems. Importantly, a number of these initiatives have demonstrated measurable improvements, whether in patient outcomes, transparency, or cost discipline. They provide valuable lessons for India.

Health systems globally differ not only in their design but also in how they define and pursue value. To make sense of these variations, we have developed a maturity framework that evaluates systems based on the value definitions that are a priority and are being measured.

The complexity of value definitions keep increasing with higher maturity indicating higher order problems being solved for. Lesser mature systems measure narrower focus metrics (e.g., cost per episode, hospital efficiency, immediate outcomes) while more mature systems measure holistic parameters (e.g., long-term health management, emotional and financial well-being, quality of life).

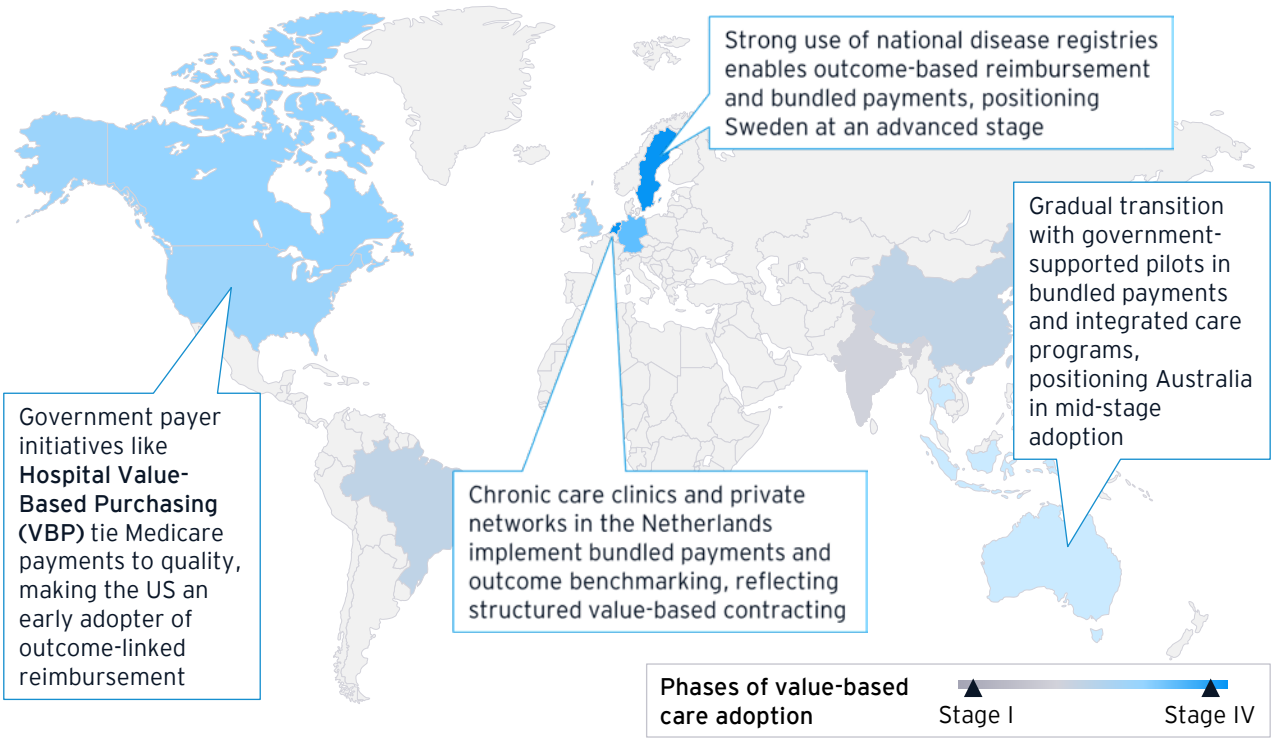
Maturity levels of health systems



This framework helps compare health systems worldwide and identify their position on the maturity spectrum. Progress, however, is not always linear. Countries may advance in some areas while lagging in others. A stage-wise approach offers a way to assess how well systems balance cost and outcomes, shifting the focus from inputs and activities to outcomes and wellness. While no country has fully reached Stage 4 maturity at scale, there are examples of parts of systems moving in that direction.

For India, this provides a reference point to see where it currently stands and what is needed to progress toward holistic care. The key message emerging from global examples is that the journey is gradual: most countries have not jumped straight to wellness-driven models but advanced step by step, gaining important lessons at each stage.

Maturity of health systems across the world



Country	Quality regulator	Notable examples
The Netherlands **Population: 18.1 million** **Insurance coverage: 85%**	▪ Kwaliteitskader: A legislatively recognized quality framework ▪ Establishes what constitutes "good care" and defines mandatory indicators to be reported, covering outcomes, processes and patient experience	▪ **Diabeter:** A private provider network of diabetes-specific care with a value-based approach for type-1 diabetics ▪ Negotiates an annual bundled payment with payers which covers the total episode of care: OP visits, lab costs, overheads and equipment ▪ Contracts include a performance-based component ▪ Outcomes are measured in real-time and are transparent to the patient through a digital platform ▪ 55% of patients are below HbA1c threshold compared to 28% in the general population ▪ 3% hospitalization rate compared to 8% nationwide
Sweden **Population: 10.6 million** **Insurance coverage: 99%**	▪ Socialstyrelsen: A central government agency under Ministry of Health and Social Affairs ▪ Issues national clinical guidelines based on evidence and outcomes to enable uniform, equitable care and maintains national health statistics	▪ **Stockholm City Council** introduced a bundled payment model for total hip and knee replacements including complication warranty ▪ Implementation mandated regular reporting of patient outcomes (PROMs such as EQ-5D, VAS, KOOS) ▪ 14% decrease in total average medical spend ▪ Patient wait time for treatment reduced from 33% to 13% ▪ Reduced length of stay from 6.7 to 5.8 days
Germany **Population: 83.5 million** **Insurance coverage: 100%**	▪ Universal SHI and reforms enabling integrated care and 100% compliance ▪ Focus on preventive care through integrated contribution of medical and non-medical bodies ▪ Cost savings are realized as an outcome of fewer hospitalizations and pre-emptive mitigation of adverse cases	▪ **Gesundes Kinzigtal: The integrated care network's** focus is on high-need, high-cost NCD patients ▪ Model: Population-based, long-term shared-savings contract across the integrated care continuum ▪ Multidisciplinary care teams: All medical and non-medical partners (gyms, pharmacies etc.). ▪ Care approach: Patient-chosen "doctor of trust" to assess, navigate and coordinate care; technology-enabled data reporting, messaging and predictive modelling for preventive care ▪ ~7% cost reduction per covered life; total US$7 million savings versus benchmark ▪ Average life expectancy increased by ~1.4 years

Source: **Netherland- Diabeter:** EIT Health High-Value Care Forum Case Study: "Diabeter – Value-based care for Type-1 Diabetes" (2019); VBHC Prize Profile. Demonstrates bundled payment model with real-time outcome tracking via V-Care platform

Sweden – Stockholm City Council, BMC Health Services Research, EY-Parthenon analysis

Germany – Gesundes Kinzigtal. Accountable Care in Practice: Global Perspectives (Duke-Margolis/Commonwealth Fund, ca 2016): "Gesundes Kinzigtal integrated-care network with population-based shared-savings contracts, 'doctor-of-trust' care coordination, predictive data systems and multidisciplinary partners

Country	Quality regulator	Notable examples
 **US** **Population: 341 million** **Ins. coverage: 75%**	▪ CMS Value-Based Programs which are linked to payment ▪ Enables effective up-to-date healthcare coverage and promotes quality care at low cost with the agenda of moving away from fee-for-service model	▪ **Oak Street Health: The primary care network's** target population is senior citizens who are chronically ill Medicare beneficiaries ▪ Model: Value-based capitated contracts with Medicare Advantage ▪ Multidisciplinary Integrated Practice Unit (IPU)-like care teams: Physicians, nurse practitioners, social workers, behavioral health specialists, "ninja" community health workers ▪ Care approach: Intensive primary care with extended visits, transition care nurses and hospital partnerships to enable smooth discharge ▪ **~44% reduction in hospital admissions vs. Medicare benchmark** ▪ **51% of engaged patients achieved 50% or greater improvement in PHQ-9 within 24 weeks**
 **Singapore** **Population: 6.1 million** **Ins. coverage: 71%**	▪ Ministry of Health is the primary healthcare regulator which monitors services, facilities and professionals ▪ Also establishes the National Clinical Quality Indicators (NCQIs) to track outcomes and safety	▪ **Healthier SG**- Reorients healthcare from treating illness to preventing disease, with a long-term goal of capitation-based financing ▪ National program to promote healthy living, with objectives to encourage healthy eating, regular physical activity and reduce chronic disease prevalence ▪ Residents adopt GP-led health plans that include screenings, vaccinations & lifestyle adjustments to promote long-term wellbeing ▪ Regional health managers and local partners support residents with resources and programs to sustain healthier lifestyles ▪ National enrollment, IT systems, data transparency and financing reforms (bundled payments, capitation) underpin the program's success
 **Indonesia** **Population: 284 million** **Ins. coverage: 95%**	▪ Directorate of Healthcare Quality and Accreditation leads healthcare quality policy development ▪ Coordinates a National Quality Policy and Strategy (NQPS) framework to drive systemic quality improvement	▪ **PROLANIS:** Chronic disease management program launched under the national health insurance scheme – JKN ▪ Patients receive monthly medical consultations and health status monitoring every six months ▪ Providers are paid through capitation and performance incentives (P4P) ▪ Shifts clinically stable patients from secondary to primary care so that they can access monthly medications through PROLANIS pharmacy ▪ ~1 million JKN members enrolled in PROLANIS since launch (2014) ▪ 63% patients attend monthly primary care visits
 **Australia** **Population: 27 million** **Ins. coverage: 55%**	▪ National Model Clinical Governance Framework outlines essential component of clinical governance ▪ Ensures organizations are accountable for delivering safe high-quality, patient-centered care	▪ **Silver Chain Group:** Non-profit that provides hospital-level care at home, community nursing and palliative care ▪ Bundled/outcome-based funding agreements with governments and payers, covering full episode of care ▪ Long-standing contracts with Commonwealth and State governments for Hospital in the Home (HITH), chronic disease management, palliative care, care coordination and virtual care services ▪ **30%–40% lower cost per patient compared to hospital-based care**

Source: **US – Oak Street Health.** Oak Street Health Social Impact Report & CVS Health insight (2022–2025): value-based capitated Medicare Advantage model using multidisciplinary IPU-style teams (physicians, NPs, social/behavioral workers, community health workers, transition-care nurses).

Singapore – News articles, Healthier SG program, EY-Parthenon analysis

Indonesia – PROLANIS (Program Pengelolaan Penyakit Kronis). WHO Western Pacific Region, Policy Brief (2020): "PROLANIS – Chronic disease management under Indonesia's JKN scheme" – capitation and performance-based incentives; monthly consultations and biannual health status monitoring

Australia – Silver Chain Group. Silver Chain Group submission: Consultation paper on the Pricing Framework for Australian Public Hospital Services (2016): "Silver Chain Group – Hospital in the Home (HITH) and community-based care services" – bundled/outcome-based funding agreements with governments and payers covering full episode of care; long-standing contracts with Commonwealth and State governments

Driving a balance between quality and cost while delivering value

Global case studies highlight that while health systems vary in design, certain foundational dimensions consistently emerge as prerequisites for value-based care. These dimensions determine how effectively a system can balance cost with quality, enabling providers, payers and patients to be aligned towards common goals.

To make these ideas more tangible, we have distilled the global lessons into a six-dimension foundation framework for value-based care. These dimensions capture the essential building blocks that determine the effectiveness of a health system in balancing cost with quality.

Focus cohorts

Defining populations most in need of specific interventions, enabling equitable attention to vulnerable groups, chronic disease patients and preventive health.

1

Value definition metrics

Establishing standardized indicators that capture not only clinical outcomes but also efficiency, patient experience and long-term wellness (clear outcome metrics).

2

Care co-ordination

Building integrated care pathways across primary, secondary, tertiary and community settings, enabled by digital interoperability and gatekeeping mechanisms across levels of care.

3

Reimbursement model linkage

Linking reimbursement to outcomes through bundled payments, capitation or performance-based adjustments that reward high-quality, efficient care.

4

Governance

Mandate outcome reporting, protect patient data, standardize digital tools and ensure accountability through oversight and audits.

5

Patient empowerment

Transparent public reporting along with standardized measures to enable accountability, informed choice and directional improvement in quality.

6

1. Focus cohorts

At the heart of value-based care lies a clear understanding of which population segments/ cohorts are being targeted. It is difficult for Health systems to deliver value uniformly without segmenting patients into cohorts based on need, risk or disease burden. Cohorts may include populations with chronic conditions, patients requiring complex tertiary care, or groups vulnerable to disparities such as the elderly, rural populations or low-income communities. By defining focus cohorts, systems can design tailored interventions, enable efficient allocation of resources and create accountability for outcomes within defined groups.

Global examples

- In the UK NHS, chronic disease cohorts (e.g., diabetes, COPD) are tracked under the Quality and Outcomes Framework (QOF) with incentives linked to improved management
- Under Singapore's Healthier SG initiative, elderly populations and those with multiple chronic conditions are the first focus cohorts for personalized health plans.

2. Value definition metrics

The term "value" must be defined before it can be measured or optimized. Value-based systems adopt a multi-dimensional approach to measurement, moving beyond traditional clinical success rates to include operational efficiency, safety indicators and patient-reported outcomes and experiences (PROMs, CROMs and PREMs). Standardized metrics allow comparison across institutions, encourage benchmarking and form the basis for linking incentives to performance. Without clarity and consensus on what constitutes value, attempts to reform healthcare financing and delivery may continue to remain fragmented or subjective.

Global examples

- The Netherlands mandates reporting of clinical quality indicators alongside patient-reported outcome measures in cancer and cardiac care.
- The US Healthcare Effectiveness Data and Information Set (HEDIS) framework standardizes preventive care and chronic disease management metrics across health plans.

Indication/Specialty specific outcome metrics tracked globally:

	Netherlands	US	Sweden	Australia	Singapore	Indonesia
Bypass surgery (CABG) and/or Angioplasty (PTCA)						
Acute MI (Heart Attack) mortality and readmission	✓	✓	✓	✓	✓	
In-hospital mortality				✓		
National registries		✓				
Oncology						
Survival rate	✓	✓	✓	✓	✓	✓
National registries				✓	✓	✓
Transplant						
One-year survival rate	✓	✓	✓			
Waiting time			✓	✓		
Stroke						
Timeliness of care		✓				
Survival rates		✓				

Source: Netherlands – Netherlands Heart Registration (NHR). Annual Report 2023: Cardiac Surgery Outcomes in the Netherlands; Netherlands – Dutch Institute for Clinical Auditing (DICA) & MRDM/LOGEX; Dutch Transplant Foundation (NTS). "Slightly more organ donations in Netherlands; waiting times decreasing

US – Centers for Disease Control and Prevention (CDC), National Center for Health Statistics; United States – American Cancer Society (ACS). Cancer Facts & Figures 2025; Organ Procurement and Transplantation Network (OPTN) & U.S. Department of Health and Human Services

Sweden – SWEDEHEART National Quality Registry (Swedish Web-System for Enhancement and Development of Evidence-Based Care in Heart Disease); National Board of Health and Welfare (Socialstyrelsen); Swedish Cancer Register (SCR); Scandiatransplant Association. Scandiatransplant Annual Data Report 2024

Australia – National Cardiac Registry (NCR); Australian Institute of Health and Welfare (AIHW); Australia and New Zealand Dialysis and Transplant Registry (ANZDATA);

Singapore – National Heart Centre Singapore (NHCS); Singapore Cancer Registry (SCR), National Registry of Diseases Office (NRDO)

Indonesia – National Cancer Registry (Sistem Registrasi Kanker di Indonesia, SRIKandI) and Indonesian Cancer Control & Prevention (Ministry of Health)

The **International Consortium for Health Outcomes Measurement (ICHOM)**, a nonprofit organization dedicated to transforming healthcare worldwide by standardizing the measurement and reporting of patient outcomes, focuses on outcomes that matter most to patients such as quality of life, functionality and long-term results rather than just clinical metrics like lab tests or hospital stay length. ICHOM brings together global teams of physician leaders, outcomes researchers and patient advocates to define patient-centered outcome measures for specific conditions and promotes their adoption to enable healthcare providers worldwide to compare, learn and improve care.

Sample of patient reported outcome measures

PROM tool	Type	Countries where adopted/used	Areas being assessed
EQ-5D-3L / 5L	Generic HRQoL (Health related quality of life)	Australia, Singapore, England, Netherlands	Mobility, self-care, usual activities, pain/discomfort, anxiety/depression
PROMIS Global Health (PROMIS-10)	Generic health status	Netherlands, US, Australia	Global physical and mental health (general health, fatigue, pain, social and emotional roles)
PROMIS Physical Function (Short Form 4a)	Generic physical function	Netherlands, US, Australia	Functional status/physical functioning
KCCQ-12 (Kansas City Cardiomyopathy Questionnaire)	Disease-specific (HF)	US, Germany, Singapore	HF symptoms, physical and social limitations, QOL
KOOS-PS (Knee Injury and Osteoarthritis Outcome Score – Physical Function Shortform)	Disease-specific (knee OA)	Sweden, Netherlands, Denmark	Knee function in daily activities
HOOS-PS (Hip Disability and Osteoarthritis Outcome Score – Physical Function Shortform)	Disease-specific (hip OA)	Sweden, UK, Denmark	Hip function in daily activities

Source: International Consortium for Health Outcomes Measurement (ICHOM); PROMIS: Patient Reported Outcomes Measurement Information System
https://eprovide.mapi-trust.org/

India at present has limited adoption of ICHOM or equivalent standards for patient outcomes reporting with Apollo and Fortis being two prominent groups that have reporting measures and framework in place to enable quality improvements in the care offered. While some hospitals have taken steps to enhance reporting measures, most of the hospitals in Indian healthcare system lack a robust framework for outcome measurements. This can be attributed to multiple factors including fragmented healthcare systems, policy and regulation gaps to mandate or incentivize outcome reporting, limited adoption of innovative and digital tools to enhance the reporting framework, lack of resources including staff and infrastructure requirements and most importantly, low awareness about ICHOM standards.

This creates a need for a nationwide policy and regulatory intervention that can promote outcome reporting across all levels of domestic healthcare systems primarily by creating awareness about the need for a robust reporting mechanism and introduction to global standards such as ICHOM. Additionally, government endorsements through existing authoritative organizations such as NITI Aayog and schemes such as Ayushman Bharat can provide guidelines to integrate patient-centered outcome measurement across rural and urban areas in regional languages for easy adoption. Moreover, incentivizing and accreditation link-ups could prove to be major drivers in improving the overall adoption rates for India to compete with global healthcare standards.

3. Care coordination

Fragmentation of care is one of the greatest obstacles to achieving value. Care coordination emphasizes the integration of services across primary, secondary, tertiary and community care. This includes smooth referral systems, continuity of information through digital records and shared responsibility between clinicians and facilities. Coordination reduces duplication of tests, avoids gaps in treatment and improves both patient safety and satisfaction. Patient journeys cut across institutional boundaries and care models need to be aligned accordingly. At its core, care coordination rests on three pillars:

1. **Strong gatekeeping mechanisms:** Primary care or first-point providers act as navigators for the patient journey, enabling only clinically appropriate specialist consultations and higher-order interventions only. Gatekeeping reduces unnecessary costs and also helps maintain quality, including care delivery at the right level of the system.
2. **Appropriate handoffs at every stage:** Smooth and structured transitions between providers (e.g., from primary physician to specialist, from hospital to home health, or from acute care to rehabilitation) are critical to maintaining treatment continuity, avoiding duplication of tests and minimizing medical errors.
3. **Unified view of patient needs and treatment plan:** A holistic understanding of the patient, supported by shared care plans and interoperable medical records, allows every provider in the care chain to be aligned to the same objectives. This alignment prevents conflicting prescriptions, redundant investigations and fragmented follow-up.

Global examples

a. **Regulations:** In systems such as the UK and the Netherlands, patients cannot directly access specialists without a referral from their primary care provider, which allows strong gatekeeping.

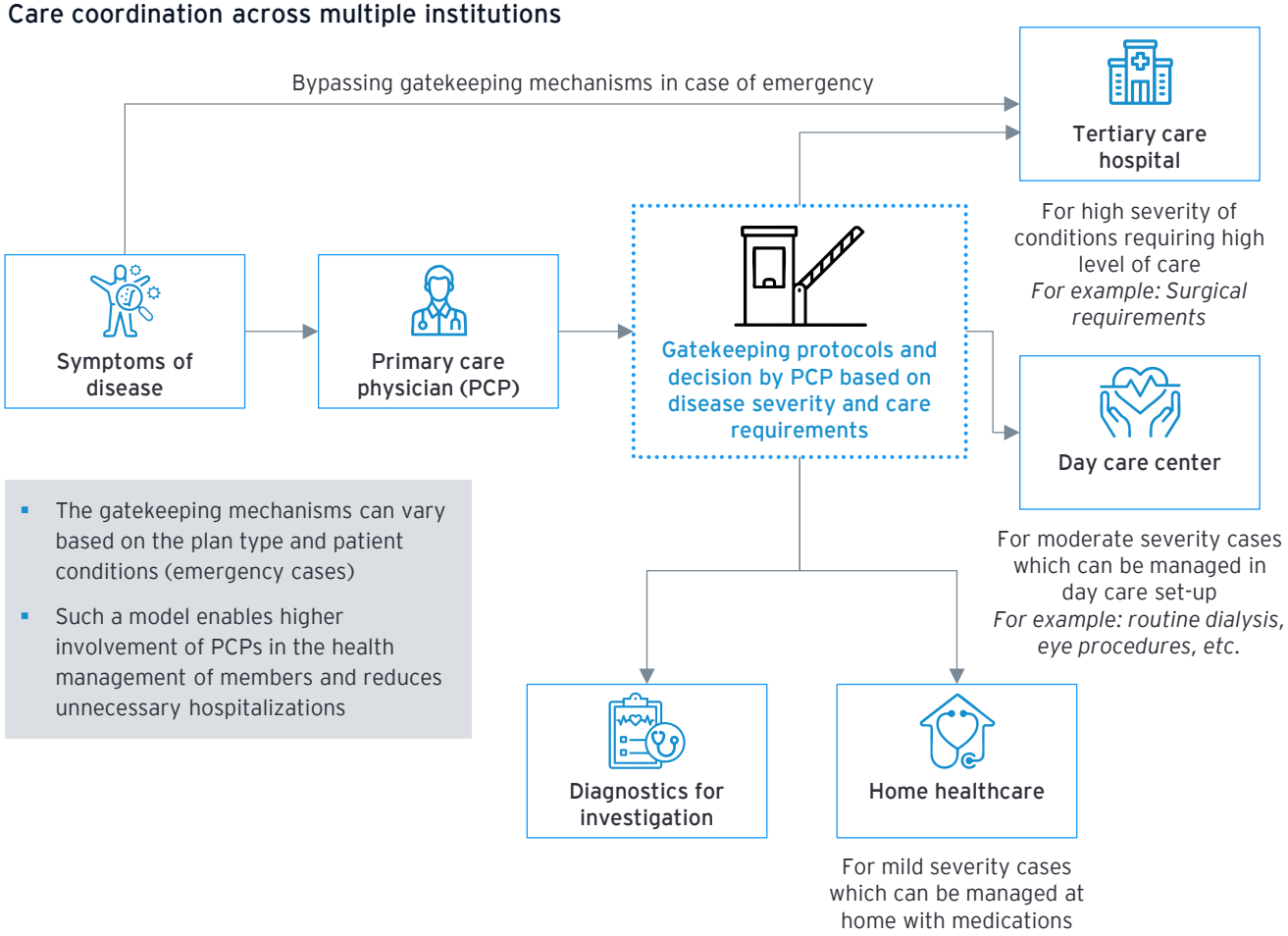
b. **Accountable Care Organizations (ACOs):** In the US, ACOs bring together networks of providers who share accountability for cost and quality across an entire patient population, incentivizing them to coordinate care.

c. **Digitization:** In Singapore, the National Electronic Health Record (NEHR) system creates a single longitudinal view of a patient's health journey, enabling providers across public and private sectors to align care.

Well-designed care coordination improves outcomes, lowers costs and enhances patient satisfaction.

By reducing fragmentation and building seamless, patient-centered pathways, health systems move closer to the ideals of value-based care, where the patient's needs rather than institutional set-ups define the course of treatment.

Care coordination across multiple institutions



- The gatekeeping mechanisms can vary based on the plan type and patient conditions (emergency cases)
- Such a model enables higher involvement of PCPs in the health management of members and reduces unnecessary hospitalizations

4. Reimbursement model linkages

Reimbursement models are among the most powerful levers in shaping healthcare delivery. Traditional fee-for-service systems reward activity and volume, potentially driving unnecessary interventions without accountability for outcomes. A value-based system requires that reimbursements are explicitly linked to quality, efficiency and patient outcomes, thereby aligning financial incentives with the goals of better care at a lower cost.

There are several mechanisms through which this linkage can be established:

a. **Tiered reimbursement levels:** Payments to providers are differentiated based on objective criteria such as accreditation status, infrastructure quality, outcome performance or compliance with evidence-based care protocols. For example, hospitals consistently demonstrating superior outcomes or higher adherence to clinical pathways receive higher reimbursement rates, while lower-performing institutions receive baseline rates. This creates a "tiering" system that rewards excellence while encouraging lagging providers to improve.

b. **Bonuses and penalties:** Short and long-term adjustments to reimbursements can be used to reinforce accountability. In the short term, bonuses may be offered for reducing infection rates, achieving early discharges without readmission, or reporting standardized outcome data. In the longer term, penalties may be imposed for persistent underperformance, such as high readmission rates, poor patient safety indicators, or consistent deviation from clinical protocols. This dual approach both incentivizes improvement and discourages complacency.

c. **Capitation models:** A fixed per capita payment is given to providers for managing the health of a defined population, regardless of the volume of services delivered. This shifts financial risk to the provider, encouraging a proactive focus on preventive care, chronic disease management and efficient resource utilization. When combined with risk adjustment and quality safeguards, capitation ensures that providers remain committed to delivering holistic, long-term value rather than maximizing short-term revenue.

Global examples

- In the US, ACOs often operate under shared-savings and shared-risk arrangements that combine tiering with bonuses and penalties.
- In the Netherlands, selective contracting by insurers links reimbursement to outcome performance and efficiency benchmarks.
- Australia's activity-based funding integrates quality adjustments into its reimbursement formula, ensuring that cost efficiency does not come at the expense of patient safety.

In essence, aligning financing with outcomes allows transforming the provider's incentives: from maximizing activity to optimizing value. When reimbursement frameworks incorporate tiering, bonuses/penalties and capitation structures, they can create the right conditions for healthcare systems to move toward accountability, sustainability and patient-centered care.

Case study: Under the JKN scheme in Indonesia, hospitals receive differentiated payments across procedure, complexity, facility and geography.

- The scheme uses the **INA-CBGs (Indonesia Case-Based Group), a Diagnosis-Related Group (DRG)-based payment system for hospitals**, covering both IP and OP services.
  - The INA-CBG system groups patients with similar diagnosis and treatments into categories with fixed tariffs
- The INA-CBG base categories include **262 IP** and **289 OP** diagnoses or procedures. Each base category is further differentiated by: **Hospital type** (A-D), **Ward class** (for IP), **Region** (five JKN regions), **Ownership** (public vs private) and **Severity** (for IP, up to three levels per base category).

This gives **94,320 possible codes** for IPD procedures and **11,560 for OPD procedures**, with each code representing a differential rate of reimbursement to enable fairness across hospitals, while accounting for cost drivers like region, hospital class and case complexity

Basis of classification	Details	Combinations
Region	▪ The country has been divided into five regions (Region 1-5), wherein Provinces are grouped based on their cost structure for medical services ▪ Region 1 has the higher INA-CBG reimbursement rates and Region 5 the lowest	x 5
Type of facility	▪ Compensation (tariffs) for hospitals is differentiated based in facility type ▪ Hospitals are divided into **four classes** (Type A,B, C and D) with Type A having the highest base rate for compensation ▪ **Type A**: National referral hospitals and teaching hospitals (widest range of specialties and sub-specialties) ▪ **Type B**: Provincial referral hospitals (many specialties, some subspecialties) ▪ **Type C**: Limited specialist services ▪ **Type D**: Basic limited specialist services (at least internal medicine, surgery, pediatric medicine and ob-gyn)	x 4
Diagnosis severity	▪ Three levels of severity are prescribed on co-morbidities and complications: ▪ **I= mild**: No co-morbidities/complications ▪ **II= moderate**: Mild co-morbidities/complications ▪ **III= high**: Major co-morbidities/complications	x 3
Ward room class (IP)	▪ Members of the scheme can access three classes of wards in hospitals (I, II, III) ▪ Choice of ward does not impact the medical services available	x 3
Base categories	▪ A base category is the fundamental diagnosis or procedure in the INA-CBG system, from which tariffs are further adjusted by hospital type, ward class, severity, region and ownership	x 262 (IP) x 289 (OP)
Ownership	▪ Public and private hospitals further represent two district categories of classification	x 2

5. Governance

Strong governance is essential for value-based care principles to be applied consistently, transparently and in ways that prioritize patient outcomes over institutional convenience. Governance provides the oversight, enforcement and accountability mechanisms that translate policy into practice and prevent fragmentation of effort. In our foundation framework, we see governance working across three complementary dimensions:

1. **Regulatory governance:** This refers to the role of government bodies and statutory authorities in setting the rules. Regulations help define the minimum standards of safety and quality, establish mandatory outcome reporting requirements and enable interoperability of digital systems. They can create both the baseline of compliance (through accreditation, audits and penalties) and an enabling environment for innovation (through data protection, digital health standards and reimbursement rules).

Global examples

- In the UK, the Care Quality Commission enforces compliance with national quality standards, while hospitals must publish annual Quality Accounts.
- In Australia, the National Safety and Quality Health Service (NSQHS) Standards form the basis of hospital accreditation.
- In Singapore, the Ministry of Health mandates publication of quality indicators, including infection rates and waiting times.

2. **Independent oversight governance:** Independent governance refers to oversight mechanisms that operate at arm's length from providers and payers, to bring in impartiality and credibility. These bodies may be professional associations, third-party accreditation agencies, or multi-stakeholder registries that validate and publish outcomes data. Their independence helps reduce conflicts of interest and builds patient trust by allowing performance measurement to be objective.

Global examples

- In the Netherlands, boards govern clinical registries such as Dutch Institute for Clinical Auditing (DICA) and Netherlands Heart Registration (NHR). The boards include clinicians, insurers and patient representatives, to enable balanced oversight.
- In the US, the National Committee for Quality Assurance (NCQA) serves as a neutral body that accredits health plans and validates quality reporting for Centers for Medicare & Medicaid Services (CMS) programs.
- In Australia, the Independent Hospital Pricing Authority provides unbiased oversight of efficiency and quality in hospital funding.

Case study: Singapore's "Price Banding with Flex" for hospital procedures

To improve transparency and curb excessive variation in private hospital bills, Singapore's Ministry of Health introduced a **fee benchmark framework.**

The Ministry calculates fee benchmarks using **actual billing data from private hospitals**, focusing on typical cases and excluding extreme outliers. Fees are then statistically anchored between the **25th and 75th percentiles**, representing the middle range of what most patients pay. These preliminary ranges are further refined through **consultations with clinicians, hospitals, insurers and consumer groups** for clinical and market relevance.

The benchmarks are guidelines, not ceilings—providers retain **flexibility to charge above the band** if justified by case complexity, co-morbidities, or special requirements, but they are expected to explain such deviations to patients and insurers.

Procedure description	Hospital fee benchmarks (SG$)	Surgeon fee benchmarks (SG$)	Average length of stay (days)
SL808L- Cataract extraction with IOL implant	2,600-4,700	2,900-4,400	1
SB710S- Shoulder soft tissue injury, MIS/open decompression with cuff repair	13,800- 18,800	9,700-13,500	1
SF706G- Gallbladder surgery	9,000- 13,300	6,200- 9,600	2
SD713H- PTCA + Stenting	-	10,000- 14,600	-
SB810K- Primary total knee replacement	21,200 - 26,400	9,200 - 12,000	4

The framework has been effective in moderating private-sector fee growth while preserving pricing flexibility for atypical cases. Public availability of benchmark ranges has empowered patients to make informed choices, enabled insurers to align reimbursement practices and encouraged providers to keep charges within the published bands unless clinically justified.

Source: Singapore- Ministry of Health Singapore (2024): "Hospital Fee Benchmarks – Price Banding with Flex"

3. **Appropriateness of care:** Beyond compliance and oversight, governance must also ensure that care is appropriate, necessary and evidence-based. Appropriateness governance involves monitoring whether interventions are justified, care is being delivered at the correct level of the system and variation in practice is clinically warranted. This prevents both overuse (unnecessary procedures, excessive hospitalization) and underuse (missed preventive screenings, delayed specialist referrals).

Global examples

- In the US, CMS uses appropriateness criteria in its reimbursement policies (e.g., bundled payments require adherence to defined clinical pathways).
- In the UK, National Institute for Health and Care Excellence (NICE) develops evidence-based clinical guidelines that define appropriate interventions for common conditions, which are then used in reimbursement and quality measurement.
- In Singapore, care bundles for chronic diseases emphasize appropriateness by standardizing care pathways across providers.

Case study: NICE – Enabling appropriate and effective care in the UK

NICE is an independent public authority established in 1999, tasked with guiding the NHS on delivering care that is clinically effective, cost-effective and equitable. It plays a central role in patients receiving appropriate interventions that offer value and improved outcomes.

NICE guidelines are developed by involving stakeholders such as national organizations that represent patients and carers, national health and social care professional organizations, the NHS, organizations that fund or carry out research and companies that have an interest in the guidance being developed.

NICE function	Primary role in enabling appropriateness
Clinical Guidelines	Defines evidence-based treatment pathways for consistency and appropriateness of care
Health Technology Appraisals	Evaluates new interventions for cost and clinical effectiveness before approving use
Quality Standards	Sets benchmarks for high-quality care and measures provider adherence
Public Health and Social Care Guidance	Aligns preventive and social care interventions with evidence-based best practices

Together, these enablers help create an infrastructure of accountability by establishing transparency, defining clear quality standards and supporting the digital backbone required for modern healthcare delivery. With these elements in place, value-based models can move from isolated pilots to system-wide practice. Regulations, when designed well, can safeguard patients, give providers a common framework to work within and provide the foundation needed for financing and governance reforms to succeed.

6. Patient empowerment

Patient empowerment signifies giving people the information, choices and tools they need to participate in decisions about their care and well-being – and to use these to choose between plans, providers or treatments. Looking closely across countries that provide high levels of access to their populace to choose the desired treatments, there are two common themes emerging:

1. **Adoption of standardized plan-level or system-wide quality measurement frameworks** (like **HEDIS** model in **the US**) that allow payer comparison and reporting.
2. **Availability of provider-level public dashboards / indices** (like **Muashir model in Abu Dhabi**) that publish provider-level safety, outcome and experience measures so patients can compare hospitals, clinics and physicians.

Countries	Mandated typically by a national regulator – Standardizing what gets measured across payers or systems	Availability of searchable provider-level services through public dashboard
US	**Provides standardized measures** used by Medicare Advantage, commercial and Medicaid plans. **NCQA** is the regulatory body for HEDIS.	**CMS care compare** provides public website to compare hospitals, nursing homes, doctors, home health, dialysis centers.
Abu Dhabi (UAE)	**Department of Health** regulates insurers and sets quality frameworks.	**Muashir is a public provider index** used for patient information and regulatory action in Abu Dhabi. It evaluates healthcare providers across domains such as safety, effectiveness, timeliness and patient experience.

Source: https://www.ncqa.org/hedis/ , https://www.medicare.gov/care-compare , https://www.doh.gov.ae/en/programs-initiatives/muashir , https://www.doh.gov.ae/en/programs-initiatives/muashir

Countries	Mandated by national regulator – Standardizing what gets measured across payers or systems	Availability of searchable provider level public dashboard
UK	**Quality and Outcomes Framework (QOF)** is a voluntary annual reward and incentive programme for all GP practices in England, detailing practice achievement results. The focus is not on performance management but resourcing and rewarding good practice.	**NHS patient-facing dashboard** integrates QOF indicators (for GPs) and Care Quality Commission (CQC) ratings (for all providers) into one searchable public portal.
Australia	**Australian Institute of Health and Welfare (AIHW),** a national and welfare statistics agency, enables standardization of measures across all states/territories and feeds validated data into patient-facing platforms.	**MyHospitals** provides patient-facing hospital finder and comparative data (activity, wait times, safety, etc.), along with downloadable APIs/data.
The Netherlands	The National Health Care Institute (Zorginstituut Nederland) sets the national quality framework.	Transparency Register Healthcare (Transparantieregister Zorg) provides public reporting on quality indicators. Patients can view ratings of hospitals and providers.

Source: https://qof.digital.nhs.uk/ , Find services near you – NHS , https://www.aihw.gov.au/, https://www.aihw.gov.au/hospitals , https://www.zorgkaartnederland.nl/ , https://www.zorgkaartnederland.nl/

Transparent public reporting along with standardized measures enables accountability, informed choice and (when coupled with purchasing/contracting action) directional improvement in quality. Key learnings from these countries include:

1. **Centralized comparison of provider quality that** lets patients choose facilities and creates public accountability
2. **Provision of single sign-on** and patient access to records along with service comparison tools puts choice and clinical information in users' hands
3. **Local/regional government publishes comparative scores** that are used to evaluate providers and drive regulatory action

Some countries also promote patient empowerment by allowing their citizens to choose insurance products tailored to their **preferences, geography or health needs**. This shifts healthcare from a "one-size-fits-all" model to a **need-driven system**.

The US has among the most advanced models. It varies across three dimensions – **by distance and provider network; by specialty/ disease; by geography/tier**. **Australia and UAE** provide partial flexibility (tiered or network-based).

Conclusion

The global case studies make it clear that while no health system has fully mastered the balance of quality, efficiency and cost, each offers valuable lessons. Mature systems such as in the Netherlands and the UK demonstrate the power of standardized outcome reporting, integrated governance, payer-driven accountability and patient empowerment. Emerging models like in Singapore highlight how digitization and financing design can create efficiency and transparency even in resource-constrained settings. Meanwhile, countries like Indonesia reveal both the opportunities and challenges of rapidly expanding access while striving for quality.

Across contexts, a common pattern emerges: systems progress by moving from fragmented, volume-based care to models that emphasize cohort definition, outcomes measurement, coordinated delivery, aligned financing and strong governance. Together, these pillars form the scaffolding for a system where health outcomes that matter to patients are achieved in a sustainable and equitable way.

While India has made strides in expanding access through initiatives such as Ayushman Bharat and digital health infrastructure, it remains at an earlier stage of the maturity spectrum compared to global exemplars. The next phase of reform must go beyond access and coverage to embed accountability for outcomes and efficiency into the system.

The question now is: how can India adapt these lessons to its own unique healthcare landscape marked by diversity in providers, wide geographic disparities and constrained public financing?

The push towards value-based care is a defining moment for India's healthcare ecosystem. Placing patients at the center while driving both quality and efficiency is essential to meeting the country's growing health needs. By focusing on measurable clinical outcomes alongside economic viability, we can strengthen trust in the system and deliver care that is both equitable and sustainable. High-quality medical devices have a pivotal role to play in this journey. With innovations designed to provide precision, safety and consistency at affordable costs, such solutions empower surgeons, improve treatment outcomes and ensure that more patients have access to advanced care. India's opportunity lies in combining indigenous innovation with scalable manufacturing, to create technologies that are globally benchmarked yet locally relevant. By doing so, we can build a healthcare model that prioritizes accessibility without compromising on excellence. At Healthium, we believe that aligning innovation with patient-centricity will accelerate the transition towards true value-based care. This is an opportunity for all stakeholders including the industry, policymakers and healthcare providers to come together and reshape the future of care delivery in India.

Anish Bafna
CEO and MD, Healthium Medtech Limited

05 Charting the **new order**

“

True value in Indian healthcare will come from making the patient outcome - not volume, not revenue - the organizing principle of every decision. Evidence-based diagnosis and treatment planning must become the norm, with appropriateness standards ensuring that every rupee spent produces measurable benefit for the individual patient. Reimbursement models should reward quality, safety and functional recovery rather than length of stay or number of procedures and accreditation systems must evolve to include real-time outcome measurement and transparent reporting.

Public reporting of results, when done responsibly, can empower patients and families to choose providers on the basis of quality rather than marketing claims. At the same time, innovative insurance products can nudge both providers and consumers toward higher-value care, for example, by incentivizing prevention, continuity of care and adherence to evidence-based pathways.

India would benefit from an independent body - similar to NICE in the UK - that defines minimum clinical and cost standards for high-volume conditions. But standards alone are insufficient: healthcare organizations must build a culture of quality in which clinicians embrace outcome reporting, peer review and team-based models of care.

Finally, digital health can be a great enabler and the patient's voice. From e-registries and AI-driven decision support to patient-reported outcome tools in local languages, technology can shorten feedback loops and reveal what matters most to patients. Used wisely, it will allow India to deliver world-class outcomes at sustainable cost, making true value-based care not just an aspiration but an everyday reality.

One can adopt the Kaizen strategy, which is continuous improvement such that not a day should go by without some kind of improvement being made somewhere in the company. Kaizen is not about giant leaps but about small, disciplined improvements every day. When everyone owns the process, excellence becomes inevitable. In healthcare, Kaizen means empowering every clinician and staff member to make small, evidence-based improvements daily. Together, these micro-changes accumulate into safer care, better outcomes and lower costs.

Dr. Somashekhar SP
Chairman - Medical Advisory Board, Aster DM Healthcare Limited – GCC & India
Global Director, Aster International Institute of Oncology – GCC & India

“

For India, embedding quality into healthcare delivery must be seen as a national priority. A differentiated reimbursement model that factors in quality, infrastructure and clinical expertise is critical to ensure fairness and sustainability. Equally, a transition towards outcome- and value-based care will align incentives with patient well-being, strengthening the country's health system for the future.

Dr. Ashutosh Raghuvanshi
MD and CEO | Fortis Healthcare Limited

India will need to chart its own path towards achieving the twin objectives of quality care and at a frugal cost, keeping in mind its unique structure and complexities

Unique Indian context	Supporting arguments	Implications
Significant variability in ecosystem maturity (levels of access, affordability, quality of infrastructure and treatment capabilities)	1. **Large share of unorganized players:** ~2 lakh out of 13 lakh private bed capacity is with organized providers 2. **Varying degrees of access to care:** a. 1.3 beds per 1,000 population in India vs. 3.0 WHO benchmark b. Southern Indian states have higher density at 1.7-3.0, while North Indian states have lower density of 0.9-1.4 3. **Uneven access to insurance, coverage:** ~30-35 crore people are yet to be covered under any type of insurance scheme; about 31 crore are covered under private insurance	**Cohorting** critical as a principle – "one size fits all" approach likely to be inadequate
Unique payer-provider fragmentation, coupled with low levels of formalization, significant cost pressures across stakeholders and low financial viability for underserved areas	1. **Fragmented ecosystem:** 25-30 beds per hospital vs. 100+ in global peers; top five payers cover only ~40% of payouts vs. ~60% elsewhere. 2. **Low accreditation:** Only ~2,500 NABH and ~12,300 entry-level facilities are accredited out of ~80,000 3. **Weak enforcement:** Minimum quality standards; not uniformly implemented 4. **Accreditation gaps:** Voluntary, limited scope, most of the unorganized sector remains excluded 5. **Low insurance touchpoints for nursing homes:** Only ~20,000 of 35,000-40,000 private hospitals estimated to have had a touch point with insurers 6. **Cost and margin pressure for both provider and insurer:** a. Large organized providers face 7%-8% cost inflation while pricing inflation is lower b. Nursing homes will need support to invest in functional infrastructure to reach minimum standards c. Insurers' emphasis is mostly on limiting claims ratios (claim ratio of about 88% in 2024) 7. **Underserved areas unviable:** Tier 3/rural hospitals face low payment levels under government schemes; face challenging financial viability	**Care** reimbursement models and **Clinical Excellence** framework to be tiered and solved for adoption, enforceability and meaningful differentiation **Cost consciousness** and enablement as an additional imperative for India

Global examples

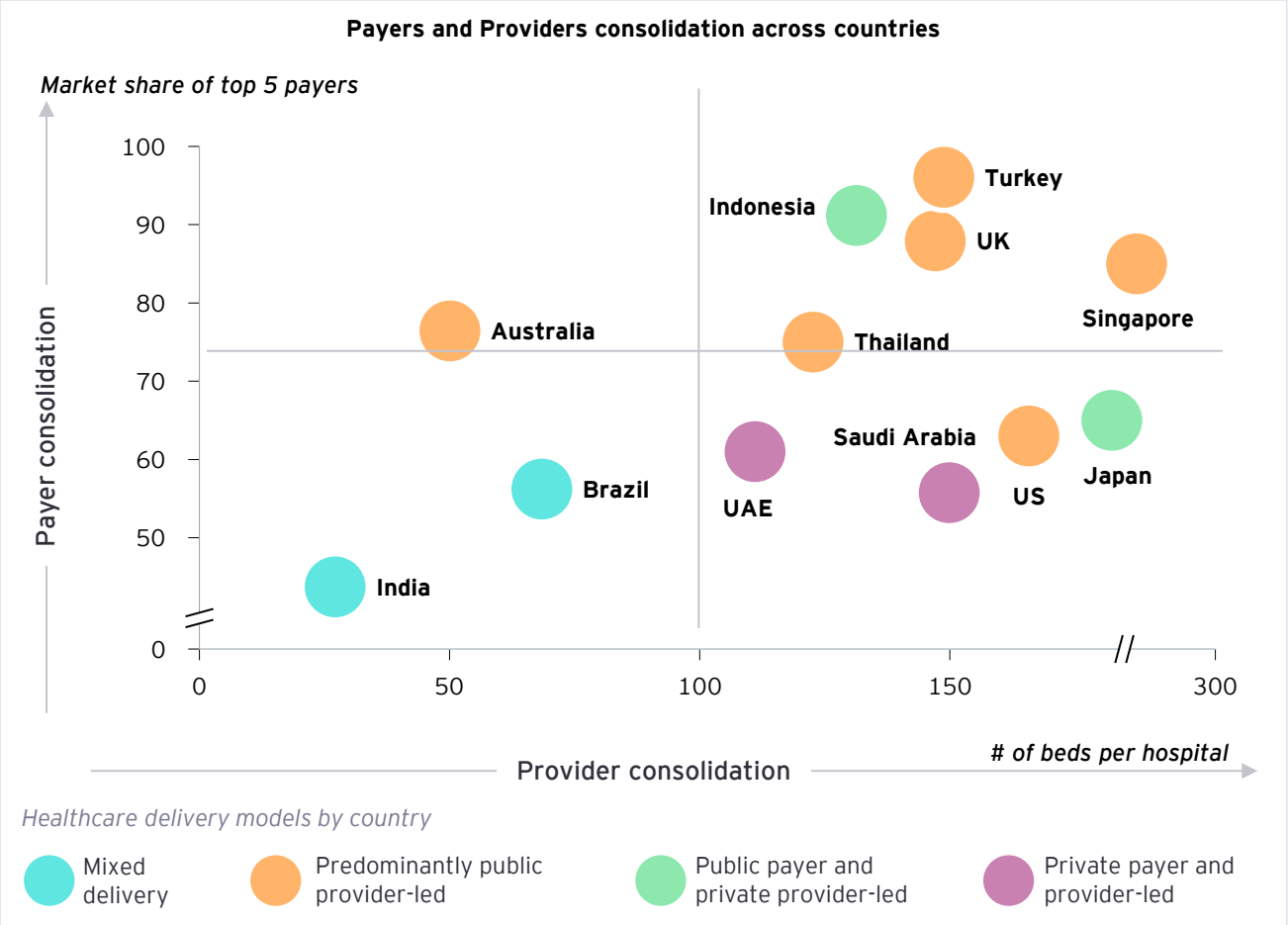
- The US Navy Hospitals have achieved high deployability towards units at highest risk of reduced readiness.
  - They have enabled this integrated medical support including mobile surgical platforms, standardized protocols, quick response teams and medicinal stocking
- In the UK NHS, chronic disease cohorts (e.g., diabetes, COPD) are tracked under the Quality and Outcomes Framework (QOF) with incentives linked to improved management
- Under Singapore's Healthier SG initiative, elderly populations and those with multiple chronic conditions are the first focus cohorts for personalized health plans.

Unique Indian context	Supporting arguments	Implications
Outcome orientation not formally embedded into our core operating framework; limited formal collaboration between stakeholders	1. **Preventive and primary care backbone underdeveloped:** Only ~60% of ~33,000 required PHCs exist; of those <10% meet IPHS Standards 2. Providers face viability and operational challenges in extending care across continuum 3. Fragmented points of care make patient information transfer and hand-offs challenging; limiting ability to impact outcomes and costs 4. Lack of agreement on pathways and key measures result in alignment challenges between provider-payer 5. Fee for service models remains dominant – resulting in alignment challenges with clinicians	**Care continuum** models and pathways will need to be developed over time with a scientific scaffolding system gradually built
Uneven consumer literacy and awareness while demand exists for visibility of care standards	1. Patients seek objective information but face information gaps; strong demand for transparent, standardized reporting: a. 37% patient survey respondents reported familiarity with the concept of 'clinical outcomes' b. ~35% consider assessing clinical outcomes when choosing a hospital c. ~80% of the patient survey respondents said their trust in hospitals will increase seeing clinical outcomes data 2. Significant variability in literacy levels across regions 3. Multilingualism across regions	**Consumer empowerment** mechanisms needed to enhance consumer visibility into quality of outcomes and empower informed decision-making
Infrastructure, skill gaps and lack of adoption are the biggest challenges in unlocking technology potential	1. **Digital infra concentrated in large hospitals;** smaller clinics and nursing homes rely on rudimentary software or manual records: a. An EY survey of healthcare CIOs revealed that only 50% reported to have partial adoption of ABDM and 40% were planning to adopt 2. Doctors acknowledge the value of digital tools but face gaps in access, training and workflow integration	**Connected ecosystem** through digital enablement is required: capturing data, tracking clinical data and reporting outcomes

> Value-based care in India must move beyond volumes to outcomes – through differentiated payer models, transparent outcome reporting and digital tools that amplify the patient's voice, putting quality and trust at the center of healthcare.

Harish Manian
CEO, Baby Memorial Hospital

A fragmented healthcare ecosystem lends itself to the acute need of a unique model of embedding quality in the health system



Source: National Health Account, World Bank, OECD, EY-Parthenon analysis

Value-based care must become the cornerstone of India's healthcare evolution. For us at Aster DM, this means placing the patient at the center, not just clinically, but financially. Evidence-based diagnosis and treatment planning are critical to ensure that care delivered is appropriate, efficient and outcome-driven.

As an industry, we must move beyond fee-for-service models and explore reimbursement systems that reward improved outcomes rather than just volume. Accreditation bodies should integrate outcome measurement and public reporting to empower patients to make informed choices, while insurance players can incentivize providers who deliver superior quality at optimized costs.

At Aster, we are also driving multiple initiatives to reduce inefficiencies across material management, manpower planning and operational processes ensuring that resources are utilized optimally and cost savings are reinvested in improving patient care.

Finally, building a culture of quality inside hospitals where outcome reporting, clinician engagement and digital health tools are embraced, is essential. This shift will not only improve trust but also drive financial sustainability for providers and affordability for patients, creating a true win–win for the entire ecosystem

Sunil Kumar MR
CFO, Aster DM Healthcare Limited

A 7C framework is thus proposed for India's way forward

Proposed solution framework: Towards accountable care

Cohorting and segmentation-based approach

Gradually expand in scope as threshold conditions on population coverage, provider accreditations and metric clarity are satisfied

Clinical excellence

Regulating for trust via a Central Authority

Setting standards	Tiering accreditation	Enforcing accountability
Appropriateness of care, privileging, outcome metrics, reporting requirements	Minimum standards, Centre of Excellence, feedback loops	Risk-adjusted publishing, penalties and audit mechanisms

Cost consciousness

Balancing quality-cost through policy enablement

Driving access	Improving affordability	Supporting viability
Cost reduction mechanisms (VGF, infra sharing), tech-driven models	Rational use of high-cost therapies, Subsidies for "missing middle" cover	Group purchasing organizations (GPOs); Schemes link to minimum costing standards; GST reform to lower burden

Care reimbursement

Tiering payout basis quality, infra and service

Differentiating care	Tiering reimbursements	Maintaining fairness
Differentiated care delivery (Quality × Capability × Service)	Rate differentials by hospital, geography, complexity	Reducing variability between similarly capable hospitals; rewards / penalties

Consumer empowerment

Enabling informed decision-making

Improving transparency	Building clarity	Expanding choice
Dashboards for quality, cost and guides	Scaled awareness and education programs	Insurance product innovations: base vs. top-ups

Care coordination

Moving towards a managed-care ecosystem

Piloting payer-provider solutions	Scaling integrated networks	Enabling tech driven models
Bundled payments for integrated care	Capitation for preventive and chronic care	Home healthcare, clinical grade wearables and care consortium groups

Connected ecosystem

Moving towards digitally enabled ecosystem

Infrastructure enablement	System intelligence	Data-driven governance
Common portals and ABDM-compliant EMRs	System-wide tools for fraud and clinical guidance	Cohorting, risk models and grading backed by data

Cohorting: Segmenting objectives and approach to drive targeted initiatives and impact

Cohorting of objectives based on health system maturity would be central to a scalable design for India

Global experience shows that health systems vary in maturity and their place on the maturity curve shapes both the health system's objectives as well as how they define value.

A similar variability exists within India, given provider, payer fragmentation and variability in access, affordability, patient literacy and awareness.

We, therefore, extend the same notion to India, through a maturity framework illustrated here, highlighting the dimensions along which health systems differ and how these variations can inform a "cohorting of objectives" for these systems. In other words, each system's position on the maturity continuum determines what it can reasonably prioritize and achieve.

Illustrative Dimensions to determine health system maturity levels

Key dimensions	Relevance of dimension
Bed density	▪ Supply of healthcare facilities available for the general population (private and public) ▪ Indicates reach of system and lives impacted
% beds under NABH or NQAS	▪ Supply of higher quality supply of healthcare facilities in a region ▪ Higher availability of accredited facilities should enable better measurement and tracking of KPIs
% beds under insurance	▪ Indicates the extent to which healthcare facilities are financially accessible through insurance coverage ▪ Higher availability of beds under insurance should enable better linkages of quality improvements to payer-led incentives
% population under insurance	▪ Points to the affordability of the population; potential demand for tertiary healthcare services ▪ Higher availability of population under insurance gives better pathways to improve patient choice on the basis of quality and provide continuum of care services
Extent of digitization	▪ Reflects the maturity of health systems in adopting digital tools (e.g., HIS, EMRs, QMS, telemedicine) ▪ Higher levels of digitization enable standardization of data and measures

"

India's healthcare system is at an inflection point. Historically, there has been a heavy drainage of patients into Tier 1 cities and metros, driven by the absence of adequate local infrastructure. Covid demonstrated that this model is neither resilient nor equitable, as patients were compelled to seek care closer to home. With 70% of the population residing in Tier 2 and Tier 3 cities but only 30% of hospital infrastructure available and a bed density of 1.3 per 1,000 against the WHO benchmark of 3, the imbalance is evident. The next decade must focus on building affordable, high-quality chain models in these underserved markets.

Equally important is embedding accountability for outcomes. All markets—including tier 2 and tier 3—should adopt a system of measurable clinical quality indicators, with a transparent rating framework to guide both patients and payers. Differentiated reimbursement tariffs that reward quality and efficiency can further align incentives, while digital tools can make outcome reporting accessible even in areas with lower literacy. Only by linking affordability with measurable outcomes and quality assurance can India achieve sustainable, inclusive and patient-centric healthcare delivery.

Puncham Mukim
Head of India PE and Senior MD, Everstone Capital

What should health systems of varying maturity prioritize?

	Level of maturity		
Priority Objectives	**Foundational**	**Standard**	**Mature**
Access	✓	✓	✓
Basic quality measures	✓	✓	✓
Formalization		✓	✓
Cost efficiency			✓
Clinical excellence		✓	✓

This is critical to developing scaffolded solutions that remain within reach for players at varying levels of maturity, while holding cost and access as essential design constraints alongside quality.

Cohorting of patient groups helps align resources with impact.

Value-based care design requires intent, depth and realignment of resources towards the quality objective. It necessitates critical mass of population and stakeholder alignment on inputs, measures and benefits such that quality-based differentiation may be enabled and continual improvement may be encouraged.

Cohorting of population groups helps to re-prioritize resources and tailor interventions. In the context of India's shifting demographic and disease profile and its likely impact as a multi-fold increase in our healthcare needs and expenditure, EY-Parthenon has undertaken an illustrative attempt to plot patient groups along the following dimensions.

At the outset, we should be proud of the fact that Indian healthcare delivers quality and affordability unmatched by much of the world. That said, if we are to truly leapfrog global health systems, we need to build on this foundation by setting clear quality benchmarks, ensuring right care is delivered across hospitals and encouraging hospitals and insurers to work together rather than at cross purposes. Equally important is advancing preventive care through AI and analytics, aiming for price transparency without rigid controls and enabling insurance penetration at scale. With the right investment-linked incentives, India has the opportunity to expand quality capacity across the country and create a more sustainable, future-ready health ecosystem.

Krishnan Akhileswaran
Group CFO, Apollo Hospitals Enterprise Limited

Dimension	Interpretation	Sub-metrics	Relevance
Longitudinal impact of intervention	The **greater** the impact of intervention on a patient group's state on sub-metrics → the **higher their position** on the X-axis	▪ Impact on co-morbidity progression	▪ In our estimate of the growth in national expenditure discussed in Chapter 1 of this report, prevalence of co-morbidity was a fulcrum driver of growth in hospitalization
		▪ Impact on national product	▪ Early onset of chronic diseases and rise in risk factors among <40 years age group impact the health of our workforce ▪ Solving for the resulting productivity loss would be a key imperative for India as it forges its path towards Viksit Bharat
		▪ Impact on mortality	▪ Solving for loss to life is the core responsibility of a health system
Ability to influence change on quality of healthcare	The **greater** the ability of a health system to influence change on the quality of healthcare for the patient group → the **higher** its score on the Y-axis	▪ Coverage under insurance	▪ Implies ability to deliver impact through provider incentives and connected care continuum under a unified construct
		▪ Ability to standardize care pathways and quality measures	▪ Existence of credible, well-documented and agreed upon pathways and quality measures drive a higher ability to influence change ▪ Ease of creating formalized and standardized pathways and metrics indicates higher potential for change
		▪ Ability to align provider incentives to invest in quality	▪ High fragmentation in provider ecosystem can limit ability to drive, monitor and enforce change ▪ Provider benefits such as reimbursement values or ability to differentiate clinical outcomes can drive greater willingness for action
		▪ Degree of patient dependence on outcome achievement	▪ Chronic disease management relies on patient adherence and treatment continuity ▪ The more susceptible a disease journey is to drop-offs, the weaker is a health system's degree of control over outcomes
Current size of population	The larger the size of a patient group, the larger the size of the bubble		▪ Measure of scale

Various patient groups were plotted for this exercise to identify potentially homogenous target groups most amenable to focus on and prioritize to establish early success stories over the medium term as India embarks on this journey towards accountable care.

These patient groups have been divided along three attributes:

a) Age-based cohorts

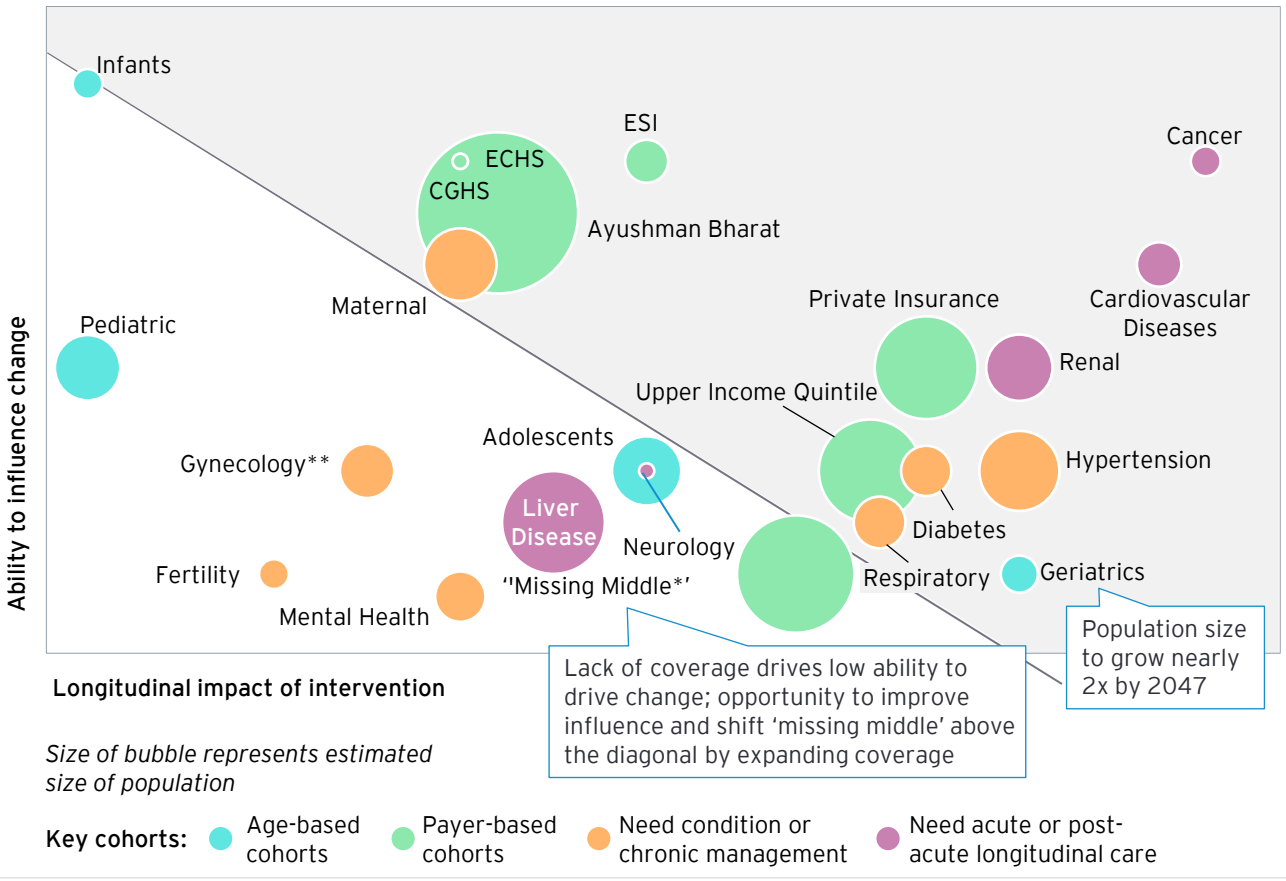
b) Payer type-based cohorts

c) **Disease- or condition-based cohorts:** Disease-based cohorts are further sub-divided into (i) those who need condition or chronic management (ii) those who need acute or post-acute longitudinal care While population groups within these attributes are exclusive, they may overlap across attributes. Given this, collectively, they may not add up to 100%.

The chart below shows the result of this illustrative exercise.

Illustrative cohorting of patient groups

Patient cohorts split into four distinct groups; do not add up to 100% of population



Source: EY-Parthenon analysis, Report of the Technical Group on Population Projections, Ministry of Health and Family Welfare, 2021; Global Burden of Disease, 2021, Health Insurance for the Missing Middle, Niti Aayog, 2021, Lancet 2001, 2021, National Family Health Survey-2021, WHO 2002-2025, WHO x Globocan 2018, 2022, National Health Accounts, 2022, Independent peer-reviewed clinical studies, published in the European and British journals of General Practice, The American College of Obstetricians and Gynecologists, Mayo Clinic: evaluation of insurance products by State and major private providers, National Mental Health Survey, NIMHANS, 2025, Pradhan Mantri National Dialysis Programme, 2025, Press Information Bureau

Note: CGHS - Central Government Health Scheme, ECHS - Ex-Servicemen Contributory Health Scheme, ESI - Employees' ;'Missing Middle' are middle of pyramid individuals who are not covered under any insurance- as defined by Niti Aayog in "Health Insurance for the Missing Middle", 2021; Upper Income Quintile assumed to have partial insurance penetration of private insurance as reported in same Niti Aayog report (2021); Gynecology ** - includes addressable population which older than 40

The chart above showcases an illustrative roadmap to potentially sequence planning of solutions to deliver high impact and efficient deployment of resources, as we move towards accountable care.

Clinical excellence: Regulating for trust via a central authority

India's clinical excellence framework will need to solve for the triple problem of adoption of common standards, enforcement and tiering.

India's healthcare system has expanded rapidly in scale. But quality and accountability remain uneven. Quality assurance even today remains a predominantly voluntary endeavor. The onus lies with individual hospitals to uphold clinical and non-clinical standards, which when consistently applied can lead to improved patient outcomes over time.

As discussed in the previous chapters, multiple central bodies in India, such as NABH, NABL, NQAS and even ICMR have been accelerating their efforts towards defining in best-in-class global practices customized for the Indian context. Adoption of these standards, however, remains the key challenge in the absence of strong enforcement mechanisms.

Central Body	Initiatives
QCI	Proposed Hospital Grading Framework to help patients make informed choices and enable healthcare organizations to differentiate.
NABH	Specialty-specific accreditation programs (e.g., collaboration with RSSDI for diabetes care and promotion of NABH Allopathic Clinic Accreditation Standards
ICMR	Publication of Standard Treatment Workflows (STWs) across multiple specialties to standardize clinical care.

The GoI has, in the past, made efforts to establish a nationwide framework to promote the adoption of minimum standards and mandatory registration across India's fragmented healthcare provider landscape through the Clinical Establishments Act, 2010. However, since health is a State subject under the Constitution and the Act was enacted under Article 252(1) - which requires individual States to formally adopt it via a resolution - its adoption has remained limited.

Key stakeholder interactions have also articulated the need for a framework to recognize institutions which are delivering global best-in-class outcomes and thus a formal process to recognize and differentiate centers-of-excellence.

India's healthcare system has made remarkable strides, with sophisticated treatment protocols, cutting-edge technology and readily available world-class clinical expertise. These advancements have enabled Indian hospitals to deliver outcomes comparable to the best global medical centers.

At this pivotal moment, it is essential to promote public reporting of clinical outcomes and foster greater transparency. Accreditation agencies have already collaborated with hospitals to embed quality, safety, measurement and reporting systems into their processes. The next step is to co-create a robust platform for public reporting of clinical outcomes.

Such transparency will empower patients to make informed decisions when choosing their healthcare providers. Indian hospitals are now well-positioned to offer high-quality, evidence-based, personalized treatment with improved access and affordability.

Healthcare providers, accreditation bodies, policymakers and technology partners must come together — to build a transparent, patient-centric healthcare ecosystem. By embracing innovation and operational efficiencies, we can drive continuous improvement and deliver cost-effective, high-value healthcare.

Prof. Anupam Sibal
Co-Chair, FICCI Health Services Committee and Group Medical Director, Apollo Hospitals Group

Strong legislative mandates, centralized authority, arms-length constructs, robust enforcement powers and resourcing have been employed to drive quality excellence in other Indian sectors as well as global health systems.

Lessons on independence and empowerment driving quality embedment and assurance may be drawn from the examples of other Indian bodies as given below:

Industry	Regulator	No. of providers	Key interventions	Impact	Lessons for healthcare industry
Food & Beverages	FSSAI	2,00,000+ food businesses/ 48,00,000+ food businesses as in 2021	▪ Recalling 400 million+ packets of instant noodles ▪ Unified food safety standards ▪ Nutrition information for awareness	▪ 95% reduction in food safety incidents ▪ Increase in licensed food businesses to 8 million+ ▪ Improved export competitiveness	Single authority with scientific panels and a Center–State enforcement spine Enacted under Union List powers for food adulteration; embedded statutory tools such as universal licensing, search and seizure and a codified recall procedure
Consumer products, systems and services	BIS	50,000+ textile, electronics and industrial units	▪ Mandatory certification for 150+ product categories ▪ Elimination of substandard products to protect consumers ▪ Industry-wide upgrades to meet BIS specifications	▪ Manufacturing defects complaints reduced by 60% ▪ Textile export rose by 15% ▪ Electronics sector achieved US$75 billion in production	Enactment under Union List Entry 50 empowered Center to mandate Standard Marks through Quality Control Orders (QCOs) Also gave authority to search, seize and prosecute violators

A similar approach in healthcare – with centrally notified minimum standards and state-supported inspections – could potentially be explored to drive consistent clinical outcomes nationwide.

“

Value-based care in India must put the patient at the core where access, affordability and accountability converge. Evidence-based diagnosis and treatment planning should guide clinical pathways, with appropriateness of care standards embedded across the ecosystem. Reimbursement models must evolve from volume to outcomes, incentivizing quality over quantity. Accreditation and public reporting systems should reflect measurable outcomes, empowering patients to make informed choices. Insurance innovation covering longitudinal care, sharper quality-linked products and broader nursing home adoption can accelerate this shift. Digital health and AI can serve as powerful enablers for continuous monitoring and transparent reporting. Most importantly, a cross-stakeholder framework defined by independent bodies with common metrics can harmonize care delivery. Providers, too, must embrace a culture of outcome reporting and new doctor engagement models. Listening to the patient’s voice is critical; only by addressing their lived challenges can MedTech truly transform care into a value-driven, patient-centered system.

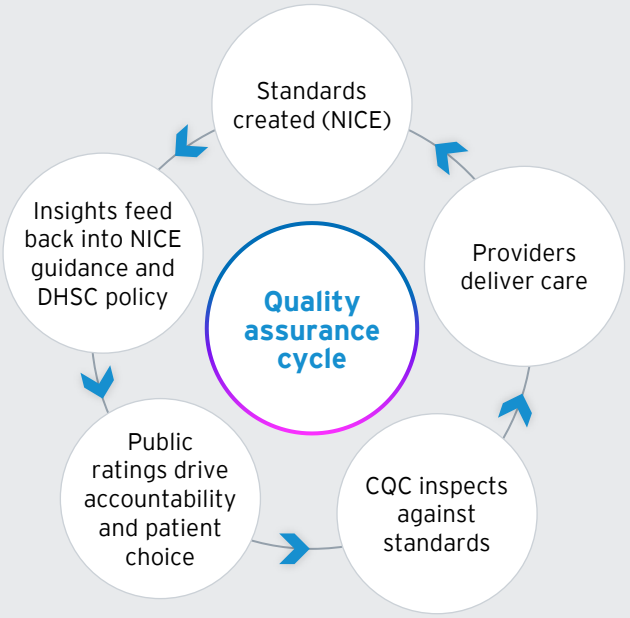
Himanshu Baid
MD, Poly Medicure Limited

Even in the UK, arms-length bodies (NICE and CQC) with clear mandates and enforcement teeth have been deployed to drive the implementation of the quality agenda.

a) **NICE – National Institute for Health and Care Excellence:** NICE is an advisory body, established in 1999 with a mandate to develop evidence-based clinical guidelines, health technology appraisals and quality standards for the NHS. While accountable to Department of Health and Social Care (DHSC), NICE operates independently. Decisions are based on clinical and economic evidence. Its guidance is binding on NHS organizations. Commissioners and providers must adhere to NICE-approved protocols and technology appraisals.

b) **CQC – Care Quality Commission:** CQC is a statutory regulator, established in 2009 with a mandate to register, inspect and regulate healthcare and social care providers. It functions independently of ministers but reports annually to Parliament via DHSC. It is empowered to issue warnings, impose conditions, suspend or cancel provider registrations and mandate improvement actions. It helps in enabling transparency and publishes provider ratings (Outstanding, Good, Requires Improvement, Inadequate), which are accessible to the public.

The UK model differentiates standard-setting from enforcement. While NICE defines what good care looks like by issuing clinical protocols, cost-effectiveness appraisals and quality benchmarks, CQC (Regulation and Compliance) ensures providers deliver care safely and effectively through inspections, ratings and enforcement. Together, they aim to create a comprehensive quality assurance cycle.



Key lesson for India

India currently has partial equivalents (CEA for registration of providers, NABH for voluntary accreditation, MoHFW/ICMR for issuing Standard Treatment Guidelines (STGs). There is a need to consolidate efforts and strengthen them for adequate coverage, depth and adoption. Lack of monitoring and feedback mechanism demands creation of independent bodies to enable a full circle of quality assurance to build trust among patients, enable continuous quality improvement and establish a minimum standard of quality that is maintained across the length and breadth of the country.

“

In my opinion India’s healthcare must now focus on value and not just volumes. We need evidence-based diagnosis, appropriateness standards and reimbursement linked to outcomes. Accreditation should measure real results with mandatory public reporting. Only then this can empower patients and insurance innovation can drive quality choices. An independent body should define minimum clinical and cost standards, while providers build a culture of outcome reporting and patient voice. Digital health is the enabler — but the critical ask is simple: measure, report and reward quality.

Dr. Mradul Kaushik
Senior Director, Operations and Planning, Max Healthcare

Care quality commission (CQC, UK)

The CQC is the independent regulator of health and social care services in England. It conducts comprehensive inspections of both NHS and independent (private) hospitals to assess the quality of care provided. These inspections are based on five key questions:

01. Are services safe?

- Protection against improper treatment
- Evaluating the risks to patient safety
- Reviewing medicine prescriptions
- Evaluation of safety incidents and how they were handled
- Determining learning curve from incidents and how they have improved

02. Are services effective?

- Delivering evidence-based treatment
- Assessing need and monitoring outcomes
- Assessing the competence of staff and collaboration among staff
- Determining how services promote health and well-being.
- Ensuring patients give informed consent

03. Are services caring?

- Evaluating how staff demonstrate kindness and respect in their interactions.
- Assessing how patients are involved in decisions regarding their care
- Ensuring that patients' privacy and dignity are maintained

04. Are services responsive to people's needs?

- Protection against improper treatment
- Evaluating the risks to patient safety
- Reviewing medicine prescriptions
- Evaluation of safety incidents and how they were handled
- Determining learning curve from incidents and how they have improved

05. Are services well-led?

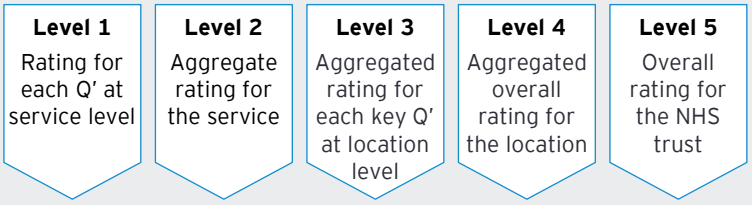
- Evaluating the effectiveness of leadership in driving quality care
- Assessing the clarity and communication of the organization's vision and strategy
- Reviewing the organizational culture and its impact on care.
- Determining the effectiveness of governance and management structures
- Evaluating how risks and performance are managed
- Assessing the handling and use of information
- Reviewing how staff and patients are engaged and involved.
- Determining how the organization fosters learning and innovation

CQC Hospital Ratings System

CQC rates hospitals on the above questions providing a clear indication of the quality of care provided by hospitals. To provide more granularity, CQC assigns percentage scores within each rating category. This scoring system helps to identify how close a service is to achieving the highest standards.

CQC also provides ratings at different levels to offer detailed insights and provide a hierarchical structure to assess and compare different aspects of hospital services. CQC also provides ratings at different levels to offer detailed insights and provide a hierarchical structure to assess and compare different aspects of hospital services.

Rating	Description	Score
Outstanding	The service is performing exceptionally well	88%-100%
Good	The service is performing well and meeting expectations	63%- 87%:
Requires Improvement	The service is not performing as well as it should and requires improvement	39% -62%
Inadequate	The service is performing badly and requires significant improvement	< 39%:



Publishing the inspection findings

CQC rates hospitals on the above questions providing a clear indication of the quality of care provided by hospitals. To provide more granularity, CQC assigns percentage scores within each rating category. This scoring system helps to identify how close a service is to achieving the highest standards.

CQC also provides ratings at different levels to offer detailed insights and provide a hierarchical structure to assess and compare different aspects of hospital services. CQC also provides ratings at different levels to offer detailed insights and provide a hierarchical structure to assess and compare different aspects of hospital services.

Sources: https://www.cqc.org.uk/about-us/how-we-do-our-job/five-key-questions-we-ask
https://www.cqc.org.uk/guidance-regulation/providers/assessment/assessment-framework
https://www.cqc.org.uk/guidance-providers/healthcare/key-lines-enquiry-healthcare-services

Continuous monitoring and enforcement

After inspections, if providers fall short of standards without posing immediate safety risks, the CQC mandates an Action Plan and monitors progress through follow-ups. Persistent or serious breaches trigger escalating enforcement: issuing warning notices, imposing conditions or special measures, suspending or cancelling registration and, in severe cases, pursuing prosecution and financial penalties. This framework ensures accountability and drives continuous improvement while safeguarding patient safety.

Illustrative outcome measures evaluated by CQC for assessment of quality of healthcare services

i. Domain 1: Preventing people from dying prematurely

- One-year survival from all cancers
- Mortality in 30 days of hospital admission for stroke
- Mortality from cancer*
- Emergency admissions for alcohol-related liver disease

* Cancer includes colorectal, lung, prostate, cervical, ovarian, endometrial, pancreatic, liver and breast

ii. Domain 2: Enhancing quality of life for people with long-term conditions

- Emergency hospital admissions for chronic ambulatory care sensitive conditions
- Complications associated with diabetes
- Proportion of people with hypertension with controlled blood pressure

iii. Domain 3: Helping people to recover from episodes of illness or injury

- Emergency admissions for acute conditions that should not usually require a hospital admission
- Emergency admissions for acute conditions that should not usually require a hospital admission
- Proportion of people with hypertension with controlled blood pressure

PROMs for elective procedures

- EQ-5D (General surgeries)
- Oxford Hip Score
- Oxford Knee Score
- Aberdeen Varicose Vein Questionnaire

iv. Domain 4: Ensuring people have a positive experience of care

- Patient experience of hospital services
- Patient experience of urgent and emergency care

v. Domain 5: Treating and caring for people in a safe environment and protecting them from avoidable harm

- Hospital acquired infections
- Medication errors and adverse drug reactions
- Pressure ulcers in hospital
- Safe staffing levels in hospitals
- Safety incidents reported

There is, thus, potentially a case for a Central Authority at this juncture for India. However, for the success of such a body, it will be imperative to drive adoption via state and provider participation. For a national quality body to achieve widespread adoption and impact, its design must balance authority with collaboration and regulation with support. The following guiding principles can serve as a foundation:

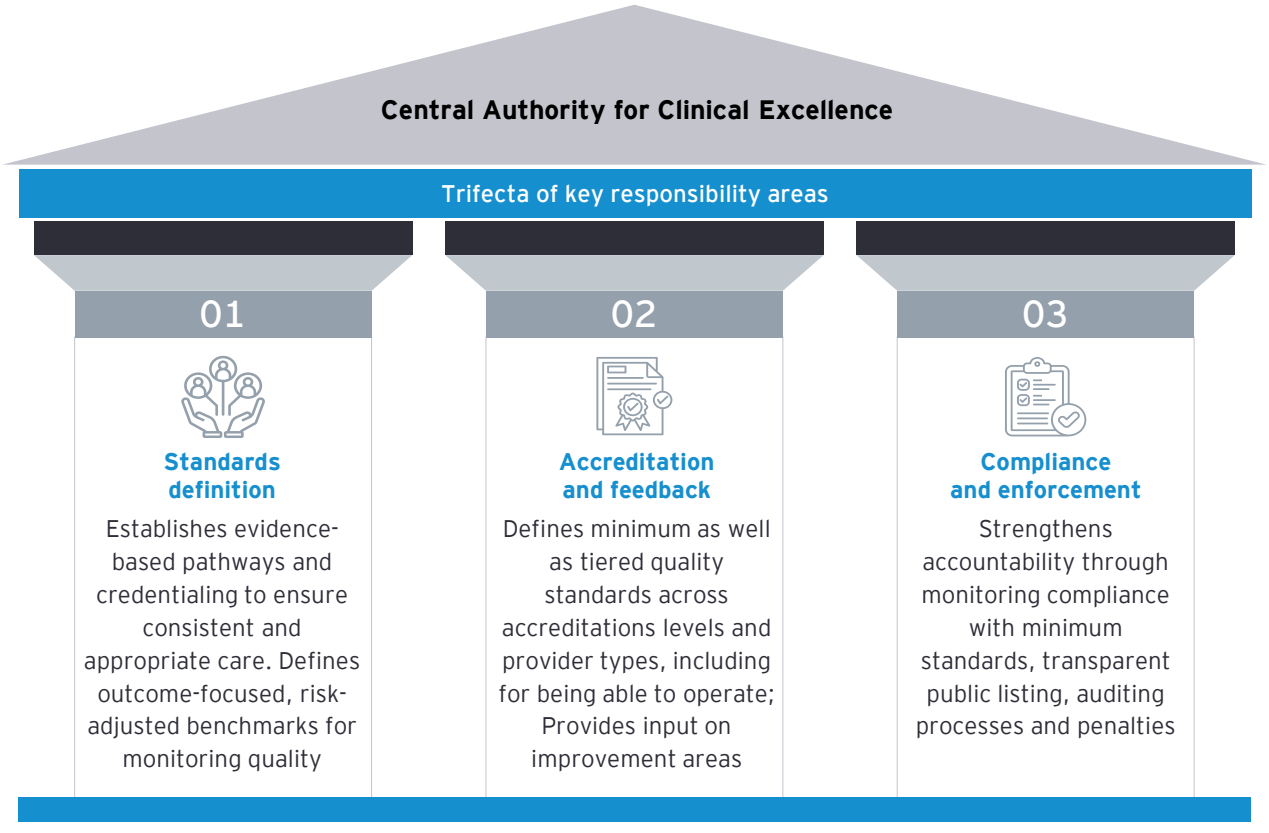
Key guiding principles

Partner, not gatekeeper	Inclusive and industry-led	Empowered and well-resourced	Complementary, not duplicative	Clarity of purpose	Flexibility by design	Strategic intent
Guide providers with support and practical tools, not just enforcement.	Engage diverse stakeholders to ensure trust and operational relevance.	Provide clear authority, funding and technical capacity for compliance.	Integrate existing frameworks to unify efforts and avoid overlap.	Focus on setting standards, measuring quality and ensuring transparency.	Enable phased adoption and tailored benchmarks for varied providers.	Balance accountability with support to improve healthcare quality nationwide.

A Central Authority for Clinical Excellence can potentially integrate current efforts and focus on solving the triple problem of adoption of common standards, enforcement and tiering.

Drawing on insights from the UK and other sectors within India, it is essential to define the foundational responsibility areas of this proposed authority. Designed to function as both an advisory and regulatory authority, its mandate could focus on driving systemic reforms in access, affordability and quality of care nationwide. The structure should reflect global best practices while remaining tailored to the Indian context. Ensuring effective integration of existing frameworks as well as diverse and credible representation on the board will be critical to fostering balanced decision-making, maintaining institutional legitimacy and leveraging existing institutional capabilities.

The Central Authority should be anchored to three critical functions, as given below, each with a clear mandate and accountability framework.



Function	Sub-area	Key scope areas – *Illustrative (Not exhaustive)*
I **Standards definition**	A Continuity and Appropriateness of Care	1. Evidence-based clinical pathways that guide caregivers, care takers and patients on need for intervention or admission 2. Standard Treatment Protocols (STPs) basis Diagnosis-Related Group (DRG) and treatment 3. Minimum infrastructure, staffing and experience standards for high-risk procedures 4. Guidelines for handoffs between providers for continuity of care 5. Defined periodicity for review and updates basis emerging evidence and new technologies or paradigms
	B Quality Indicators and Reportable Measures	1. Mechanisms to enable outcomes measurement (e.g., readmission rates, risk-adjusted success rates, etc.) 2. PROMs framework for mass deployment vs. for curated pathways 3. Key metrics for mandatory reporting 4. Priority treatment areas (ICD codes) for mandatory reporting
	C Workforce Standards	1. Common Privileging and Credentialing framework for clinicians by super specialty, surgery and treatment pathway 2. Credentialing framework for nurses and allied health staff 3. Clinical staff reporting standards for providers
II **Accreditation and Feedback**	D Tiered Accreditations	1. Simplified bare-minimum mandatory accreditation (linked to licensing) requirements to operate 2. Accreditation framework to recognize global or national best-in-class outcomes and scale or Centers of Excellence
	E Feedback Loops	1. Structured feedback loops to drive improvement basis periodic physical assessment and review of shared clinical data
	F Technology Integration	1. Integrated system to capture quality matrix 2. Standardized template for data capturing
III **Compliance and Enforcement**	G Auditing Mechanisms	1. Audit trail for any amendments in clinical data with reasoning 2. Ability to validate data shared with regulator/ Surprise audits
	H Enforcement and Penalties	1. Penalty for consistent lapses 2. Reward for commitment to quality basis outcome metric tracked
	I Public Listing	1. Publication of quality ratings on government website and hospital website

A robust regulatory framework for private healthcare is considered a necessity and could integrate a national tariff system with transparent and itemized billing, standardized treatment guidelines to ensure equity and targeted incentives to expand services in underserved regions. An autonomous regulator could oversee accreditation, sentinel event reporting, cashless claim settlement within a stipulated time and comprehensive outcome reporting, while enforcing the Charter of Patients' Rights. With the addition of an independent Ombudsman, this framework can also establish national benchmarks for quality, transparency and accountability. The role played by central regulatory bodies in handling COVID-19 epidemic is a testimony that this concept is viable.

Lt Gen (Dr.) AK Das, AVSM
Institute Body Member, AIIMS Kalyani

Cost consciousness: Balancing quality-cost through policy enablement

The quality-cost balance equation for India implies solving for market inefficiencies that have hampered private sector expansion; the role of policy and government in driving such solutions is likely to be pivotal

Indian healthcare is expected to continue to rely on the private sector and eventually universal health cover to drive expansion of care provisioning capacity. In a resource constrained environment, where both consumer paying capacity as well as government budgets are potentially limited, it thus becomes critical to solve for market inefficiencies such as:

- Those inhibiting infrastructure creation in underserved areas
- Those inhibiting provision of meaningful health cover to the "missing middle" (the segment not covered by government insurance and cannot afford private insurance)
- Those resulting in potentially unnecessary usage of expensive drugs, implants or equipment
- Those inhibiting uptake of central or state government (AB-PMJAY) schemes

Ensuring the delivery of quality healthcare while maintaining cost-effectiveness remains a critical challenge for healthcare providers and policymakers. India needs a coordinated and strategic approach to quality healthcare delivery that prioritizes accessibility, affordability and feasibility of delivery.

In the context of the growing emphasis on quality healthcare delivery especially in underserved and remote regions, the role of the government becomes pivotal. Policy-level interventions and systemic enablers are essential to drive development and implementation of sustainable models of care delivery that uphold quality without compromising on financial viability.

"Managed care and episode linked payment pilots in select micromarkets for high impact ailments which can have measurable protocols and outcomes, can unlock a new era of collaboration between stakeholders and value for patients. By sharing accountability and costs, care pathways that prioritize prevention, continuity and patient experience can be optimized. These experiments are critical to building scalable models that deliver better health at lower systemic costs and can herald a transformation of clinically and financially viable continuum of care business models in Indian healthcare.

Vivek Goyal
CFO, Fortis Healthcare Limited

The government has already established strong foundational building blocks to address these problems; a concerted and targeted effort to scale these solutions across focus cohorts can accelerate India's journey to health equity.

Function	Sub-area	Existing building blocks	Potential acceleration levers – *Illustrative (Not exhaustive)*
I Unlocking access	A Infrastructure creation closer to demand	Revamped VGF schemes under Department of Economic Affairs with higher limits for Capex and Opex grants and the option of the Central Government also contributing up to 50% share PPP Model frameworks by NITI Aayog for NCD service expansion in district hospitals as well as upgradation to medical colleges Pradhan Mantri National Dialysis Program (PMNDP), operational in 751 districts with 1,731 centers	1. Adopting a cohorting framework at a micromarket level across states 2. Tightening linkages and focus of scheme to "Foundational" and "Standard" micromarket – to accelerate existing schemes in under-served regions
	B Digital innovation to aid access	E-Sanjeevani program scaled by government for tele-consultation ▪ Hub and spoke model ▪ Includes both doctor – doctor and patient-doctor interactions ▪ >13 crore tele-consultations during November 2023–November 2024	1. Deploying enabling policy for rapid but safe deployment of technology led solutions across the patient journey a. Screening and initial consultation: AI based symptom assessment and tele-consultation b. Diagnostic evaluation: Tele radiology and tele pathology c. IP services: Tele surgery and Tele ICU d. Post discharge care: Remote monitoring devices/ POCT devices like CGM devices

Source: https://dea.gov.in/viability-gap-funding-vgf-scheme, https://pmndp.mohfw.gov.in/en , https://esanjeevani.mohfw.gov.in/#/about

Function	Sub-area	Existing building blocks	Potential acceleration levers – Illustrative (Not exhaustive)
II Enabling affordability	C Cost effectiveness analysis of health technologies	Health technology assessment India (HTAIn) set up under Department of Health Research to analyze cost effectiveness of health technologies	1. Collaborating with private sector for both HTA focus areas and implementation 2. Widening range of topics for frugal innovations (e.g., evaluation of reuse of Single-use devices or SUDs) 3. Reviewing cost effectiveness of care pathways/ high-end therapies or items
	D Focus on "Missing middle" for health insurance	Structure for large scale healthcare insurance scheme (Ayushman Bharat) Structure for standardized product for basic insurance (Arogya Sanjeevani)	1. Creating customized basic insurance product with focus on out-patient services and preventive care 2. Evaluating expansion of Ayushman Bharat program with co-pay for "Missing middle" cohort 3. Exploring scaled adoption of Arogya Sanjeevani through PSUs – for instance, through proposed composite licensing for LIC or existing insurers partnering with PSUs with deep interiors reach
III Driving feasibility	E Initiatives to lower supply chain costs	Model for central negotiations and purchase for drugs (Jan Aushadhi)	1. Exploring government-backed GPO/ Jan Aushadhi channel for private hospitals a. Ensuring consistent supply at right prices from credible government approved suppliers for smaller hospitals b. Country-wide risk sharing agreements with manufacturers of innovative technology/ drugs linked to outcomes 2. Exploring zero-rating of healthcare services and enabling full ITC on inputs
	F Right pricing of government schemes	Costing studies conducted by HTAIn	1. Increasing private sector participation in costing studies to comprehensively capture heterogeneity of their cost structures 2. Linking lowest payouts in Government schemes to viable levels

"To truly deliver accountable care, we must embed robust checks and balances that ensure effective implementation at every level. Fostering outcome-based contracts, with risk sharing and transparent monitoring – between providers, suppliers and insurers can drive collective responsibility for results. Maximizing utilization of high-end infrastructure requires enabling policies for shared infrastructure models that unlock access and efficiency. Most importantly, we must make data dance for us – by integrating clinical decision support systems and AI into daily workflows, we can transform information into actionable insights, empowering every stakeholder to achieve better outcomes at lower cost for all.

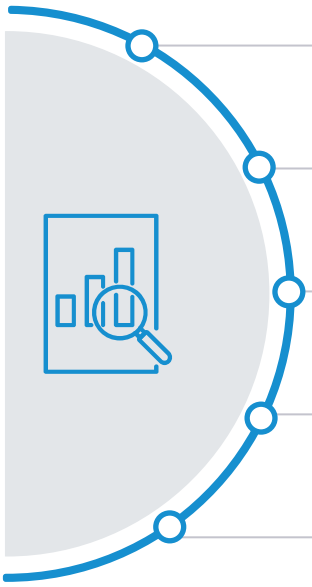
Dr. Shravan Subramanyam
MD, BPL Medical Technologies Private Limited

Patient journey

Screening and initial consultation	Diagnostic evaluation	IP stay – surgery/ medical mgt.	Post discharge care
Typical challenges in access			
▪ Accessible at rural PHCs/ at taluka hospitals	▪ Limited at rural PHCs ▪ Travel to taluka/ districts	▪ Limited at talukas ▪ Travel to district/ near-by cities	▪ Limited; dependent on frequent visits to districts
Potential technology solutions			
▪ AI-based symptoms assessment ▪ Tele-consultation	▪ Tele-pathology ▪ Tele-radiology	▪ Tele-ICU ▪ Tele-surgery	▪ Remote monitoring ▪ POCT, wearables like CGM devices

Enabled by strong regulatory and accountability framework

Illustrative five-point framework for reusability policy brief



What to reuse?

Proposed set of items where re-use of SUDs do not significantly impact quality

How to reuse?

Best-in-class sterilization practices - immediately post use and at Central Sterile Supply Department (CSSD)

How many times?

Ideal reuse frequency post which quality is not acceptable

When to discard?

Condemnation policy guidelines for quality check before usage

How to track?

Best-in-class methodologies to track reuse frequency by item

S No.	Item category	Consumption in select clinician cohorts	Potential discretionary usage play*
1.	Pulmonary artery catheter	▪ Usage across all CABG cases	▪ Guideline based usage ▪ Management of complicated MI ▪ High-risk patients as per clinical assessment
2.	DVT prophylaxis	▪ Usage of both pharmacological prophylaxis (Enoxaparin) and mechanical prophylaxis (DVT pumps) on all Cardiac surgery and TKR cases	▪ Indication-based prophylaxis protocol E.g., UK NICE guideline NG89
3.	Anti-bacterial prophylaxis	▪ Usage of high end anti-bacterial drugs for prophylaxis ▪ E.g., Usage of Cephalosporin Class 3 drugs (Cefoperazone Sulbactam) for prophylaxis in TKR for all patients	▪ Usage of Cephalosporin Class 1 or 2 (Cefuroxime) drugs for prophylaxis – as per National treatment guideline 2016 MoHFW
4.	Pain management	▪ Usage of nerve blocks along with high dosage of analgesics for all patients	▪ Conditional usage of nerve block (case specific assessment)
5.	Foam dressing	▪ Usage of high-end dressing on all surgical cases	▪ Case specific protocol/ usage

* Basis discussions with clinicians from leading hospitals chains

“

World-class healthcare is never built on bargains. Lasting outcomes demand shared investment by patients, providers, payers and policymakers. True accountability lies in rewarding quality and when every stakeholder values health as deeply as cost, we unlock a future where world-class care is within everyone’s reach.

Raj Gore
Healthcare Industry Leader

Care reimbursement: Tiering payout based on quality, infrastructure and service

The need for a tiered reimbursement framework anchored on a scientific grading system has been clearly articulated by various stakeholders and has also been seen globally to be one of the most effective levers towards incentivizing a mindset shift towards quality

Approximately 80% of patients surveyed believed that standardized grading would strengthen their trust in hospitals and clinicians. As mentioned earlier, key stakeholder interactions have also articulated the need for a framework to recognize and differentially reward institutions delivering high quality of outcomes and clinical excellence.

Grading systems like the one used by the JKN scheme in Indonesia offer a clue as to a potential template for a similar system in India. The JKN grading system considers three basic modifiers: the capability levels of facilities, the geography driven input costs and the severity of the diagnosis. These modifiers are then used to calculate a customized reimbursement rate. This customization ensures fair compensation to the healthcare facility that covers input cost variability and enables viability of operations.

A simple grading system that integrates capability with quality can potentially drive adequate differentiation; especially when combined with clear Centre of Excellence definition and additional reimbursement modifiers basis geography and complexity

EY-Parthenon has proposed a simple grading system that groups hospitals based on capability and quality, into six types which will further form the basis of tariff bands. This is to ensure that input investments and quality levels are appropriately differentiated.

Illustrative facility tiering framework:

Capability of facility	×	Quality of care	=	6 Facility Types
Tier 1		Advanced		
Tier 2		Standard		
Tier 3				

Capability levels based on:

1. Level of medical infrastructure
2. Breadth and depth of specialist availability
3. Level of digitization and usage of clinical decision assist tools
4. Presence and activity of multi-disciplinary care teams

Quality levels based on:

1. Accreditation status (Entry-level NABH → Full NABH → JCI)
2. PROMs and patient satisfaction reporting
3. Independent audit validation
4. Clinical outcomes (readmission rates, mortality indices, infection control)

“

The current pace of innovation and their adoption to serve our patients with best clinical outcomes is the mantra for today's healthcare. This, supported by digitalization and big investments is gearing the industry for a brighter future. Clinical practice would no more be adequate without a decent investment of time for multidisciplinary teamship, audits, research, academic and leadership programs. The 'star doctors' of today have to give way for 'star teams'. They would be happy to lose their identity to stand in the line, with their agile, progressive, missionary teams leading the way.

Dr. Harit Chaturvedi
Chairman, Max Institute of Cancer Care

Capability of facility	Illustrative definition metrics
Tier 1	▪ Cutting-edge medical infra. (Robotics, advanced diagnostics, etc.) ▪ Multi-disciplinary care teams active in at least top three therapy areas (Cardiac, oncology, transplant, etc.) ▪ Fully integrated EMR systems
Tier 2	▪ Advanced medical infra ▪ Sub-specialization / multi-disciplinary team available in at least 1 specialty ▪ Digitized HIS systems
Tier 3	▪ Standard medical infra ▪ Multispecialty availability

Quality of care	Illustrative definition metrics
Advanced	▪ Full NABH accreditation and JCI accreditation preferred ▪ Audited minimum threshold performance across at least three PROMs ▪ Audited minimum threshold performance across at least eight CROMs
Standard	▪ Entry-level NABH accreditation ▪ Audited minimum threshold performance across at least four CROMs

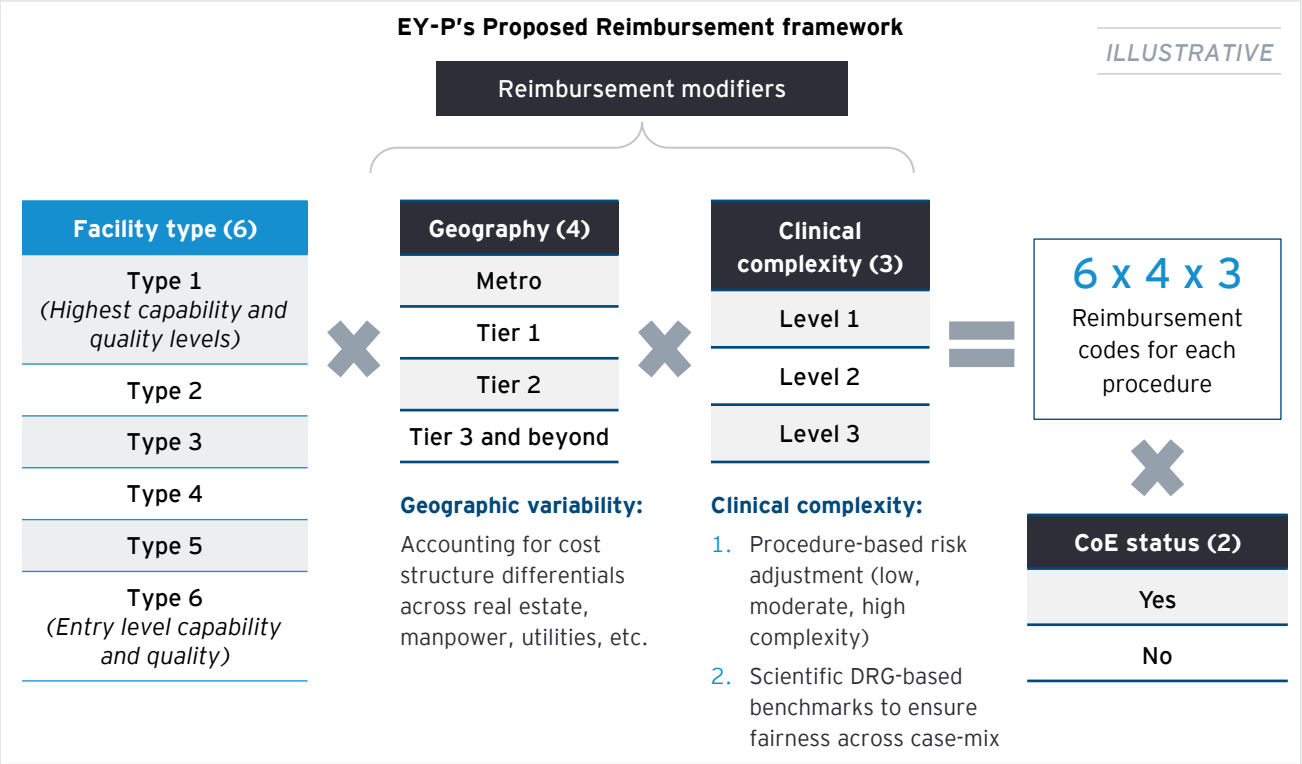
Further, to account for the variability in cost of capital and real estate as per geographic location as well as accounting for complexity of the disease, reimbursement modifiers can be introduced. These modifiers will have weightages associated for each category which could account for the differences in cost structures across geographic locations and the severity of disease to ensure justifiable variances in reimbursement levels beyond only the hospital capability and quality.

A Centre of Excellence modifier can also be kept as an optional modifier which can be used in exceptional cases where there is depth in specific specialties which is exemplified by equipment, infrastructure, research, affiliations, etc. Such facilities also cater to a larger volume of patients which includes a significant portion of medical tourism. They are characterized by exceptional medical outcomes and a modifier will ensure they are compensated accordingly for bringing excellence in care.

Illustrative definition of a Centre of Excellence:

Cutting edge offering and depth of capabilities	Sub-specialized and multi-disciplinary clinical team	Demonstrated clinical and thought leadership	Large scale, complexity of operations	National or global recognition
High-end medical equipment available under one roof	Clinicians with requisite sub-specialty training/ expertise	Clear research and academic thrust; clinical innovations	Top three by volume regionally; high medical tourist flow	Part of recognized global forums or institutions
Comprehensive availability of treatments and services	Demonstrated team approach to care	Outcomes in-line with global best-in-class benchmarks	Complex work share in-line / better than global CoEs	Global best-in-class accreditations

Source: EY-Parthenon analysis



Source: EY-Parthenon analysis

Government schemes such as Ayushman Bharat and even CGHS recently have already moved towards tiered pricing basis differences in input costs by city tier and basis accreditations like NABH and NQAS. The private insurance sector though may not yet have a formalized system of scientifically assessing and linking reimbursement rates to input costs as well as quality indicators or outcomes.

EY-P's proposed framework can potentially reduce the significant pricing variability today across hospital types and bring in a more structured, fair and transparent regime

EY-P's illustrative framework solves for a meaningful differential based on the facility type and modifiers to ensure fairness while also rewarding quality and outcomes. This framework gives an illustrative working mechanism for reimbursements which could perhaps be tested out in the private insurance framework.

Publicized GIPSA tariffs currently have significant tariff variations across different geographical regions as well as hospital types. Solving using a simple least squares regression method, EY-Parthenon estimated suitable reimbursement modifier weights basis the sample analyses of rates across 90 hospitals in 15 cities.

"

The next wave of healthcare transformation in India must be anchored in value-based care, where patient outcomes, not volumes, define success. To achieve this, we need a fundamental shift in how care is incentivized, moving from uniform tariffs to differentiated reimbursement models that reward quality and clinical excellence. Providers must equally invest in building a culture that celebrates transparency, outcome reporting and more collaborative doctor engagement. Digital health tools ranging from remote monitoring to advanced analytics can be powerful enablers, not as an end in themselves but as systems that empower patients and clinicians to make better decisions. Above all, we must keep the patient's voice at the heart of this journey. Addressing their lived challenges and unmet needs is not just a moral imperative it is what will ultimately drive sustainable, high-quality healthcare delivery in India.

Amit Somani
Director, Commercial Management at Yashoda Healthcare Services Limited

CGHS rate revision: A step towards structured tiering in Indian healthcare

On 03 October 2025, the Directorate General of CGHS issued a landmark circular revising package rates for empaneled healthcare organizations (HCOs), effective 13 October 2025. This move introduces a structured, tiered reimbursement framework that aligns closely with the principles proposed in EY-P's framework.

Key Highlights of the CGHS 2025 circular:

1. **Differential pricing based on accreditation:** Non-NABH/NABL HCOs to be reimbursed at 15% lower rates than accredited ones
2. **City-based tiering:** Tier II cities (Y) receive 10% lower rates and Tier III cities (Z) 20% lower than Tier I (X)
3. **Super Specialty uplift:** Rates for super specialty hospitals are 15% higher than NABH-accredited peers
4. **Ward-based adjustments:** General ward: -5%, Private ward: +5% on base semi-private rates
5. **Multiple procedure logic:** Second surgery reimbursed at 50%, third and subsequent at 25% of package rate

While the above variations have been introduced along with detailed annexures – reimbursements for consultations, radiotherapy, investigations, day care procedures and minor procedures not involving inpatient admission remain consistent across all three hospitals types.

List of Tier I (X) cities		
Hyderabad (UA)	Pune (UA)	Bengaluru (UA)
Mumbai (UA)	Ahmedabad (UA)	Kolkata (UA)
Delhi (UA)	Chennai (UA)	

Source: F.No.5-16/CGHS(HQ)/HEC/2024(Part-I) (Comp No. - 8365027)

Implications for sectoral reform

CGHS's initiative sets a precedent for national payers and private insurers to adopt transparent, differentiated pricing models. It also reinforces the urgency for providers to invest in quality, accreditation and digital enablement to unlock fair reimbursement bands.

"In the constantly evolving landscape of healthcare, creating better patient health outcomes relative to the cost of care is a goal that most stakeholders across the healthcare system can target in order to create a more sustainable healthcare system. Patient centered care both on the private and public healthcare can only be driven through evidence-based practices and monitoring of clinical outcomes. As India evolves its healthcare ecosystem from a population health management perspective it needs the alchemy of healthcare providers, Clinicians, Insurance and the government to think collectively that quality and quantity of healthcare offerings need to move in tandem towards the deliverable of accountable care, that the focus on affordable care is not just centric to costs but needs a multi-pronged effort on the quality front too.

Vishal Bali
Executive Chairman, Asia Healthcare Holdings

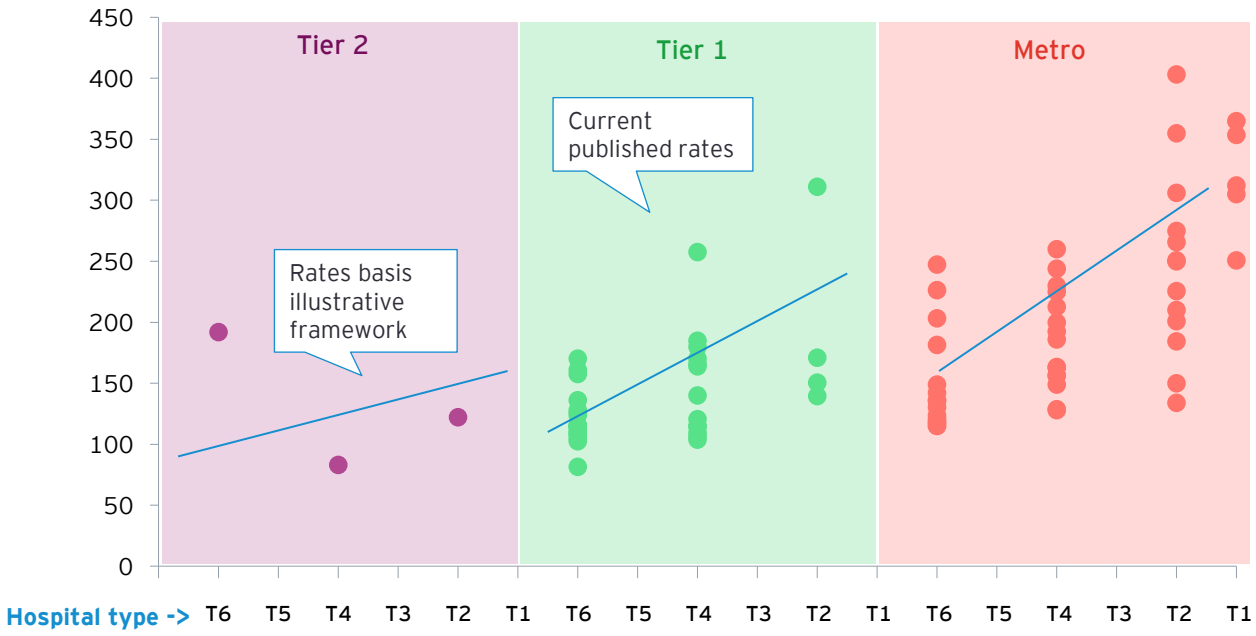
Calculated and rounded reimbursement modifiers using least squares regression

Facility Type	Weightage
Type 1 (Highest Capability and Quality)	2.0
Type 2	1.5
Type 3	1.6
Type 4	1.25
Type 5	1.3
Type 6 (Entry Level Capability and Quality)	1.0

Geography	Weightage
Metro	1.3
Tier 1	1.15
Tier 2 and below	1.0

The resulting implied reimbursement rates have been plotted in the chart below versus the current published rates, highlighting the potential of such a system to bring in a transparent, scientific mechanism to defining the reimbursement rate.

GIPSA CABG tariff trends (GW) across hospital and city types (Analysis of rates across ~90 hospitals across 15 cities and potential for harmonization using illustrative methodology – assuming Complexity Level 1):



The above assessment assumes the lowest base tariff would be applicable to Type 6 hospitals (higher secondary care with standard quality parameters). The base tariff can be referenced from CGHS or any other acceptable tariff floor which offers reasonable margins at the lowest cost structure as a starting point. Quaternary care hospitals with advanced quality parameters based in metro cities can earn approximately 2.6 (2.0 x 1.3) times the base tariff with the above proposed reimbursement mechanism. Additional reimbursement modifiers can be added based on case complexity with inputs from a regulatory body.

CABG: Actual GIPSA tariff comparison vs. calculated tariff via proposed tiering methodology

Facility type *(Weightage)*	Location *(Weightage)*	CoE status *(Weightage)*	Original GIPSA tariff *(INR)*	Base tariff		Facility multiplier		Calculated tariff *(INR)*
Type 1 *(2.0)*	Metro *(1.3)*	Yes *(1.3)*	3,53,600	1,18,100	×	3.4	=	3,99,178
Type 2 *(1.5)*	Tier 1 *(1.15)*	No *(1.0)*	1,40,000	1,18,100	×	1.7	=	2,03,723
Type 4 *(1.25)*	Tier 1 *(1.15)*	No *(1.0)*	1,70,200	1,18,100	×	1.4	=	1,69,769
Type 6 *(1.0)*	Metro *(1.3)*	No *(1.0)*	1,49,000	1,18,100	×	1.3	=	1,53,530

PTCA: Actual GIPSA tariff comparison vs. calculated Tariff via proposed tiering methodology

Facility type *(Weightage)*	Location *(Weightage)*	CoE status *(Weightage)*	Original GIPSA tariff *(INR)*	Base tariff		Facility multiplier		Calculated tariff *(INR)*
Type 1 *(2.0)*	Metro *(1.3)*	Yes *(1.3)*	2,10,700	60,900	×	3.4	=	2,05,842
Type 2 *(1.5)*	Tier 1 *(1.15)*	No *(1.0)*	86,625	60,900	×	1.7	=	99,533
Type 4 *(1.25)*	Tier 1 *(1.15)*	No *(1.0)*	88,400	60,900	×	1.4	=	82,944
Type 6 *(1.0)*	Metro *(1.3)*	No *(1.0)*	74,300	60,900	×	1.3	=	79,170

Additionally, to incentivize data reporting and standardization, there can be an additional payout to the providers who are enabling auditing and publishing of detailed data. A pre-determined template, metrics and frequency can be released by the governing quality authority and providers can have the option to self-enroll in such programs which will entitle them to additional payouts.

Customer empowerment: Enabling informed decision making

Healthcare choices in India have traditionally been driven by word of mouth and clinician legacy, which has led to a disproportionate pull of patients to selective doctors. Such a model has limited basis in evidence and puts higher pressure of healthcare delivery on fewer resources/individuals. There is a need to empower patients enough for them to take better control of their health via informed decision making

Nearly 90% of respondents in the patient survey reported being either very familiar or somewhat familiar with the term "clinical outcomes." Around 75% of them shared they actively consider a hospital's clinical outcomes when choosing where to seek care. However, despite the high level of awareness, there is a significant information gap. In the absence of a single reliable source that provides ratings based on clinical outcomes, only 36% of patients said they were able to find the information they were looking for with ease. A significant proportion (~74% respondents) of patients are already relying on digital sources to fetch information.

With 80% survey respondents mentioning that accessing standardized outcomes would increase their trust in hospitals, it is imperative to have a standardized and regulated source of information to serve the requirements of the modern-day patient. There are three areas which need to be addressed to meet these requirements: Transparency, Clarity and Flexibility (through better Choices).

Function	Sub-area	Potential interventions – Illustrative (Not exhaustive)
I **Improving Transparency**	**A** Minimum data	1. Creation of one profile per provider 2. Linking of data across ABDM, PM-JAY and hospital systems to make such profiles both reliable and machine-readable
	B Visibility	1. Curation of a consumer-grade public dashboard stitched from ABDM, PM-JAY and eSanjeevani feeds 2. Availability in Indian languages, low-bandwidth formats and distributed through kiosks, ASHA networks and awareness campaigns
II **Building Clarity**	**A** Tools and guides	1. Deployment of simple comparison tools to view hospital grades, clinician and provider details, outcomes, cashless eligibility checks 2. Incorporation of key clinical outcome signals into patient journeys, while payers use the same data to steer demand and design value-based contracts 3. Standardized disclosures and product cards for insurance products
III **Expanding Choice**	**A** Bespoke insurance products	1. Coverage across every household through an affordable baseline clinical insurance cover (e.g., a INR5,000 family floater) 2. Preserving the freedom to upgrade service eligibility through top-ups 3. Steerage options – trade-off between premiums and range of network hospitals (within a certain geography or payer-preferred network)

"As India's journey advances towards value-based care, our foremost priority must be keeping the patient at the center. Embedding a culture of quality through transparent outcome reporting, differentiated reimbursement that incentivizes excellence and stronger clinician engagement is vital. Digital innovation can further drive this transformation by enabling insights and amplifying patient voices. I believe such an approach is essential to deliver sustainable, equitable and world-class care.

Dr. Sandeep Budhiraja
Group Medical Director, Max Healthcare

A NIRF institute rankings for empowering students and parents

Key problem statement / brief context

Before 2016, the absence of reliable institute rankings in India led students and parents to rely heavily on brand perception and hearsay for evaluating institutions.

Solution framework

The National Institutional Ranking Framework (NIRF), launched by the Ministry of Education, introduced data-driven, transparent, comparable metrics across institutions. The five ranking parameters were: teaching, research, graduation outcomes, outreach and inclusivity and perception.

1. **Visibility**: Institutions disclosed standardized data on faculty, research and student outcomes. NIRF requires institutions to upload audited data on a central portal, subject to checks
2. **Awareness**: Institutes' use of NIRF rankings for promotions, increased student and parent awareness
3. **Informed decision-making:** Benchmarks on performance, outcomes and inclusivity imbibed confidence in students and parents to take informed decision for higher education
4. **Freedom of choice:** NIRF evolved into 16 category-wise rankings (e.g., Medical, Law, Agriculture) by 2024, enabling tailored comparisons to better inform student aspirations and choices

Outcome achieved

- The model engaged students/parents, institutions, regulators and government to bridge information gaps
- Standardized benchmarks pushed institutions to improve outcomes like research and quality education
- Rankings are being used by students, institutions, regulators and policymakers alike, embedding transparency into the higher education ecosystem

~6,500
Institutions participated

PUBLIC	PRIVATE
~42%	~58%

Of the ranked institutions

~86% increase
In institute participation since 2016 (public + private)

Source: NIRF Report 2024, EY-Parthenon analysis

"For value-based care in India, we need to accept that affordability and outcome measures are two critical pillars and in fact go together to ensure that the centrality of the recipient of care is always first. Certain reimbursement and insurance models are creating a situation where, in specific instances, the choices of care provider and recipient are limited, resulting in increased likelihood of sub-optimal clinical outcomes. In ophthalmology, Cataract surgery with Toric IOL is an example of such a situation.

Outcome reporting within and across organizations can be helpful in benchmarking, leading to guidance for differential reimbursement models.

Dr. Mahipal Sachdev
Chairman and Medical Director, Centre for Sight

B E-Choupal Empowerment Program for farmers' market access and livelihood enhancement

Key problem statement / Brief context

India's agricultural supply chains were dominated by mandis, middlemen and limited information access, causing farmers to have meager bargaining power, low productivity and limited exposure to fair market prices.

Solution framework

A private FMCG player launched **E-Choupal initiative,** with informal state support, setting up internet kiosks run by local farmer leaders, creating a **hybrid *"Phygital"* model to improve transparency, efficiency** and **farmer empowerment**.

1. **Visibility:** Daily access to fair market prices was enabled via digital kiosks
2. **Awareness:** Farmers were trained with better practices, digital literacy and agronomic advice
3. **Informed decision-making:** Support was extended from former mandi agents (samyojaks) and Choupal Hubs for weighing, selling and payment along with assisted access to insurance, health services and agri-extension
4. **Freedom of choice:** Farmers got access to direct alternative buyers, bypassing exploitative mandi middlemen

Outcome achieved

- This model engaged private players, progressive farmers (sanchalaks), former mandi agents (samyojaks), local communities and state governments, fostering an environment of trust and change adoption.
- Farmers received transparent pricing, reduced intermediation costs and improved incomes, while the private FMCG company secured better quality produce at scale and emerged as first choice in the supply chain.
- India's largest rural digital empowerment platforms came into being, reducing information asymmetry and building farmer trust in modern supply chains.

~1m	~2,000	~11,000	4	~US$10m
Farmers onboarded	Kiosks deployed	Villages	States	Invested by the private FMCG company

Source: Secondary research, EY-Parthenon analysis

India requires a robust reporting system with standardized, yet simple metrics which can be consumed across all demographic and vernacular segments ensuring maximum coverage. The reporting system will have to be customized across three main levels of health system maturity which is representative of the current landscape in India – Foundational, Standard and Advanced.

Based on the maturity levels, the reporting requirements can differ which will enable all providers to participate based on their respective capabilities. A roll-out plan will have be designed keeping in mind the feasibility of capturing and measuring the data which can then be scaled and standardized pan-India as the maturity of the overall ecosystem increases over the next few years.

Metric maturity	Applicability	Illustrative metrics	Roll-out plan
Foundational	▪ PHCs ▪ CHCs ▪ Small nursing homes ▪ <50-bed hospitals	▪ Hand hygiene compliance ▪ Biomedical waste segregation ▪ Infection control committee existence ▪ Patient safety reporting (falls, med. errors) ▪ Availability of essential drugs	**Rural + tier 2/3 towns** first (baseline standardization), then scaled nationally
Standard	▪ 50–200-bed secondary care hospitals ▪ Mid-sized private facilities	▪ Surgical site infection rate ▪ HAI rate ▪ 30-day readmission rate (select conditions) ▪ ALOS benchmarking ▪ Nurse/doctor staffing ratios ▪ Patient satisfaction	**Tier 1 cities + large district hospitals** prioritized (where measurement systems feasible)
Mature	▪ Tertiary hospitals ▪ Teaching institutions ▪ Corporate chains ▪ CoEs	▪ Risk-adjusted mortality ▪ PROMs (cardiac, ortho, oncology) ▪ 30-day post-discharge follow-up ▪ Multidisciplinary reviews (tumour boards) ▪ Outcome benchmarking vs registries ▪ Digital maturity (EHR dashboards)	**Metros + CoEs** as pilots; expand to tier 1 and 2 cities progressively

HAI: Hospital Acquired Infection
ALOS: Average Length of Stay

Globally, insurance companies have developed flexible products, curated to serve multiple segments of population based on the type of requirements and affordability. Such modules plans provide a clear tradeoff across service levels, flexibility and pricing. Below is one such example from the US.

Type Of program	Network flexibility	Referral requirement	Cost structure	Service access	Patient experience	Ideal for
Health Maintenance Organization (HMO)	Restricted to a defined network of providers	Mandatory referral from Primary Care Physician (PCP) for specialist visits	Lowest premiums and out-of-pocket costs	Basic preventive care, diagnostics, hospitalization within network	Streamlined care coordination but limited provider choice	Patients seeking affordability and simplicity
Preferred Provider Organization (PPO)	Broad network; out-of-network access allowed (at higher cost)	No referral needed for specialists	Higher premiums; lower costs for in-network services	Full range of services including specialist care, diagnostics, elective procedures	High flexibility and autonomy in choosing providers	Patients valuing choice and willing to pay more
Point of Service (POS)	Hybrid model: in-network preferred, out-of-network allowed with conditions	PCP referral required for in-network specialists; out-of-network access allowed	Moderate premiums; mix of HMO and PPO cost structures	Access to both in-network and out-of-network services with variable reimbursement	Balanced experience with moderate flexibility and cost	Patients wanting a middle ground between cost and choice

In addition to standardizing the reporting metrics, ideally mandated by a centralized authority, there is a need for greater innovation in insurance products for patients to choose from. Below is an illustration of how modular products can be made available to patients in India that addresses the high variability of need and affordability. There can be three categories of products which fundamentally differ in terms of their pricing – Base, Mid-Tier and Premium.

The focus of the base plans would be covering the bare minimum healthcare requirements which includes ensuring clinical coverage maintaining minimum quality standards. Beyond base plans, there can be a modular design of service-wise top-ups which address higher service-level requirements as well as flexibility. Those who can afford and are willing to pay can have the freedom to choose the higher plans at a price premium.

Service areas	Base plans	Mid-tier plans (Hybrid)	Premium plans
Hospital network access	Restricted to empaneled local providers within city/district	Wider regional network of accredited providers	National network of accredited providers (no geographic constraints)
Geographic coverage	Care limited to home district/nearest hub	In addition to home region, coverage in the wider state region including state capitals	Pan-India portability across states and metros
Availability of care quality	Standardized minimum quality (NABH/empaneled facility protocols)	Same standard quality	Same standard quality
Service levels	Shared rooms, basic amenities, standard staff ratios	Semi-private rooms, higher staff ratios, some concierge services	Private rooms, premium hospitality, 24/7 care coordination
Specialist access	Gatekeeper (PCP referral required)	Mix of direct specialist access and referral	Full open access to specialists
Premium levels	Lowest premiums enabling maximum coverage and maximum risk pooling	Mid-level premiums enabling some regional flexibility	Highest premiums with focus on flexibility and service levels only for those who can afford a high discretionary spend

Care co-ordination: Moving towards a managed-care ecosystem.

Interest in managed care exists today across key stakeholders

There is growing interest and recognition among providers, clinicians and even patients in the potential for managed care to significantly improve outcomes and experience across the care continuum.

Stakeholder	Interest in managed care
Patients	~90% of surveyed patients resonated with the concept of a managed care model with ~50%* associating chronic disease management and easy access to doctors as key potential benefits
Clinicians	~80% * acknowledged managed care will improve care quality
Providers	Increasing horizontal expansion by several leading organized players – through setting up of primary care clinics and diagnostic labs in addition to hospital services

As discussed in the chapter covering learnings from global systems, there are clear outcome benefits in terms of reduced hospitalization burden and lower overall healthcare spending when well-run managed care systems are deployed. This becomes especially relevant for chronic pathways and patients living with comorbidities and is likely to be a critical part of the puzzle in India's journey towards Viksit Bharat.

Significant barriers exist though to building managed care systems at scale in India

Global systems highlight that structured pathways, aligned incentives, integrated governance and digital enablement are key levers in successfully implementing managed care.

India's healthcare system, however, currently lacks several foundational elements required for its effective implementation. Fragmented providers across the care continuum, low primary care utilization, limited digitization and a divided insurance sector make coordinated, scalable care challenging. Patients often bypass local clinics for tertiary care and providers are hesitant to adopt standardized protocols without aligned incentives, creating gaps in continuity, efficiency and shared accountability for outcomes.

Concerted efforts to pilot various models needed to build scaled successful proofs of concept and understanding of feasible operational constructs for managed care in India

A multi-pronged approach is needed that balances the setup of foundational enablers with pragmatic piloting. These pilots can build belief in the feasibility of managed care models and generate critical learnings on what works in the Indian context.

Importantly, while the private sector faces acute challenges in integration, the public sector—with its tiered PHC–CHC–District–Apex architecture—holds natural potential for scaling managed care, especially in states with relatively well-developed infrastructure.

At the same time, private sector models could also become scalable at a cohort or micro market level, provided certain threshold conditions are met:

1. Broad consensus on clinical pathways and disease management guidelines for targeted comorbidities or ailments.
2. A critical mass of patients in a micro market covered under a single payer (or a coalition of payers willing to participate).
3. A critical mass of accredited providers willing to align with stringent clinical and reporting standards and empaneled with the payer.

> "Value-based care will definitely improve population's health. Through our Universal Health Mission and Swasthya Mitra approach at GNRC, Assam, we are focusing equally on disease prevention and accelerating health seeking behavior of the people by spreading health literacy and bringing down costs of care through disruptive innovations. To breakdown the vicious cycle of ignorance, ill-health and poverty, we are also undertaking various income generating schemes to implement Universal Health Coverage for every family.
>
> **Dr. NC Borah**
> Founder, GNRC Limited

As broader interventions around clinical governance, quality-cost balance and customer empowerment are implemented, these threshold conditions will increasingly be met across multiple micro markets. This creates the opportunity to test and refine managed care models in India for feasible disease and demographic patient cohorts, through pilots.

Thus, three potential arenas can be piloted in parallel to maximize learnings and operational experience in building conviction for scaling managed care across the country:

Model type	Key features	Applicability	Key challenges to be solved
Provider-led pilots: Closed-Network Wellbeing Ecosystems	Integrated network spanning primary clinics, diagnostics, hospitals and homecare Subscription-based or outcome-linked pre-paid care packages Priority access, bundled discounts, preventive check-ups and wellness services (nutrition, lifestyle coaching)	Private provider with multi-specialty and longitudinal care ecosystem or Public healthcare system Sufficient patient base within catchment area for meaningful testing Provider readiness to invest in digital and wellness integration	Data integration and interoperability for continuity of care Patient preference of having unrestricted access outside the network Transparency and shared accountability across connecting nodes
Insurer–provider collaborative pilots: Pre-paid managed care models	Joint offering between insurer and provider for comprehensive coverage (OPD, diagnostics, hospitalization) Pre-paid, predictable cost structure with shared savings model Incentives for preventive and outpatient care to reduce hospitalization	Anchor insurer with significant local customer base Anchor provider with strong equity in the micromarket; initiates tie-ups with other key specialists in the micromarket Tri-partite agreement (hospital-payer-specialists) on outcome-linked reimbursement and governance framework	Alignment of pathways, outcomes and payment models ensuring accountability across stakeholders Digital enablement for claims and outcomes tracking Misuse or overutilization of OPD/diagnostics
Health-tech anchored pilots: Disease-focused, digital-first care	Digital-first programs for chronic conditions (diabetes, hypertension, cardiac care) Tele-consults, remote monitoring, diagnostics coverage, AI-driven insights Convenience and scale beyond geographical limits	Insurer partnership with health-tech platform and quality clinician partners Defined disease group with standard protocols and measurable outcomes Patient cohorts large enough for meaningful analytics	Interoperability and unified view of patient data with secured sharing Standardized protocols for disease management Outcome measurement frameworks to validate impact Patient preference for "physical" touchpoints and need for hybrid support

> Investing in healthcare is fundamentally about backing the future of longer lifespans. It's not a passing trend, but a long-term necessity. In India, as the sector stands at the intersection of rising demand and rapid innovation, investors have a unique opportunity to shape the future of accessible, scalable and tech-driven care for over a billion people.

Ved Prakash Kalanoria
MD, Temasek Holdings (Private) Limited

While India's healthcare system is still evolving, early provider and insurer-led pilots can offer valuable insights into implementing coordinated, preventive and outcome-driven care.

These pilots should be expanded thoughtfully across catchment areas and disease groups to test different models, refine clinical pathways and validate financial and operational assumptions. Simultaneously, alignment with government initiatives can provide a scalable backbone for hyperlocal access, continuity of care and preventive interventions.

Lessons from these pilots should inform policy frameworks, standardization of protocols and incentive structures, creating a roadmap for broader adoption.

Over time, iterative learning from these pilots, coupled with patient empowerment, provider engagement and insurer participation, can pave the way for a nationwide, sustainable managed care ecosystem - transforming India's healthcare delivery toward holistic wellbeing for both urban and rural populations.

The value-based healthcare model offers a patient-centered framework essential to meet these evolving challenges in an efficient and equitable way. This approach moves away from the conventional fee-for-service system—based on paying providers by volume of services delivered—towards one that prioritizes patient outcomes, quality of care and cost effectiveness. This model also aligns well with India's commitment to SDG 3.8, which aims to achieve Universal Health Coverage (UHC) by 2030. India's flagship health insurance initiative, Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (PM-JAY) also directly supports this commitment. PM-JAY also establishes a strong foundation for further scaling patient value-focused innovations. Further, while the private setting also incorporates elements of value-based care, wider introduction of value-based care will require 1) Designing care and payment systems that reward better patient outcomes and satisfaction. This will require changes in payment methods to service providers; 2) Prioritizing prevention and early intervention, especially for chronic lifestyle diseases, leading to fewer hospitalizations and lower costs. Development of Insurance products centered on health outcomes will be essential; 3) Building coordinated, data-driven healthcare delivery with continuous monitoring and benchmarking to align financial incentives with improved health; 4) Developing business models with new organizations responsible for complete care along with other healthcare partner organizations and sharing of rewards and costs in a transparent manner.

Sanjeev Saxena
Harvard ALI Fellow and Industry Leader

Connected ecosystem: Moving towards digitally enabled ecosystem

India's healthcare sector stands at a pivotal moment in its digital transformation journey. While large hospitals in metropolitan cities have invested in core digital infrastructure, adoption remains uneven, particularly among smaller facilities where manual and paper-based processes continue to dominate. This fragmentation has limited the ability to capture standardized data, track quality metrics and ensure continuity of care across the patient journey.

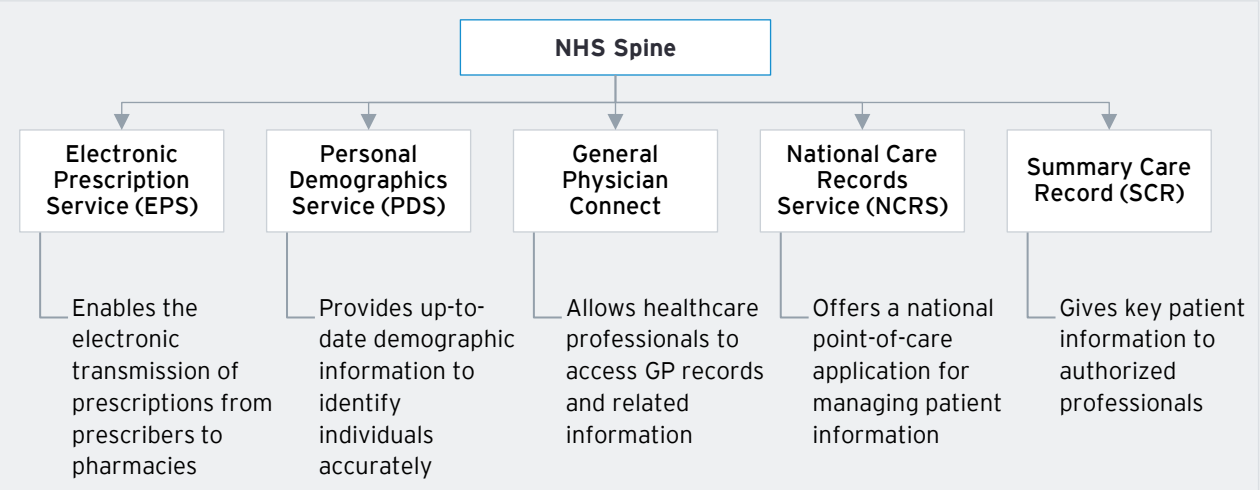
To unlock the full potential of digital health, India must move beyond isolated implementations and build an integrated, scalable and trust-driven ecosystem. This requires not only strengthening infrastructure but also embedding standardized data capture, tracking and monitoring quality parameters such as PROMs and CROMs, fostering interoperability, ensuring compliance with national frameworks like NABH digital standards, ABDM and the DPDP Act and creating the right incentives for adoption across all levels of care.

Building data-backed linkages between clinical pathways and longitudinal outcomes will be critical to designing nuanced insurance products and longitudinal care models. Today, significant clinical and outcomes data may be getting captured at discrete points of the patient journey – within clinician prescriptions, diagnostic players' systems, hospital EMRs and payers' claims processing data. Enabling effective data pooling and leveraging AI or LLMs to glean effective population level and cohort level insights for more effective planning as well as actuarial pricing will be a critical solution to solve for.

The NHS Digital Spine Network is the UK's secure, national digital infrastructure connecting hospitals, clinics and care providers. Key features of NHS spine are as follows:

1. Fast and safe exchange of data like e-prescriptions and patient records
2. Centralized data exchange to allow secure and seamless patient information sharing with implied interoperability among providers

This has benefited the NHS system by reducing excessive delays and errors of fragmented health records, brought efficiencies in clinical workflows and improving medication safety and ensuring timely collaborations and coordination of care when assessing complex cases and in emergencies. Finally, reliable access control mechanisms ensure sensitive patient information is secure when accessed and available when needed. These functions are all intended to promote trust by reinforcing care quality. The efficiencies lead to a safer, improved healthcare system that is patient-focused, which may be in contrast to paper-based, fragmented system and processes.



Driving adoption across all levels of providers will require targeted incentives and sustainable financing models. There is also willingness at nursing homes level to invest in technology as seen in the EY survey detailed earlier in the report. Government-led initiatives such as subsidized access to digital platforms and innovative payment mechanisms (e.g., Software-as-a-Service models) can motivate clinics, nursing homes and smaller hospitals to digitize clinical records. Beyond adoption, it will be critical to create a value framework for the data generated. Anonymized datasets, when governed under the DPDP Act, can be responsibly leveraged for nationwide epidemiological studies, clinical research and AI model development to address critical healthcare challenges.

Based on the key challenges of the current digital ecosystem and learnings from other countries, VALUE framework by EY-Parthenon defines Vital Aspects of Leveraging Digital for Unifying & Enhancing Health outcomes for India with focus on 5Is – Infrastructure, Interoperability, Intelligent systems, Integrated care and Insight-based governance. It will be imperative for us to leverage the initial momentum gained in this journey through ABDM initiative as well as recently launched NABH digital standards.

VALUE Framework

Vital Aspects of Leveraging Digital for Unifying & Enhancing Healthcare

V – Vital Digital **Infrastructure**

A – Advanced **Interoperability**

L – Leveraging **Intelligent** Systems

U – Unifying **Integrated** Care

E – Evidence and **Insights** Based Governance

> India's shift to quality care will hinge on scalable, tech-enabled solutions: empowering chronic disease self-management to reduce specialist dependency; revitalizing ABHA/ABDM for seamless health data exchange; leveraging AI and LLMs for digitized histories and early detection; and driving cost efficiencies through shared infrastructure like white-labeled radiology and GPO models. Together, these steps can embed discipline, improve outcomes and lower systemic costs, transforming care from reactive to proactive.

Om Manchanda
MD, Dr. Lal Pathlabs Limited

> India must make healthcare more accountable and value-driven. We need real-time disease surveillance, standard clinical protocols and transparent dashboards of hospital outcomes. Patients should give genuine feedback and facilities must adopt ABHA IDs and EMRs. Incentives should reward quality care, not just volume. By combining transparency, digital tools and fair incentives, we can create a system that consistently delivers safe, equitable and high-quality care to every citizen.

Dr. K Madan Gopal
Advisor, Public Health Administration Division, National Health Systems Resource Centre

Framework	Key interventions	Implementation roadmap
V- Vital Digital Infrastructure Lay the foundation for digital transformation by ensuring all providers adopt basic building blocks such as HIS, EMR, LIS, RIS, PACS; preferably NABH-approved and ABDM-compliant systems	▪ Critical focus systems: HIS, EMR, PACS, LIS, RIS Patient apps, NHCX ▪ HIS and EMR as standard across all type of providers (clinics, nursing homes, hospitals) to capture patients longitudinal medical history ▪ Patient apps (under ABDM or hospitals patient app) for access to medical records, engagement and consent management for data portability, well integrated with HIS and EMR	▪ Government to incentivize providers to adopt technology to register patients and mange digital records ▪ Subsidize and develop innovative payment models for HIS and EMR softwares, to improve adoption ▪ PHP (Patient app) to be created on lines of Digi Yatra app
A – Advanced Interoperability Enable seamless, secure flow of health information across the ecosystem	▪ ABHA-linked health records to ensure continuity of care across all levels of care ▪ Common data capture standards, templates and open APIs for nationwide exchange ▪ Patient consent-driven data sharing with stakeholders aligned with DPDP Act	▪ Accelerate drive for adoption of ABDM and NHCX across all stakeholders to enable seamless and secure flow of information – address patient and industry's concerns proactively in this regard
L – Leveraging Intelligent Systems Harness technology to improve outcomes, efficiency and trust between patients, providers, payers and regulators	▪ AI, GenAI and Agentic AI for clinical decision support at provider level and personalized health awareness and education at patient level ▪ Smart automation to reduce manual effort and error at provider and payer level ▪ Fraud detection in claims and insurance processes at payer level ▪ Automated quality metrics capture and monitoring at provider level ▪ AI-based models for predictive analysis of health emergencies or changing health profile at government level	▪ Drive awareness of latest technologies and relevant use cases for all stakeholders through industry bodies and service providers ▪ Engage start-ups and technology service providers to work with state healthcare systems to develop quality use cases ▪ Incentivize digital start-ups participating in driving the quality agenda to address gaps across the healthcare ecosystem
U – Unifying Care Break silos to deliver holistic, patient-centric care	▪ Integrated platforms for collaboration between hospitals, clinics, labs, pharmacies, payers and regulators for longitudinal Patient 360* view across all stakeholders ▪ Integration of HIS system with NHCX for claims and scheme management	▪ Introduce patient and clinician training programs to ensure longitudinal health data considered for treatment decisions ▪ Incentivize HIS and EMR solution providers to ensure their systems ABDM and NHCX compliant
E – Evidence-Based Governance Translate data into actionable insights and accountability	▪ Real-time dashboards for regulators, payers and providers ▪ Standardized reporting of outcomes and quality indicators ▪ Feedback loops to drive continuous improvement ▪ Leveraged data analytics for public health studies, disease profiling, Clinical R&D, infrastructure planning, health budgeting, etc. ▪ Data analytics to create cohort based managed care models	▪ Develop AI-driven tools to anonymize health data which can be shared with relevant stakeholders: government bodies for population health studies, IRDAI for insurance products development, etc. ▪ Enable regulatory bodies driving healthcare quality agenda (QCI, ICMR, etc.) with advanced technology to collect and analyze structured and anonymized health data from various stakeholders ▪ Incentivize providers and payers to use health data for creating and launching value-based care plans for relevant patient cohorts

Creating a truly unified digital healthcare ecosystem that solves for quality adoption in India will require all stakeholders such as government, insurers, providers and patients to come together to drive adoption and compliance to digital tools so that patients' longitudinal data can be collected, outcomes improved by timely interventions at the provider level and data leveraged ethically and securely to generate insights to support health policy and budgeting for India.

“

By shifting towards value-based care, India's healthcare system is increasingly prioritizing quality and patient outcomes. Ayushman Bharat scheme is a major catalyst embedding bundled/fixed pricing and performance metrics to incentivize quality. Frugal innovative solutions across the Indian healthcare value chain are fueling this change. Tech-enabled ventures like AI for early diagnosis and digital platforms for preventive care are closing critical gaps. The nation's future health hinges on enabling these innovations to overcome workforce and infrastructure challenges. Ultimately, the shift to value-based care in India depends on the successful integration of policy, technology and patient-centric innovations to build a more efficient, equitable and outcomes-driven healthcare system.

Ajay Mahipal
Co-Founder and General Partner, HealthKois Investment Managers Private Limited

“

The road to value-based care transition goes through adoption of digital/ tech/ AI-enabled healthcare models. These models enable digitization and real-time availability of each patient’s health data, allowing personalized treatment plans, leading to better outcomes and reduced hit and trial costs. Integration of digital interaction with patients and remote monitoring can facilitate early detection of conditions and pre-emptive interventions. This would enable movement away from acute care to holistic care and improve adherence to treatment plans. Digital trails will eventually enable payer models based on care delivery and outcomes, leading to normalization of value-based care models. HealthQuad invests in such digital/ tech/ AI models which are aiding traditional models in democratizing access to affordable, high-quality care.

Rahul Agarwal
Partner, Healthquad Capital Advisors Private Limited

Imperatives for key stakeholders

Stakeholder	Key imperatives
 **Regulator**	▪ Establish a Central Authority for Clinical Excellence to define, accredit and enforce minimum and tiered quality standards ▪ Scale policy enablers like VGF schemes, GST reforms to include ITC on inputs, Ayushman Bharat and HTAIn to address infrastructure gaps and affordability for the "missing middle" ▪ Mandate digital adoption through ABDM and NHCX compliance, especially in tier 2/3 and rural areas ▪ Drive managed care pilots in public systems leveraging PHC–CHC–District–Apex architecture ▪ Enable transparent public dashboards for hospital performance and clinical outcomes ▪ Incentivize private sector participation in cost studies, digital health and value-based care models ▪ Create legal and regulatory frameworks for data sharing, privacy (DPDP Act) and outcome-linked reimbursements
 **Provider**	▪ Invest in digital infrastructure to enable longitudinal patient records, quality tracking and ABDM integration ▪ Lead managed care pilots by building integrated networks (primary, diagnostics, tertiary) ▪ Standardize care pathways and align with national protocols to improve outcomes and trust ▪ Enable transparent reporting of clinical outcomes and quality metrics to build patient confidence ▪ Train staff on quality protocols and digital tools to improve compliance and operational efficiency ▪ Explore bundled care models and pre-paid packages to improve affordability and predictability for patients
 **Payer**	▪ Adopt tiered reimbursement models linked to provider capability, quality, geography and complexity ▪ Collaborate with providers to launch capitated managed care models for select focused cohorts with shared savings and outcome-linked incentives ▪ Support digital claims and quality tracking through NHCX and ABDM integration ▪ Develop flexible insurance products tailored to different affordability levels and care needs ▪ Use clinical data to steer demand toward high-quality providers and design value-based contracts ▪ Subsidize or co-pay for "missing middle" populations and empanel minimum standards compliant nursing homes to expand coverage and risk pooling ▪ Invest in fraud detection and analytics to improve efficiency and trust in the system
 **Clinician**	▪ Co-create and adopt standardized clinical pathways and participate in quality benchmarking initiatives ▪ Engage in continuous credentialing and privileging aligned with national frameworks ▪ Champion digital adoption by integrating EHRs and contributing to longitudinal patient records ▪ Participate in multidisciplinary reviews and outcome tracking to improve care quality ▪ Educate patients on treatment options, outcomes and preventive care to build trust ▪ Align with managed care models to deliver coordinated, outcome-driven care ▪ Contribute to feedback loops for refining protocols and improving system-wide quality
 **Patients**	▪ Use digital tools to access hospital ratings, clinical outcomes and insurance eligibility ▪ Choose care based on quality data, not just word-of-mouth or legacy reputation ▪ Participate in feedback mechanisms to improve provider accountability ▪ Adopt preventive care practices and engage in chronic disease management programs ▪ Understand care rights and standards through awareness campaigns and vernacular dashboards ▪ Leverage telehealth and digital services for access, especially in underserved areas

Conclusion

At this pivotal moment of transformation, India's healthcare system is uniquely positioned to redefine what is possible – building on decades of progress, while boldly addressing the challenges that lie ahead. The journey so far has demonstrated India's ability to deliver high-quality care at remarkable scale and efficiency, even in the face of resource constraints and demographic shifts. As the nation aspires toward a "Viksit Bharat," the focus must now shift from incremental improvements to systemic change – embracing collaborative governance, incentivizing excellence and harnessing the full potential of digital innovation and data-driven insights.

Looking forward, the opportunity is to create a health system that is not only equitable and affordable, but also relentlessly focused on quality outcomes for every citizen. By empowering all stakeholders – government, providers, payers, clinicians and patients – to work in concert, India can pioneer a model of care that is both world-class and uniquely its own. With collective resolve and visionary leadership, we can realize the aspiration of a truly "Swasth Viksit Bharat"– where affordable, high-quality healthcare is not a privilege, but a promise fulfilled for all.

"

In India, the path to sustainable and efficient healthcare lies in embracing value-based care, where the patient becomes the true center of every decision.

This calls for evidence-based diagnosis and treatment planning, coupled with strict appropriateness of care to reduce both overuse and underuse of services. Reimbursement frameworks, including Ayushman Bharat and private insurance, must evolve to reward outcomes rather than volumes.

Accreditation systems should be strengthened to reflect real-world quality through outcome measurement and transparent reporting, while public disclosure can empower citizens to make informed choices. Insurance innovation can steer sharper focus on quality and an independent body could set baseline clinical and cost standards to ensure fairness and trust across the diverse mix of public and private providers.

For hospitals and doctors, the priority is to build a culture of quality through systematic outcome reporting, new models of clinician engagement and adoption of digital technologies as enablers of transparency, coordination and patient feedback.

Above all, the voice of the Indian patient, their challenges of access, affordability and trust, must guide this transformation, because only then will we move from a fragmented system to one that truly delivers value and equity in healthcare in a very efficient manner.

Behram R. Khodaiji
Group CEO, Ruby Hall Clinic Services Private Limited

06 | Annexures

Annexure 1 – HPP Index approach and methodology

HPP Index is defined as HPP Index value = Healthcare Outcome composite / Healthcare Expenditure composite. Higher the HPP Index, the greater the efficiency of the health system in delivering outcomes per unit of cost.

- **Healthcare Outcome** composite represents a weighted composite of normalized health outcomes. Health outcomes measuring population health status and system performance such as -
  - **Health Status Indicators**: Life expectancy at birth, Survival rates above age 65, Infant mortality rate (IMR), Under-5 mortality rate (U5MR), Maternal mortality ratio (MMR),
  - **Disease-Specific Outcomes**: Mortality from non-communicable diseases (NCDs – cardiovascular disease mortality, cancer mortality, chronic respiratory disease mortality, diabetes-related mortality), Suicide rate (as a proxy for mental health outcomes),
  - **Burden of Disease Indicators**: DALY Index due to communicable diseases, DALY Index due to communicable diseases, DALY Index due to injury
- **Healthcare Expenditure composite** represents a weighted composite of normalized health inputs such as Current health exp. Per capita (PPP $); Current health exp. as % of GDP and Out-of-pocket expenditure per capita, PPP (current international $).

Weighting and Scoring:

The HPP Index employs a weighted composite approach where:

1. Each indicator is normalized across all countries and all years (2003–2023) to a [0–1] scale using min–max transformation. For outcome indicator where higher are better scaling is done using **Normalized Value (i,t) = (Xi,t – min (x)) / (max(X) – min(X))**. And its inversely normalized when lower values are better i.e. **Normalized Value (i,t) = (max(X) – Xi,t) / (max(X) – min(X))**
2. Outcomes are assigned positive proportionality (higher is better) or inverse proportionality (lower mortality, lower DALY burden is better). Whereas expenditure are inversely proportional. Final scores are calculated as the ratio of weighted outcomes to weighted expenditure, typically scaled to facilitate interpretation.

Source: World Bank, WHO, EY-Parthenon analysis

Table 1.1 - Health outcomes and expenditures – Definition, weightage, data source

Composite Score	Indicators	Unit	Weight	Source	Definition
Health Outcomes	**Life expectancy at birth, total**	life years	10%	World Development Indicators, Data Bank, World Bank Group	Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.
	Survival to age 65, female	% of cohort	10%		Survival to age 65 refers to the percentage of a cohort of newborn infants that would survive to age 65, if subject to age specific mortality rates of the specified year.
	Survival to age 65, male	% of cohort	10%		Survival to age 65 refers to the percentage of a cohort of newborn infants that would survive to age 65, if subject to age specific mortality rates of the specified year.
	Lifetime risk of maternal death	% of population	10%		Life time risk of maternal death is the probability that a 15-year-old female will die eventually from a maternal cause assuming that current levels of fertility and mortality (including maternal mortality) do not change in the future, taking into account competing causes
	Mortality from CVD, cancer, diabetes or CRD between exact ages 30 and 70	% of 30-year-old people	10%		Mortality from CVD, cancer, diabetes or CRD is the percent of 30-year-old-people who would die before their 70th birthday from any of cardiovascular disease, cancer, diabetes, or chronic respiratory disease, assuming that s/he would experience current mortality rates at every age and s/he would not die from any other cause
	Mortality rate, under-5	national estimate, per 1,000 live births	10%		Under-five mortality rate is the probability per 1,000 that a newborn baby will die before reaching age five, if subject to age-specific mortality rates of the specified year.
	Suicide mortality rate	national estimate, per 100,000 population	10%		Suicide mortality rate is the number of suicide deaths in a year per 100,000 population. Crude suicide rate (not age-adjusted).
	DALY Communicable, maternal, perinatal and nutritional conditions	% of Total Life Years	10%	WHO Data Analysis, EY-Parthenon analysis	Estimated Disability Adjusted Lost Life Years due to Communicable, maternal, perinatal and nutritional conditions as a percentage of total population's life years
	DALY Noncommunicable diseases	% of Total Life Years	10%		Estimated Disability Adjusted Lost Life Years due to Noncommunicable Diseases as a percentage of total population's life years
	DALY Injuries	% of Total Life Years	10%		Estimated Disability Adjusted Lost Life Years due to Injuries as a percentage of total population's life years
Health Expenditures	**Current health expenditure per capita, PPP**	current international $	40%	World Development Indicators, Data Bank, World Bank Group	Current expenditures on health per capita expressed in international dollars at purchasing power parity.
	Out-of-pocket expenditure per capita, PPP	current international $	40%		Health expenditure through out-of-pocket payments per capita in international dollars at purchasing power parity.
	Current health expenditure	% of GDP	20%		Level of current health expenditure expressed as a percentage of GDP. Estimates of current health expenditures include healthcare goods and services consumed during each year. This indicator does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency or outbreaks.

Source: World Bank, WHO, EY-Parthenon analysis

Table 1.2 - Health outcomes and expenditures – Raw scores (2003, 2013, 2023)

Indicators	Countries	2003	2013	2023
Life expectancy at birth, total (years)	Brazil	71	75	76
	China	73	76	78
	Germany	78	80	81
	India	64	68	72
	Indonesia	67	69	71
	Korea, Rep.	77	81	83
	Mexico	73	74	75
	United Kingdom	78	81	81
	United States	77	79	78
Survival to age 65, female (% of cohort)	Brazil	81%	85%	86%
	China	85%	89%	90%
	Germany	90%	91%	92%
	India	68%	74%	79%
	Indonesia	72%	75%	78%
	Korea, Rep.	91%	94%	96%
	Mexico	82%	83%	84%
	United Kingdom	89%	91%	91%
	United States	87%	88%	88%
Survival to age 65, male (% of cohort)	Brazil	67%	72%	76%
	China	75%	80%	82%
	Germany	82%	85%	86%
	India	61%	66%	72%
	Indonesia	65%	67%	70%
	Korea, Rep.	78%	86%	92%
	Mexico	72%	73%	73%
	United Kingdom	83%	87%	86%
	United States	79%	81%	80%
Lifetime risk of maternal death (%)	Brazil	0.14%	0.10%	0.10%
	China	0.07%	0.05%	0.01%
	Germany	0.01%	0.01%	0.01%
	India	1.01%	0.36%	0.16%
	Indonesia	0.67%	0.47%	0.27%
	Korea, Rep.	0.02%	0.01%	0.00%
	Mexico	0.15%	0.10%	0.08%
	United Kingdom	0.02%	0.01%	0.01%
	United States	0.02%	0.03%	0.02%
Mortality from CVD, cancer, diabetes or CRD between exact ages 30 and 70 (%)	Brazil	20%	17%	14%
	China	24%	18%	16%
	Germany	15%	13%	11%
	India	22%	22%	24%
	Indonesia	26%	25%	22%
	Korea, Rep.	15%	9%	7%
	Mexico	17%	15%	16%
	United Kingdom	15%	12%	11%
	United States	17%	14%	14%
Mortality rate, under-5 (per 1,000 live births)	Brazil	28	17	14
	China	29	13	6
	Germany	5	4	4
	India	81	49	28
	Indonesia	45	30	21
	Korea, Rep.	6	4	3
	Mexico	25	17	13
	United Kingdom	6	5	5
	United States	8	7	7

Data used for Index Calculation (Source: World Bank, WHO, EY-Parthenon analysis)

Table 1.3 - Health outcomes and expenditures – Raw scores (2003, 2013, 2023)

Indicators	Countries	2003	2013	2023
Suicide mortality rate (per 100,000 population)	Brazil	5	6	8
	China	15	9	9
	Germany	14	13	13
	India	15	16	12
	Indonesia	2	2	1
	Korea, Rep.	25	31	28
	Mexico	4	5	7
	United Kingdom	8	9	10
	United States	12	14	16
DALY Communicable, maternal, perinatal & nutritional conditions (% of Total Life Yrs)	Brazil	0.09%	0.06%	0.18%
	China	0.05%	0.03%	0.02%
	Germany	0.02%	0.02%	0.04%
	India	0.43%	0.22%	0.22%
	Indonesia	0.20%	0.13%	0.20%
	Korea, Rep.	0.02%	0.02%	0.02%
	Mexico	0.07%	0.05%	0.21%
	United Kingdom	0.03%	0.02%	0.05%
	United States	0.03%	0.02%	0.08%
DALY Noncommunicable diseases (% of Total Life Years)	Brazil	0.29%	0.29%	0.32%
	China	0.30%	0.30%	0.32%
	Germany	0.38%	0.37%	0.38%
	India	0.29%	0.29%	0.30%
	Indonesia	0.31%	0.32%	0.30%
	Korea, Rep.	0.25%	0.23%	0.24%
	Mexico	0.25%	0.26%	0.29%
	United Kingdom	0.35%	0.32%	0.33%
	United States	0.35%	0.35%	0.41%
DALY Injuries (% of Total Life Years)	Brazil	0.07%	0.07%	0.06%
	China	0.05%	0.04%	0.03%
	Germany	0.03%	0.03%	0.03%
	India	0.07%	0.06%	0.05%
	Indonesia	0.04%	0.04%	0.03%
	Korea, Rep.	0.05%	0.04%	0.03%
	Mexico	0.06%	0.06%	0.06%
	United Kingdom	0.03%	0.03%	0.02%
	United States	0.04%	0.04%	0.05%
Current health expenditure (% of GDP)	Brazil	8%	8%	10%
	China	4%	5%	5%
	Germany	10%	11%	12%
	India	4%	4%	3%
	Indonesia	2%	3%	4%
	Korea, Rep.	5%	6%	10%
	Mexico	6%	6%	6%
	United Kingdom	8%	10%	11%
	United States	15%	16%	18%
Current health expenditure per capita, PPP (current international $)	Brazil	803	1,259	1,688
	China	173	557	1,143
	Germany	3,111	4,956	7,758
	India	100	187	259
	Indonesia	131	284	516
	Korea, Rep.	1,032	2,177	5,350
	Mexico	668	1,013	1,279
	United Kingdom	2,455	4,001	6,372
	United States	5,732	8,411	12,502
Out-of-pocket expenditure per capita, PPP (current international $)	Brazil	285	355	419
	China	105	212	381
	Germany	395	654	875
	India	74	129	114
	Indonesia	60	145	136
	Korea, Rep.	467	824	1,619
	Mexico	372	404	520
	United Kingdom	400	625	881
	United States	811	1,033	1,334

Data used for Index Calculation (Source: World Bank, WHO, EY-Parthenon analysis)

Calculated Composite Scores:
Table 1.4 - Health outcomes and expenditures score, HPP Index – Countries (2003, 2013, 2023)

	2003			2013			2023		
Country	Health Outcome Score	Health Expenditure Score	HPP Index	Health Outcome Score	Health Expenditure Score	HPP Index	Health Outcome Score	Health Expenditure Score	HPP Index
Brazil	0.35	0.21	1.67	0.44	0.24	1.86	0.44	0.29	1.51
China	0.40	0.08	4.80	0.55	0.13	4.23	0.63	0.20	3.10
Germany	0.61	0.33	1.83	0.67	0.47	1.43	0.67	0.62	1.08
India	**0.09**	**0.07**	**1.45**	**0.22**	**0.07**	**3.00**	**0.31**	**0.06**	**5.20**
Indonesia	0.26	0.03	10.31	0.33	0.06	6.06	0.42	0.09	4.80
Korea, Rep.	0.58	0.21	2.81	0.72	0.37	1.98	0.81	0.71	1.14
Mexico	0.44	0.19	2.34	0.48	0.21	2.30	0.42	0.25	1.67
United Kingdom	0.61	0.29	2.12	0.70	0.42	1.68	0.68	0.57	1.20
United States	0.54	0.56	0.96	0.57	0.71	0.81	0.50	0.93	0.54

HPP Index is defined as HPP Index value = Healthcare Outcome composite / Healthcare Expenditure composite. Higher the HPP Index, the greater the efficiency of the health system in delivering outcomes per unit of cost.

Healthcare Outcome composite represents a weighted composite of normalized health outcomes. Health outcomes measuring population health status and system performance such as -

- **Health Status Indicators**: Life expectancy at birth, Survival rates above age 65, Infant mortality rate (IMR), Under-5 mortality rate (U5MR), Maternal mortality ratio (MMR),
- **Disease-Specific Outcomes**: Mortality from non-communicable diseases (NCDs – cardiovascular disease mortality, cancer mortality, chronic respiratory disease mortality, diabetes-related mortality), Suicide rate (as a proxy for mental health outcomes),
- **Burden of Disease Indicators**: DALY Index due to communicable diseases, DALY Index due to communicable diseases, DALY Index due to injury

Healthcare Expenditure composite represents a weighted composite of normalized health inputs such as Current health exp. Per capita (PPP $); Current health exp. as % of GDP and Out-of-pocket expenditure per capita, PPP (current international $).

Weighting and Scoring:

The HPP Index employs a weighted composite approach where:

Each indicator is normalized across **all countries and all years (2003–2023)** to a [0–1] scale using min-max transformation. For outcome indicator where higher are better scaling is done using *Normalized Value (i,t) = (Xi,t - min (x)) / (max(X) – min(X))*. And its inversely normalized when lower values are better i.e. *Normalized Value (i,t) = (max(X) – Xi,t) / (max(X) – min(X))*

Outcomes are assigned positive proportionality (higher is better) or inverse proportionality (lower mortality, lower DALY burden is better). Whereas expenditure are inversely proportional. Final scores are calculated as the ratio of weighted outcomes to weighted expenditure, typically scaled to facilitate interpretation

Annexure 2 – Projected growth in National Healthcare Expenditure

National Health Expenditure has been estimated using a bottom-up approach across three key components: in-patient healthcare expenditure, out-patient healthcare expenditure and other healthcare expenditure.

1. **In-patient Healthcare Expenditure**: In-patient (IP) expenditure has been built up using three key metrics: population, hospitalization rate and IP realization:
    - **Population (a)**: Growth in population will naturally contribute to higher hospitalization volumes. Importantly, the ageing population (60+ years), which has a higher incidence of diseases, is expected to disproportionately drive hospitalization growth.
    - **Hospitalization Rate (b):** Hospitalization rates are projected to rise due to increasing disease burden, particularly from non-communicable diseases (NCDs), growing prevalence of co-morbidities and improving healthcare-seeking behavior
    - **IP Realization (c):** Realization growth will be shaped by:
        - **Pricing**: Like-for-like (LFL) price improvements.
        - **Payer Mix Headwinds**: Increasing share of third-party administrators (TPAs) and government schemes, which typically have lower reimbursement rates than out-of-pocket (OOP) payments.
        - **Case Mix**: Shift toward more complex procedures, supporting higher realizations
2. **Out-patient healthcare expenditure**: Outpatient per capita is expected to grow on account of improving access, affordability and growing chronic disease burden. Outpatient realization is expected to grow in line with IP realization
3. **Other healthcare expenditure**: Other healthcare expenditure includes patient transport, administrative expenses and preventative care. They have been assumed to stay steady at ~6% of overall healthcare spend

Additionally, GDP has been estimated basis RBI bulletin as on July FY24, projecting a GDP of 30-35 US$ trillion by FY47 and GDP growth of 9-10%

Parameter	Source	Projection Methodology
Population (a)		
Population Growth	▪ Census 2001 and 2011 ▪ MoHFW Population Projections	▪ Population is expected to grow to ~1.6 billion by 2047, in line with MoHFW projections
Age Mix	▪ Census 2001 and 2011 ▪ MoHFW Population Projections	▪ Share of population over 60 years has grown from ~7% in 2005 to ~12% in 2025. As per MoHFW projections, the share of population over 60 years is expected to increase to ~20% of the population by 2036
Hospitalization rate (b)		
Hospitalization rate by age bucket	NSSO (75th and 60th surveys)	▪ India's hospitalization rate stood at 3% in 2004-05 (NSSO 60th round) and increased to 5% in 2017-18 (NSSO 75th round). ▪ Hospitalization growth is projected to follow an exponential trajectory, rising by 12% in the base case and 13% in the aggressive case over 2025-47. The key drivers include the increasing prevalence of non-communicable diseases (e.g., CVD, diabetes) and higher incidence of co-morbidities ▪ Hospitalization growth has been assessed separately for below-60 and 60+ cohorts. Incidence among the 60+ population is 2.5-3.5× higher than that of the below-60 cohort. With a steadily ageing population, the disproportionate hospitalization burden of older cohorts is expected to be a key driver of exponential growth in overall hospitalization.
Shift in disease burden (co-morbidity prevalence)	LASI 2017-18	▪ As per the LASI study, prevalence of co-morbidities stood at ~5% in 2018 (~23% within the 60+ cohort), reflecting a ~20× increase since 1995. ▪ Without interventions, overall prevalence could escalate to ~24-28% of the total population (~50-55% within the 60+ cohort). ▪ With proactive preventive care and active disease management, prevalence could be contained at ~18-20% of the total population (~40-45% within the 60+ cohort).
Spend per hospitalization growth Growth (c)		
Like-for-like price growth	▪ NSSO (75th and 60th surveys) ▪ ARPP growth for key historical players	▪ Like-for-like growth was 3-4% in historical period, it is expected to be marginally lower at ~3% in-line with medical inflation
Payer Mix	NHA (2013-14, 2017-18 and 2021-22)	▪ Out-of-pocket (OOP) share has declined from ~69% in 2013-14 to ~45% in 2021-22. ▪ Future outlook: OOP is expected to fall further to ~10% of the overall market as payer-driven models gain prominence. ▪ Headwind on realizations: Average realization under private insurance is ~10% lower than OOP, while government schemes are ~50% lower. The growing share of these payers will therefore act as a structural headwind
Penetration of private and organized players	▪ NSSO (75th and 60th surveys) ▪ Financials of key healthcare players	▪ Private provider share is expected to rise from 45-50% in 2025 to 70-75% in 2047, as public-sector investments are likely to stagnate. ▪ Within private providers, the share of organized players has already increased to ~2% in 2025 and is projected to further expand to ~15% by 2047
Case Mix	NSSO (75th and 60th surveys)	▪ Case mix impact consists of three components – a) Share of high realization specialties (like CONGO), b) Acuity mix within specialties and c) Share of tertiary and quaternary procedure ▪ Case mix has a historical impact of 4-5%, which is expected to sustain in the future due to increasing prevalence of NCDs

Parameter	Source	Projection Methodology
OP per capita		
OP per capita	▪ NSSO (75th and 60th surveys)	▪ Out-patient (OP) visits per capita currently stand at ~2 and are expected to increase to ~5 in line with benchmark markets, driven by the rising burden of chronic diseases.
OP per capita		
GDP	▪ RBI Estimate	▪ GDP is expected to grow at 9-10% p.a and expected to reach 30-35 US$ trillion by 2047 as per RBI estimate

Table 1: Population growth

Particulars	UoM	2005	2018	2025	2047P	CAGR 2005-2025	CAGR 2025-2047
Population	Lakhs	11,125	13,310	14,600	16,505	1.4%	0.6%
Population Share (%)	%						
Below 60	%	93%	90%	88%	80%	NA	NA
Above 60	%	7%	10%	12%	20%	NA	NA

Table 2: Co-morbidity prevalence

Particulars	UoM	2005	2018	2025	2047P	CAGR 2005-2025	CAGR 2025-2047
Overall							
0 Conditions	%	97.8%	77.8%	68.6%	32.9%	26.5%	47.8%
1 Conditions	%	1.7%	16.2%	22.6%	39.8%	43.1%	33.5%
>1 Conditions	%	0.4%	5.9%	8.8%	27.4%	30.4%	18.7%
Above 60							
0 Conditions	%	94.0%	50.0%	34.4%	7.2%	2.5%	22.7%
1 Conditions	%	5.0%	27.0%	33.2%	37.1%	35.5%	37.1%
>1 Conditions	%	1.0%	23.0%	32.4%	55.7%	62.0%	40.3%
Below 60							
0 Conditions	%	98.1%	81.0%	73.3%	39.3%	32.5%	54.0%
1 Conditions	%	1.5%	15.0%	21.1%	40.4%	45.0%	32.6%
>1 Conditions	%	0.4%	4.0%	5.6%	20.3%	22.5%	13.3%

Table 3: Hospitalization rate

Particulars	UoM	2005	2018	2025	2047P Base Case	2047P Aggressive Case	2047P With Interventions	CAGR 2005-2025	CAGR 2025-2047 Base Case	CAGR 2025-2047 Aggressive Case	CAGR 2025-2047 With Interventions
Overall	%	3.4%	4.6%	5.1%	11.8%	12.9%	9.3%	2.1%	3.9%	4.3%	2.8%
Below 60	%	3.1%	4.1%	4.3%	8.0%	8.7%	6.5%	1.6%	2.9%	3.3%	1.9%
Above 60	%	6.4%	8.5%	10.9%	26.9%	29.6%	20.3%	2.7%	4.2%	4.7%	2.9%

Table 4: IP realization growth

Particulars	UoM	2005-25	2025-47P Base Case	2025-47P Aggressive Case	2025-47P With Interventions
Overall	%	9.0%	8.7%	8.8%	7.5%
Like-for-like growth	%	3.5%	3.0%	3.0%	3.0%
payer Mix	%	-0.1%	-1.5%	-1.5%	-1.5%
Share of private and organized players	%	0.5%	1.2%	1.3%	1.3%
Case Mix	%	4.8%	6.0%	6.0%	4-5%

Source: Report of the Technical Group on Population Projections for India and States 2011-2036, Ministry of Health & Family Welfare, July 2020; Census Data 2001, 2011; LASI 2019, NFHS-4 and 5, NSSO 2004, 2018; EY-Parthenon analysis

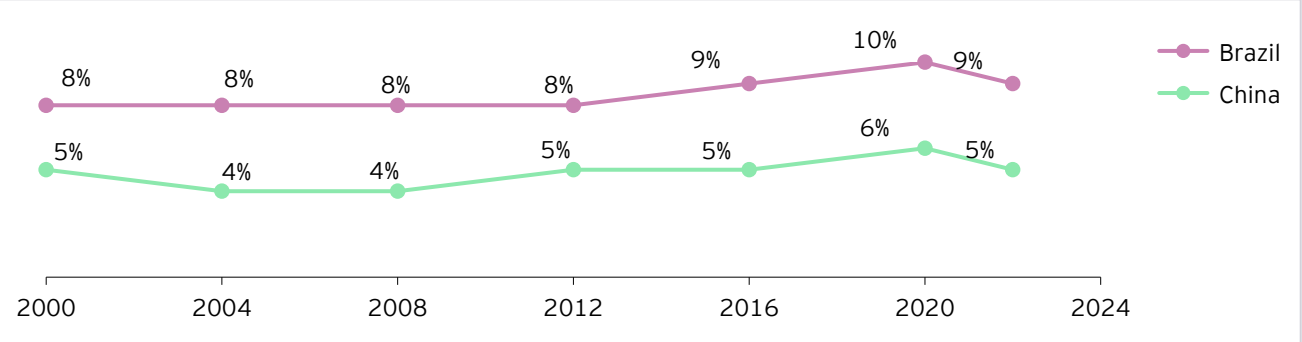
Table 5: OP per capita

Particulars	UoM	2005	2018	2025	2047P Base Case	2047P Aggressive Case	2047P With Interventions
OP Per Capita	#	1.9	1.7	2.0	5.1	5.8	5.0
Share of Public / Private (%)							
Public %	%	21%	30%	30%	30%	26%	35%
Private %	%	79%	70%	70%	70%	74%	65%

Table 6: GDP

Particulars	UoM	2005	2018	2025	2047P Base Case	2047P Aggressive Case	2047P With Interventions
GDP	INRLakh Cr.	28	168	331	2,695	2,695	2,695
GDP	US$ trillion	0.6	2.4	4.0	32.5	32.5	32.5
GDP Growth	%	-	14.6%	10.2%	10.0%	10.0%	10.0%
GDP per capita	US$	581	1,840	2,732	19,670	19,670	19,670
CHE as % of GDP	%	4.7%	3.0%	3.3%	6.0%	7.1%	5.0%

Table 7: Current Health Expenditure (CHE) trends as % of GDP for other emerging economies



Source: World Bank, EY-Parthenon analysis

Table 8: Current Health Expenditure (CHE) trends as % of GDP for other emerging economies

Country	Current Health Expenditure (CHE) *% of GDP*	Population over 60 years *% of population*
US	~16%	~25%
UK	~11%	~26%
Germany	~12%	~31%
Japan	~11%	~36%
Singapore	~5%	~34%
Saudi Arabia	~5%	~4%
Thailand	~5%	~20%
China	~5%	~20%
India (Current)	~3%	~12%
India (Projected, 2047)	~5%	~20%

Source: National Health Accounts, World Bank, EY-Parthenon analysis

Annexure 3: Illustrative outcome metrics tracked

Some of the key metrics tracked and published by Apollo Hospitals Enterprise Limited

Name of parameter	Apollo outcomes	Benchmark
Complication rate post coronary intervention	0.64%	0.53%
ALOS post angioplasty	2.60 days	2.5 days
ALOS post THR	3.90 days	4.2 days
ALOS post TKR	3.72 days	3.7 days
Major complication rate TKR within 6 months of surgery	0.37%	14.4%
Door to CT or MRI time in stroke in ER	36.47 minutes	45 minutes
Catheter Related Blood Stream Infection (CR-BSI)	0.65	1
Ventilator Associated Pneumonia (VAP)	0.39	0.9
CABG mortality rate	1.51%	0.50%
Acute Myocardial Infarction (AMI) Mortality Rate	3.59%	4.60%
Hip Fracture Mortality Rate	0.26%	1.86%
Perioperative Pulmonary Embolism or DVT Rate	0.01%	0.32%
Postoperative Acute Kidney Injury Requiring Dialysis Rate	0.03%	0.09%
Acute Ischemic Stroke 30-Day Readmission	2.59%	4.02%
Neurosurgery Mortality Rate	1.85%	1.86%
One-Year Survival Rate for Liver Transplants	84.87%	90.6% Adults
One-Year Survival with Functional Graft Post Kidney Transplant	96.34%	96.52%
Major Complication Rate Post One Year of Nephrectomy in Donors	0.00%	2.10%
GI Endoscopy Complication Rate	0.00%	0.01%
Door to Antibiotic Time in Sepsis	32.82 minutes	60 minutes
Catheter Related Urinary Tract Infection (CR-UTI)	0.73	2
Surgical Site Infection (SSI – Clean Wound)	0.24%	1.90%

*Benchmarks are based on Apollo, US National Average, Agency for Healthcare Research & Quality US, Mayo Clinic Proceedings, Australian Registry, National Healthcare Safety Network, Cleveland Clinic

Source: Apollo website and annual report 2025

Some of the key metrics tracked and published by Fortis Healthcare Limited

Name of parameter	Key metrics	Fortis outcomes	Benchmark
CABG (Bypass Surgery)	Use of LIMA graft	86.07%	≥ 85%
	Perioperative MI	0.32%	1.4%
	Postoperative stroke	0.41%	1.5%
	Re-exploration surgery	2.73%	≤ 4%
	Deep sternal wound infection	0.06%	0.3%-5%
	Same-hospital mortality	1.91%	2.3%
PTCA (Angioplasty)	Emergency CABG post PTCA	0.04%	< 0.5%
	Puncture-site vascular complications	0.06%	< 0.2%
	Stroke post procedure	0.10%	< 0.5%
	Bleeding requiring intervention	0.35%	< 0.4%
	Same-hospital mortality	1.99%	2.3%
Kidney Transplant	1-year patient survival	97.47%	90%-97%
Radiation Oncology	Treatment completion	100%	100%
	Curative intent cases	53.1%	NA
	Palliative intent cases	46.8%	NA
	Grade 3 and 4 acute toxicity	16%	≤ 20%
ERCP	CBD cannulation success	84.8%	> 80%
	Stone extraction success	77.8%	> 75%
	Intended outcome achieved	88.0%	> 85%
	Major complications	1.5%	< 5%
	In-hospital mortality	0.46%	< 1%

*Benchmarks are based on Fortis, US National Registry 2013, STS Annual Report 2019, Cleveland Clinic, Texas Heart Institute 2014
Source: Fortis Hospital website and annual report

Annexure 4: Global case studies of balancing outcomes and costs

The Netherlands

18.1 m Population

Insurance coverage

Private vs public hospitals

100% Private	- Public

Quality regulators and framework

- Kwaliteitskader –a **legislatively recognized** Quality framework
- Establishes **what constitutes "good care"** and defines mandatory indicators to be reported, covering outcomes, processes and patient experience

VBC examples

Provider	Focus cohort
Maasstad Hospital	Outcome-based care pathways in cardiology and oncology
Buurtzorg Nederland	Community/home nursing for older adults
Santeon Hospital	Multi-condition hospital cohorts with outcomes benchmarking

Notable story - Diabeter

- **Private provider network** of diabetes-specific care with a value-based approach for type-1 diabetics
- Diabeter negotiates an annual bundled payment with payers which covers the total episode of care: OP visits, lab costs, overheads and equipment
- Contracts include a performance-based component where Diabeter incurs a further bonus or penalty based on Hb1Ac range
- Outcomes measured in real-time and are transparent to the patient through a digital platform
- **55% of patients below HbA1c threshold compared to 28% in the general population**
- **3% hospitalization rate compared to 8% nationwide**

Key learnings

- **Cohort focus**: Specific type-1 diabetes
- **Clear value definition metric**: HbA1c & Hospitalization rate
- Reimbursement linkages**: With Diabeter taking on performance risk – both bonus and penalty possibilities**

Sweden

10.6 m Population

Insurance coverage

Private vs public hospitals

7% Private	93% Public

Quality regulators and framework

- Socialstyrelsen - a central government agency under Ministry of Health and Social Affairs
- Issues National Clinical guidelines based on evidence and outcomes to ensure uniform equitable care and maintains national health statistics

VBC examples

Provider	Focus cohort
Capio AB	Orthopaedics, cardiology
Aleris Healthcare	Orthopaedics, Hospital at Home, Preventive Health

Notable story – OrthoChoice

- Stockholm City Council introduced a **bundled payment model for total hip and knee replacements,**
- Contracts include a complication warranty, where providers bear cost of complications/failures
- Performance-based component withheld 3.2% of reimbursement, paid only if quality targets were achieved
- Implementation mandated regular reporting of patient outcomes (PROMs such as EQ-5D, VAS, KOOS).
- **14% decrease in total average medical spend**
- **Reduced length of stay from 6.7 to 5.8 days**

Key learnings

- **Cohort focus**: Patients undergoing total hip replacement and total knee arthroplasty.
- **Clear value definition metrics**: Waiting times, length of stay, procedure volumes, complications, PROMs (EQ-5D, KOOS, VAS).
- **Reimbursement linkage**: Bundled payment + complication warranty + performance-based bonus/penalty.

Source: Netherland- Diabeter : EIT Health High-Value Care Forum Case Study: "Diabeter – Value-based care for Type-1 Diabetes" (2019); VBHC Prize Profile. Demonstrates bundled payment model with real-time outcome tracking via V-Care platform
Sweden – Stockholm City Council, BMC Health Services Research, EY-Parthenon analysis

Germany

83.5 m Population

Insurance coverage

Private vs public hospitals

30% Private	70% Public

Quality regulators and framework

- **Universal SHI & reforms** enabling **integrated care** and 100% compliance
- Focus on preventive care through integrated contribution of medical and non-medical bodies
- Cost savings are realized as an outcome of fewer hospitalizations and pre-emptive mitigation of adverse cases

VBC examples

Provider	Focus cohort
Gesundes Kinzigtal	NCD, low-income, high-risk seniors

Notable story – Gesundes Kinzigtal

- Target population: High-need and high-cost NCD patients.
- Model: **Population-based, long-term shared-savings contract across the integrated care continuum.**
- Multidisciplinary care teams: All medical + non-medical partners (gyms, pharmacies etc.).
- Care approach: Patient-chosen **"doctor of trust"** to assess, navigate and coordinate care and **technology enabled** data reporting, messaging and predictive modelling for preventive care.
- **~7% cost reduction per insuree – total US$7 million savings vs benchmark**
- **Avg. life expectancy increased by ~1.4 years**

Key learnings

- **Cohort focus**: Lower-SES, older, high-NCD burden; high-risk patients.
- **Integrated care coordination**: Multidisciplinary integrated care (physicians, nurses, gyms, pharmacies, workplaces).
- **Clear value definition metric**: Hospitalization rates, Mean age and Years of Potential Life Gained (YPLG), patient experience and satisfaction.

United States

341.1 m Population

Insurance coverage

Private vs public hospitals

69% Private	31% Public

Quality regulators and framework

- CMS Value-Based Programs which are linked to payment
- Ensures effective up-to-date healthcare coverage and promotes quality care at low cost with the agenda of moving away from fee-for-service model

VBC examples

Provider	Focus cohort
ChenMed	Low-income, high-risk seniors
Iora Health	Seniors & adults with complex needs
VillageMD	Primary care, chronic disease, Medicare

Notable story – Oak Street Health

- Target population: Senior citizens who are chronically ill Medicare beneficiaries
- Model: Value-based capitated contracts with Medicare Advantage plans and CMS
- Multidisciplinary IPU-like care teams: Physicians, nurse practitioners, social workers, behavioral health specialists, "ninja" community health workers
- Care approach: Intensive primary care with extended visits, transition care nurses and hospital partnerships to ensure smooth discharge planning
- **~44% reduction in hospital admissions vs. Medicare benchmark**
- **51% of engaged patients achieved 50% or greater improvement in PHQ-9 within 24 weeks**

Key learnings

- **Cohort focus**: Vulnerable seniors with multiple chronic conditions.
- **Care coordination**: Multidisciplinary integrated care teams (physicians, nurses, behavioral health, social workers).
- **Payment linkage**: Shared-savings on regional population and add-on payments for value activities (goal-setting, LTC fall-prevention, EHR use).

Source: Germany – Gesundes Kinzigtal. Accountable Care in Practice: Global Perspectives (Duke-Margolis/Commonwealth Fund, ca 2016): "Gesundes Kinzigtal integrated-care network with population-based shared-savings contracts, 'doctor-of-trust' care coordination, predictive data systems and multidisciplinary partners
US – Oak Street Health. Oak Street Health Social Impact Report & CVS Health insight (2022–2025): value-based capitated Medicare Advantage model using multidisciplinary IPU-style teams (physicians, NPs, social/behavioral workers, community health workers, transition-care nurses).

Canada

41.3 m Population

Insurance coverage

Private vs public hospitals

10% Private	90% Public

Quality regulators and framework

- **Health System Funding Reform:** Province-level hospital **funding reform** replacing portions of hospital budgets with condition-specific funding bundles
- Clinical handbooks and measurement scorecards for implementation

VBC examples

Provider	Focus cohort
Ontario Ministry of Health	All Public Healthcare Providers

Notable story – Ontario

- **Target population:** Ontario health plan beneficiaries with common degenerative spine conditions.
- Model: Provincial **Health System Funding Reform using Quality-Based Procedures (QBPs).**
- Care approach: **End-to-end pathway** (assessment, conservative care, surgical decision, peri-op protocol, rehab/discharge), **with appropriateness rules** for referrals/imaging, **a shift to day surgery when safe and separate tracking of Wait times** to manage queues

Key learnings

- **Funding design with Support and Change Management:** Funding design alone is not sufficient. Some hospitals performed better than others
- **Redesign pathways and use clinical handbooks:** Standardized clinical handbooks help achieve consistent care during implementation and translate policy to practice
- **Measurement scorecards** for measurable process improvement

Singapore

6.1 m Population

Insurance coverage

Private vs public hospitals

45% Private	55% Public

Quality regulators and framework

- Ministry of Health is the primary healthcare regulator which monitors services, facilities and professionals
- Also establishes the National Clinical Quality Indicators (NCQIs) to track outcomes and safety.

VBC examples

Provider	Focus cohort
National Healthcare Group	Primary care patients, seniors with complex need
Raffles Medical Group	Primary & specialty care, corporate health
Parkway Pantai	Acute & specialty hospital care

Notable story – Healthier SG

- Reorients healthcare from treating illness to preventing disease
- National program to promote healthy living, with objectives to encourage healthy eating, regular physical activity and reduce chronic disease prevalence
- Residents adopt GP-led health plans that include screenings, vaccinations & lifestyle adjustments to promote long-term wellbeing
- Regional health managers and local partners support residents with resources and programs to sustain healthier lifestyles
- National enrollment, IT systems, data transparency and financing reforms (bundled payments, capitation) underpin the program's success

Key learnings

- **Cohort focus:** Condition-specific pathways (cataract, knee replacement, breast cancer)
- **Value definition metrics:** Cost per patient, length of stay, readmission rates, functional outcomes, patient-reported experience
- **Governance structure:** MOH sets the national VDC framework, while SingHealth drives cluster-level execution through clinical leadership and a dedicated VDC office

Source: Canada: News Article in "Policy Options Politiques", Springer Publication, QBP Clinical Handbook - Ontario Health (Key advisor to Ministry of Health)
Singapore – News articles, Healthier SG program, EY-Parthenon analysis

Australia

27.4 m Population

Insurance coverage

Private vs public hospitals

48% Private	52% Public

Quality regulators and framework

- **National Model Clinical Governance Framework** outlines essential component of clinical governance
- Ensure organizations are accountable for delivering safe high-quality, patient-centered care.

VBC examples

Provider	Focus cohort
Australian Health Service Alliance	Partnering hospitals under value-based contracts
Healthe Care	Patients undergoing elective surgery, rehabilitation
Medibank	Insured members across chronic, surgical

Notable story - Silver Chain Group

- **Non-profit that provides hospital-level care at home, community nursing and palliative care**
- Operates "Hospital in the Home (HITH)" model across multiple states, delivering acute, sub-acute
- Bundled / outcome-based funding agreements with governments and payers, covering full episode of care.
- Long-standing contracts with Commonwealth and State governments for HITH, chronic disease management, palliative care, care coordination and virtual care services.
- **~30%–40% lower cost per patient compared to hospital-based care**

Key learnings

- **Cohort focus:** Frail, elderly, chronic disease patients, palliative care populations
- **Clear value metrics:** Avoidable admission rates, cost savings, patient quality-of-life
- **Reimbursement linkage:** Risk-sharing and bundled funding models align provider incentives with outcomes

Indonesia

284 m Population

Insurance coverage

Private vs public hospitals

64% Private	36% Public

Quality regulators and framework

- **Directorate of Healthcare Quality and Accreditation** leads healthcare quality policy development
- Coordinates a National Quality Policy and Strategy (NQPS) framework to drive systemic quality improvement

VBC examples

Provider	Focus cohort
BPJS Kesehatan	Primary care, chronic disease
Siloam Hospitals	Acute & tertiary care, oncology, cardiology

Notable story – PROLANIS

- Chronic Disease Management Programme launched under the national health insurance scheme
- Patients receive monthly medical consultations and health status monitoring every six month
- Providers are paid through capitation + performance-based incentives (P4P)
- Shifts clinically stable patients from secondary to primary care so that they can access monthly medications through PROLANIS pharmacy networks
- **~1 million JKN members enrolled in PROLANIS since launch (2014)**
- **63% patients attended monthly primary care visits**

Key learnings

- **Clear value definition metric:** Contact rate, referral rate, % patients with controlled BP/glucose..
- **Care coordination:** Linking PROLANIS with PRB improved continuity of care by shifting stable patients back to primary care
- **Reimbursement linkage:** Blended capitation + Pay for Performance for providers

Source: Australia – Silver Chain Group. Silver Chain Group submission: Consultation paper on the Pricing Framework for Australian Public Hospital Services (2016): "Silver Chain Group – Hospital in the Home (HITH) and community-based care services" – bundled/outcome-based funding agreements with governments and payers covering full episode of care; long-standing contracts with Commonwealth and State governments

Indonesia – PROLANIS (Program Pengelolaan Penyakit Kronis). WHO Western Pacific Region, Policy Brief (2020): "PROLANIS – Chronic disease management under Indonesia's JKN scheme" – capitation and performance-based incentives; monthly consultations and biannual health status monitoring

South Africa

63 m
Population

Insurance coverage

Private vs public hospitals

43%	57%
Private	Public

Quality regulators and framework

- Office of Health Standards Compliance independent statutory body under the National Health Amendment Act
- Certifies health establishments, monitors compliance and ensures alignment with quality and universal health coverage

VBC examples

Provider	Focus cohort
Mediclinic Southern Africa	Maternity, Renal Services
Netcare	Acute & chronic care, renal dialysis
Life Healthcare	Mental health, Oncology

Notable story – Discovery Health

- **Pioneered a managed care and value-based model in South Africa**, delivering substantial cost savings while maintaining quality outcomes
- Covers 3.3 million members under managed care programs.
- Partnered with 3 major hospital groups, accounting for ~80% of hospital spend.
- Introduced Hospital@Home protocols, physician profiling and digital billing intelligence to reduce avoidable admissions (~4,000 avoided annually).
- **~15% savings in annual premiums, ~18.5% lower tariffs in-network**
- **~US$8m additional savings in delivered procedures**
- **12% savings via alternative reimbursement models, risk-transfer coverage for 90% of hospital spend**

Key learnings

- **Clear value definition metrics**: Hospital admission avoidance, lower tariffs, bundled payments, cost savings as % of premiums, patient care protocols
- **Reimbursement linkage**: Alternative reimbursement models (ARMs) and value-based contracts with bonus/penalty structures
- **Governance structure**: Strong payer-provider collaboration with risk-transfer instruments

Source: EY-Parthenon research and analysis

Acknowledgements

Industry leaders

Abrarali Dalal
MD and CEO, Sahyadri Hospitals Pvt. Ltd.

Ajay Mahipal
Co-Founder and General Partner, Health Kois Investment Managers Private Limited

Lt Gen (Dr) AK Das, PVSM
Institute Body Member, AIIMS Kalyani

Alisha Moopen
MD and Group CEO, Aster DM Healthcare FZC

Ameera Shah
Promoter and Executive Chairperson, Metropolis Healthcare Limited

Amit Somani
Director, Commercial Management at Yashoda Healthcare Services Limited

Dr. Anand K
MD and CEO, Agilus Diagnostics Ltd.

Anish Bafna
CEO and MD, Healthium Medtech Limited

Prof. Anupam Sibal
Co-Chair, FICCI Health Services Committee and Group Medical Director, Apollo Hospitals Group

(Hony) Brig Dr. Arvind Lal
Chair - FICCI Swasth Bharat Task Force, Executive Chairman- Dr Lal Pathlabs Limited and Managing Trustee - ALVL Foundation

Dr. Ashutosh Raghuvanshi
MD & CEO, Fortis Healthcare Limited

Dr. Atul Mohan Kochhar
CEO, NABH

Behram Khodaiji
Group CEO, Ruby Hall Clinic Services Private Limited

Dr. Bishnu Panigrahi
Group Head, Medical Strategy and Operations, Fortis Healthcare Limited

Capri Jalota
COO, AIG Hospitals

Chris Born
NHS Innovation and Clinical Services Specialist, Healthcare UK

Dilip Jose
MD and CEO, Manipal Health Enterprises Pvt. Ltd

Edna D'souza
Cluster Director - Healthcare, Life Sciences and Chemicals, Department for Business and Trade, UK

Gautam Khanna
CEO, Hinduja Hospital

Dr. Girdhar Gyani
Director General, Association of Healthcare Providers

Harish Manian
CEO, Baby Memorial Hospital Group

Dr. Harit Chaturvedi
Chairman, Max Institute of Cancer Care

Dr. Harsh Mahajan
Chair- FICCI Health Services Committee and Founder & Chairman, Mahajan Imaging & Labs

Hema Jagota
Country Director- Clinical Solutions, Elsevier

Himanshu Baid
MD, Poly Medicure Limited

Krishnan Akhileswaran
Group CFO, Apollo Hospitals Enterprise Limited

Dr. Madan Gopal
Advisor, Public Health Administration Division, National Health Systems Resource Centre

Dr. Madhu Sasidhar
President & CEO, Apollo Hospitals Division, Apollo Hospitals Enterprise Limited

Mahadevan Narayanamoni
Senior Advisor, TPG Capital

Dr. Mahipal Sachdev
Chairman and Medical Director, Centre for Sight

Dr. Manish Mattoo
CEO & Executive Director, HealthCare Global Enterprises Ltd

Mayank Banerjee
Co-Founder and CEO, Even Healthcare

Mitesh Daga
Partner and Co-Head Healthcare, TPG Capital

Dr. M I Sahadulla
Chairman and MD, KIMS Healthcare Management Ltd

Dr. Mradul Kaushik
Senior Director, Operations and Planning, Max Healthcare

Dr. N C Borah
Founder, GNRC Ltd

Dr. Narottam Puri
Advisor – FICCI Health Services, Principal Advisor – QCI; Board Member and Former Chairman NABH; Advisor – Medical Operations, Fortis Healthcare Ltd.

Dr. Nitish Shetty
MD & CEO (Bengaluru Cluster), Krishna Institute of Medical Sciences Limited

Dr. Om Manchanda
MD, Dr Lal Pathlabs Limited

Pankaj Sahni
Group CEO, GHPL (Medanta)

Prashant Krishnan
CEO, TI Medical

Dr. Pritindira Sachdeva
Regional Quality Head, Apollo Hospitals Enterprise Limited

Puncham Mukim
Head of India PE and Senior MD, Everstone Capital

Rahul Agarwal
Partner, Healthquad Capital Advisors Private Limited

Raj Gore
Indian healthcare leader

Dr. Rohini Sridhar
Chief of Medical Services, Hospitals Division, Apollo Hospitals Enterprise Limited

Rizwan Koita
Chairperson NABH, Co-founder Koita Foundation

Rushank Vora
Senior Director, ICICI Ventures

Dr. Sameer Gupta
Director, Umkal Hospital

Sanjeev Saxena
Harvard ALI Fellow and Industry Leader

Dr. Sanjeev Singh
Medical Director, Amrita Institute of Medical Sciences & Research Centre (AIMSRC) Faridabad & Chief Medical Superintendent, AIMSRC Kochi

Dr. Sandeep Budhiraja
Group Medical Director, Max Healthcare

Dr. Seema Kochhar
Principal Director, Dr. Lal Pathlabs

Dr. S Chandra Kumar
Founder and Executive Chairman, Kauvery Group of Hospitals

Dr. Shravan Subramanyam
MD, BPL Medical Technologies Private Limited

Dr. Shuchin Bajaj
Founder - Director, Ujala Cygnus Healthcare Services

Dr. Somashekhar SP
Chairman - Medical Advisory Board, Aster DM Healthcare Limited – GCC & India
Global Director, Aster International Institute of Oncology – GCC & India

Ms. Suneeta Reddy
Managing Director, Apollo Hospitals Enterprise Limited

Sunil Kumar M R
CFO, Aster DM Healthcare Limited

Col. (Dr.) Sunil Rao
COO & Director Medical Services, Sahyadri Hospitals Private Limited

Sunil Thakur
Partner and Head of South Asia, Quadria Capital

Varun Khanna
Co-Chair, FICCI Health Services Committee and Group MD, Quality Care India Limited (Care, KIMS & Evercare)

Ved Prakash Kalanoria
Managing Director, Temasek Holdings (Private) Limited

Dr. Virandera Pal Bhalla
Medical Director – Gastroenterology & Digestive Health,
Marengo Asia Hospital

Vishal Bali
Executive Chairman, Asia Healthcare Holdings

Vishal Maheshwari
CFO, Quality Care India Limited (QCIL)

Vivek Goyal
CFO, Fortis Healthcare Ltd.

EY-Parthenon team

Healthcare

Muralidharan Nair
Kaivaan Movdawalla
Srimayee Chakraborty
Akshay Ravi
Ankur Dhandharia
Tara Ravi
Vaibhav Barthwal
Dr. Eisha Anand
Moulika Saxena
Akash Chaudhary
Dileep Gunnam
Shalki Gupta
Arkaprabha Sanyal
Nirnay Kumar
Amey Nandedkar
Ajitesh Shankar
Mari Wiezel
Dr. Neha Garg
Dr. Kanchan Dua
Shivam Adhikari
Prithvi Manwani
Aman Sodhi
Ekta Tahiliani
Sheena Mattu
Nitik Gupta
Rishabh Jain
Pankaja Pawar
Ritik Jaiswal
Suneet Kejriwal
Tanisha Baid
Nidhi Naik

Content and BMC team

Bhavisha Jogi
Kamal Suri
Aditi Lad
Kaveri Nandan
Radhika KTP
Arif Jamaal
Rajeev Birdi
Rachita Gupta
Rucha P Kittur
Ritika Saini
Kartik Verma
Shweta Sharma

Contact us

Kaivaan Movdawalla
kaivaan.movdawalla@parthenon.ey.com

Srimayee Chakraborty
srimayee.chakraborty@parthenon.ey.com

Akshay Ravi
akshay.ravi3@parthenon.ey.com

Ankur Dhandharia
ankur.dhandharia@parthenon.ey.com

Tara Ravi
tara.ravi@parthenon.ey.com

Survey partners

We are thankful to the Conxtn and Vedak teams for their support in executing the patient and doctor surveys for this report.

Conxtn is a global primary research and insights partner with expertise across healthcare, life sciences, technology, industrials, consumer goods, energy and financial services. The firm supports corporations, consulting firms and investment professionals by delivering customized qualitative and quantitative studies, including surveys, in-depth interviews and moderated discussions. With access to a wide network of industry professionals, Conxtn provides real-time, ground-level insights that help clients make informed decisions.

Vedak is a leading global expert network connecting consulting firms, investment firms and corporations with top industry specialists worldwide. Its clients include prominent strategy consulting firms, private equity and venture capital funds and Fortune 500 companies. Leveraging a curated network of senior executives, decision-makers and niche experts across sectors such as technology, healthcare, energy, industrials and consumer goods, Vedak has successfully executed thousands of expert engagements across India, Southeast Asia, the Middle East, the US and Europe.

Our offices

Ahmedabad

22nd Floor, B Wing, Privilon
Ambli BRT Road, Behind Iskcon Temple
Off SG Highway, Ahmedabad - 380 059
Tel: + 91 79 6608 3800

8th Floor, Building No. 14A
Block 14, Zone 1
Brigade International Financial Centre
GIFT City SEZ
Gandhinagar – 382 355, Gujarat
Tel: + 91 79 6608 3800

Bengaluru

12th & 13th Floor
"UB City", Canberra Block
No.24 Vittal Mallya Road
Bengaluru - 560 001
Tel: + 91 80 6727 5000

Ground & 1st Floor
11, 'A' wing
Divyasree Chambers
Langford Town
Bengaluru - 560 025
Tel: + 91 80 6727 5000

3rd & 4th Floor
MARKSQUARE
#61, St. Mark's Road
Shantala Nagar
Bengaluru - 560 001
Tel: + 91 80 6727 5000

1st & 8th Floor, Tower A
Prestige Shantiniketan
Mahadevapura Post
Whitefield, Bengaluru - 560 048
Tel: + 91 80 6727 5000

Bhubaneswar

8th Floor, O-Hub, Tower A
Chandaka SEZ, Bhubaneswar
Odisha – 751024
Tel: + 91 674 274 4490

Chandigarh

Elante offices, Unit No. B-613 & 614
6th Floor, Plot No- 178-178A
Industrial & Business Park, Phase-I
Chandigarh - 160 002
Tel: + 91 172 6717800

Chennai

6th & 7th Floor, A Block,
Tidel Park, No.4, Rajiv Gandhi Salai
Taramani, Chennai - 600 113
Tel: + 91 44 6654 8100

Delhi NCR

Aikyam
Ground Floor
67, Institutional Area
Sector 44, Gurugram - 122 003
Haryana
Tel: + 91 124 443 4000

3rd & 6th Floor, Worldmark-1
IGI Airport Hospitality District
Aerocity, New Delhi - 110 037
Tel: + 91 11 4731 8000

4th & 5th Floor, Plot No 2B
Tower 2, Sector 126
Gautam Budh Nagar, U.P.
Noida - 201 304
Tel: + 91 120 671 7000

Hyderabad

THE SKYVIEW 10
18th Floor, "SOUTH LOBBY"
Survey No 83/1, Raidurgam
Hyderabad - 500 032
Tel: + 91 40 6736 2000

Jaipur

9th floor, Jewel of India
Horizon Tower, JLN Marg
Opp Jaipur Stock Exchange
Jaipur, Rajasthan – 302018

Kochi

9th Floor, ABAD Nucleus
NH-49, Maradu PO
Kochi - 682 304
Tel: + 91 484 433 4000

Kolkata

22 Camac Street
3rd Floor, Block 'C'
Kolkata - 700 016
Tel: + 91 33 6615 3400

6th floor, Sector V,
Building Omega, Bengal Intelligent Park, Salt Lake Electronics Complex, Bidhan Nagar
Kolkata - 700 091
Tel: + 91 33 6615 3400

Mumbai

14th Floor, The Ruby
29 Senapati Bapat Marg
Dadar (W), Mumbai - 400 028
Tel: + 91 22 6192 0000

5th Floor, Block B-2
Nirlon Knowledge Park
Off. Western Express Highway
Goregaon (E)
Mumbai - 400 063
Tel: + 91 22 6192 0000

3rd Floor, Unit No.301
Building No.1, Mindspace-Gigaplex
IT Park, MIDC, Plot No. IT-5
Airoli Knowledge Park
Airoli West, Navi Mumbai - 400 708
Tel: + 91 22 6192 0003

18th Floor, Altimus
Pandurang Budhkar Marg, Worli
Mumbai - 400 018
Tel: + 91 22 6192 0503

Pune

C-401, 4th Floor
Panchshil Tech Park, Yerwada
(Near Don Bosco School)
Pune - 411 006
Tel: + 91 20 4912 6000

10th Floor, Smartworks
M-Agile, Pan Card Club Road
Baner, Pune - 411 045
Tel: + 91 20 4912 6800

Ernst & Young LLP

EY | Building a better working world

EY is building a better working world by creating new value for clients, people, society and the planet, while building trust in capital markets.

Enabled by data, AI and advanced technology, EY teams help clients shape the future with confidence and develop answers for the most pressing issues of today and tomorrow.

EY teams work across a full spectrum of services in assurance, consulting, tax, strategy and transactions. Fueled by sector insights, a globally connected, multidisciplinary network and diverse ecosystem partners, EY teams can provide services in more than 150 countries and territories.

All in to shape the future with confidence.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EYG member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

About EY-Parthenon

EY-Parthenon teams work with clients to navigate complexity by helping them to reimagine their eco-systems, reshape their portfolios and reinvent themselves for a better future. With global connectivity and scale, EY-Parthenon teams focus on Strategy Realized – helping CEOs design and deliver strategies to better manage challenges while maximizing opportunities as they look to transform their businesses. From idea to implementation, EY-Parthenon teams help organizations to build a better working world by fostering long-term value. EY-Parthenon is a brand under which a number of EY member firms across the globe provide strategy consulting services. For more information, please visit ey.com/parthenon.

Ernst & Young LLP is one of the Indian client serving member firms of EYGM Limited. For more information about our organization, please visit www.ey.com/en_in.

Ernst & Young LLP is a Limited Liability Partnership, registered under the Limited Liability Partnership Act, 2008 in India, having its registered office at Ground Floor, Plot No. 67, Institutional Area, Sector - 44, Gurugram - 122003, Haryana, India

ED None.
EYIN2510-002

AJ

ey.com/en_in

@EY_India EY EY India EY Careers India @ey_indiacareers

About FICCI

Established in 1927, FICCI is the largest and oldest apex business organization in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organization, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

Website: www.ficci.in

FICCI Contacts

Shilpa Sharma
Head - Health Services & Medical Devices
E: shilpa.sharma@ficci.com

Sarita Chandra
Additional Director
E: sarita.chandra@ficci.com

Aayushi Panwar
Research Associate
E: aayushi.panwar@ficci.com