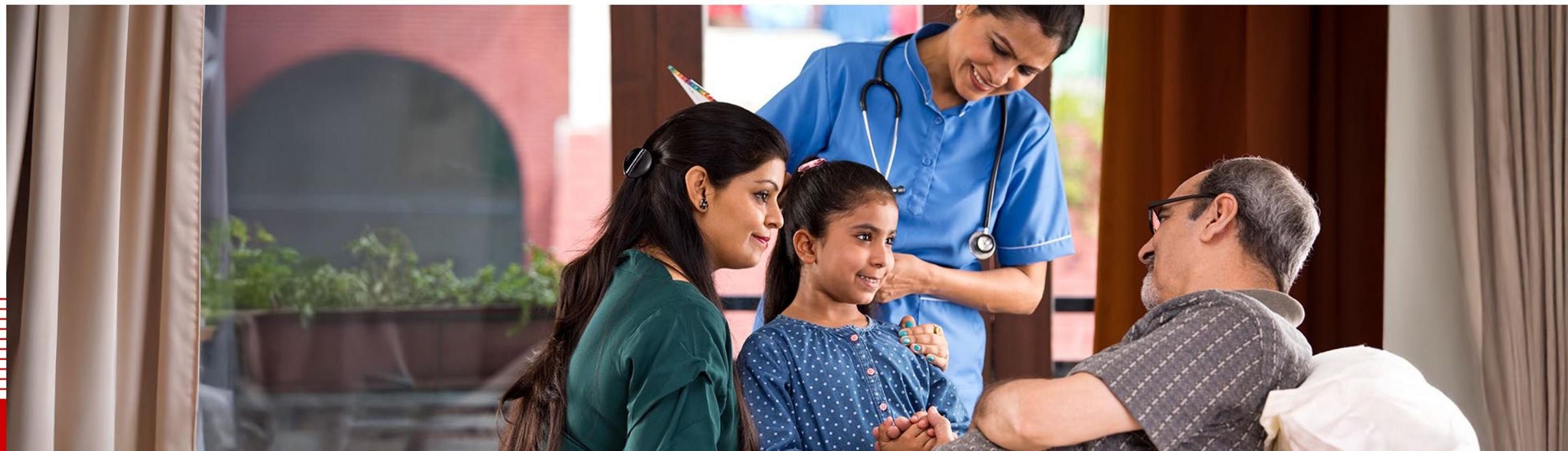


# Swasth Bharat se Viksit Bharat

Investment in health is central to India's journey toward a wealthy nation.



## About the authors

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## Acknowledgments

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# Executive summary: Health as a catalyst for economic growth

## **Population health is a foundational enabler of India's 2047 growth ambition.**

To become a \$30–\$40 trillion economy by 2047, India must fully harness its demographic dividend (2019–53). It must also treat population health as a core input to productivity, human capital formation, and sustained economic growth—not just as a social imperative. Global evidence on this issue is consistent: Healthier countries are structurally wealthier, and sustained investment in health is closely associated with long-term prosperity.

**Despite meaningful progress, disease burden remains a material economic constraint.** Over the past decades, India has implemented multiple central- and state-level reforms that have strengthened financial protection, expanded system capacity, and improved select population health outcomes. Yet a persistently high disease burden continues to suppress workforce participation and productivity, resulting in a \$0.8–\$1.0 trillion annual opportunity cost.

**Healthy lifespan gains can accelerate income growth.** Longitudinal analyses across roughly 190 countries show a clear inflection point: Once health-adjusted life expectancy (HALE) exceeds 57 years, GDP per capita growth accelerates materially—with each additional year of HALE yielding approximately 7.5% higher GDP per capita. Countries that achieved 10-year HALE gains or more over the past three decades experienced roughly two times higher GDP per capita growth than peers with more modest improvements. China, South Korea, and Poland all exhibited this trajectory.

India's HALE has already increased from approximately 50 to 61 years since 1990. Achieving an additional 10-year gain—to a HALE of 70 by 2047—could unlock a fivefold expansion in GDP per capita, increasing it from approximately \$2,800 to \$14,100. This jump could contribute 70% of the Viksit Bharat aspiration of reaching \$18,000 to \$20,000 GDP per capita.

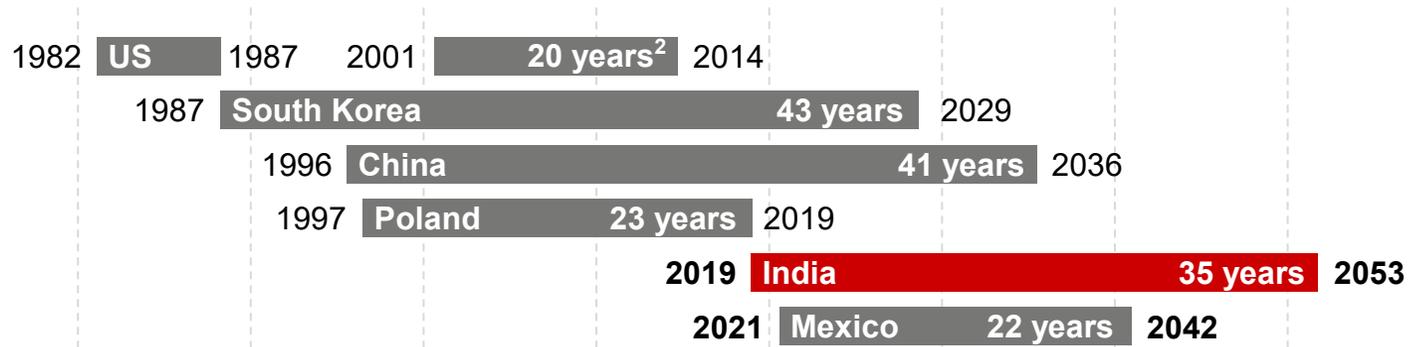
## **The next step-change requires higher investment and integrated execution.**

While the National Health Policy 2017 catalyzed progress across life expectancy, immunization, sanitation, and select disease-control outcomes, critical targets on mortality, non-communicable disease outcomes, financing, infrastructure, and system integration remain unmet. Reaching the next frontier will require doubling health investment from approximately 3%–4% of GDP to 6%–7%, in line with global peers. In addition, India must institutionalize and integrate governance models. Financing, service delivery, workforce development, digital infrastructure, procurement, and performance management should align under a single accountable framework

**Scaling prevention, infrastructure, and digital health will realize Viksit Bharat.** Expanding prevention-embedded universal health coverage, building infrastructure and workforce capacity at pace, accelerating digital health adoption, and using policy levers to shift behaviors toward healthier living will be central to achieving India's ambitions. Elevating health from a social priority to a core economic strategy is critical for India to realize its Viksit Bharat vision by 2047.

# Viksit Bharat aims to harness a multidecadal demographic dividend to achieve twin objectives of a \$30–\$40 trillion economy and healthy life expectancy of 70+ years

Period of demographic dividend<sup>1</sup> in large economies



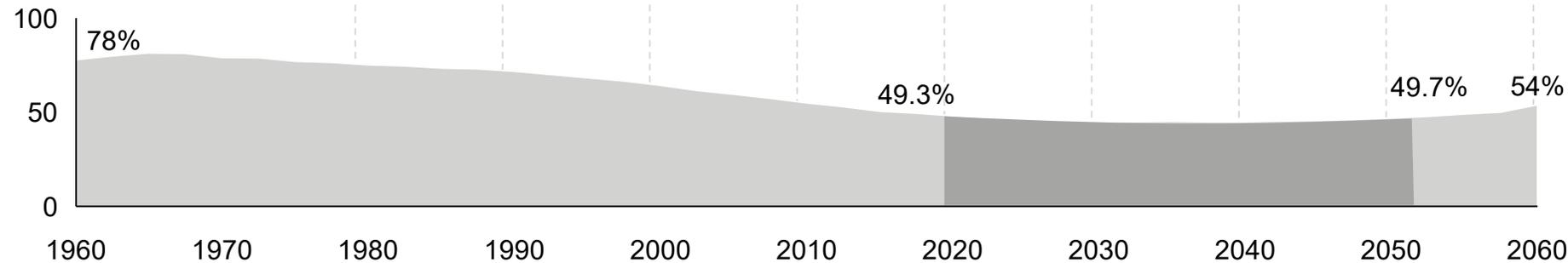
## India 2047 ambition

Viksit Bharat by 2047 on **one side is about becoming a \$30 trillion economy**, and the **second imperative relating to healthcare sector is to raise life expectancy from the current 71 years to 85 years and healthy life expectancy from 60 years to 70–75 years.**

*These are the benchmarks of the developed nations, and that is what we all should strive for: saving lives along with healthy lives.*

— NITI Aayog

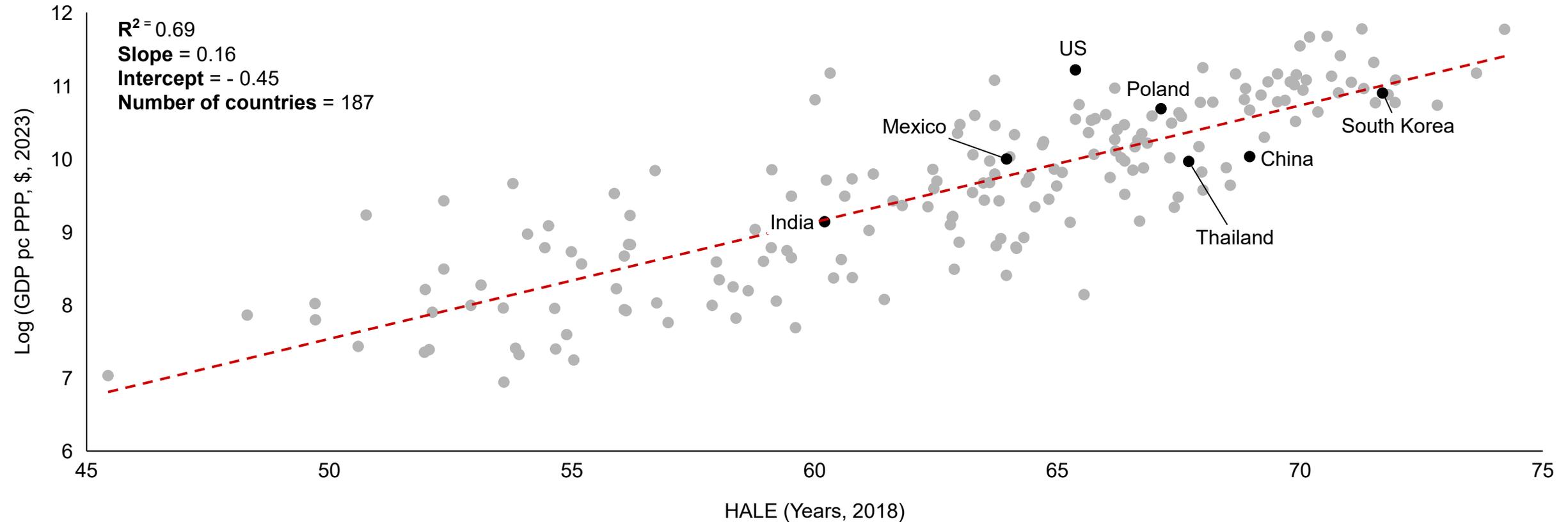
## India's dependency ratio



Notes: 1) Duration in which dependency ratio is <50%; 2) The dependency ratio was below 50 from 1982–87 and 2001–14  
Sources: Federation of Indian Chambers of Commerce and Industry; Our World in Data; Ministry of Commerce & Industry; viskstitindia.com

# Health is wealth: Higher GDP per capita is positively correlated with health outcomes (five-year lag shown below)

Cross-sectional country analysis across 187 countries

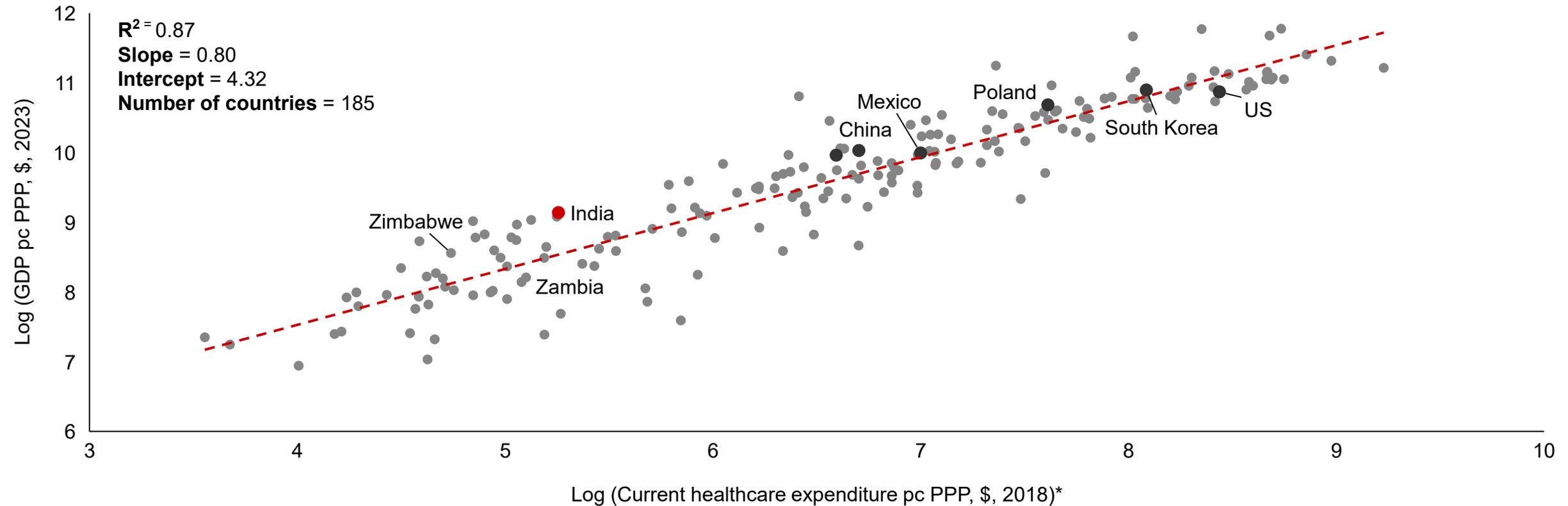


Notes: Analysis refers to real GDP per capita (inflation adjusted at 2021 prices for historical and forecasted) at PPP; GDP per capita is log-transformed because income levels vary widely across countries; logging linearizes the relationship, reduces the influence of extreme values, and allows effects to be interpreted in proportional (percentage) terms rather than absolute dollars; HALE is health-adjusted life expectancy; PPP is purchasing power parity

Sources: World Bank DataBank; Institute for Health Metrics and Evaluation—Global Health Data Exchange (GHDx) Global Burden of Disease Study 2023 (GBD 2023) database

# Health comes before wealth: Higher GDP per capita is even more positively correlated with prior investments in healthcare (five-year lag shown here)

Cross-sectional country analysis across 185 countries

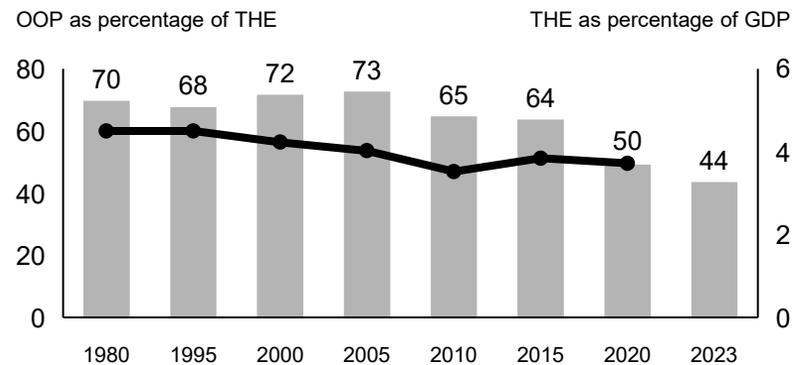


Notes: Analysis refers to real GDP per capita (inflation adjusted at 2021 prices); GDP per capita and healthcare expenditure per capita are log-transformed because income levels vary widely across countries; logging linearizes the relationship, reduces the influence of extreme values, and allows effects to be interpreted in proportional (percentage) terms rather than absolute dollars; it includes healthcare goods and services consumed during each year; it does not include capital health expenditures such as buildings, machinery, IT, and stocks of vaccines for emergencies or outbreaks; PPP is purchasing power parity

Sources: World Bank DataBank; Institute for Health Metrics and Evaluation—Global Health Data Exchange (GHDx) Global Burden of Disease Study 2023 (GBD 2023) database

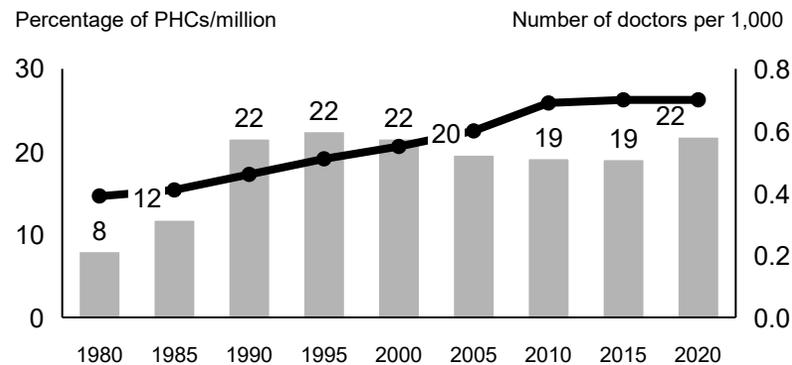
# Initiatives over the past few decades have led to improvements in financial protection, system capacity, and population health outcomes

## OOP consistently decreasing across years via expanded public financing and coverage



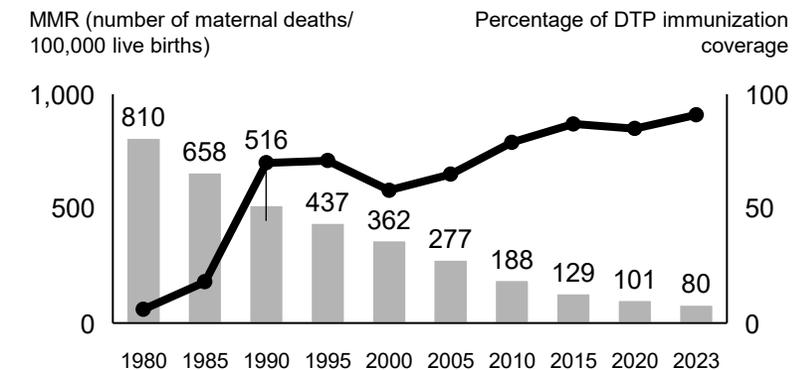
- ▶ **2005–15: Launch of NRHM, RSBY** led to further reduction in OOP percentage to 64%
- ▶ **2015–23: Higher GHE, investments in public infrastructure and Ayushman Bharat rollout** drove OOP decrease from 64% to 44%

## Govt. investment in primary infra. bolstered number of PHCs, HRH, but not at par with pop. growth



- ▶ **1980s: Physical infrastructure expansion driven under decentralization** drastically increases number of PHCs
- ▶ **2018 onward: Upgrading SHCs and PHCs into ~1.5L Health and Wellness Centres**, expanding diagnostics, NCD screening, and primary care

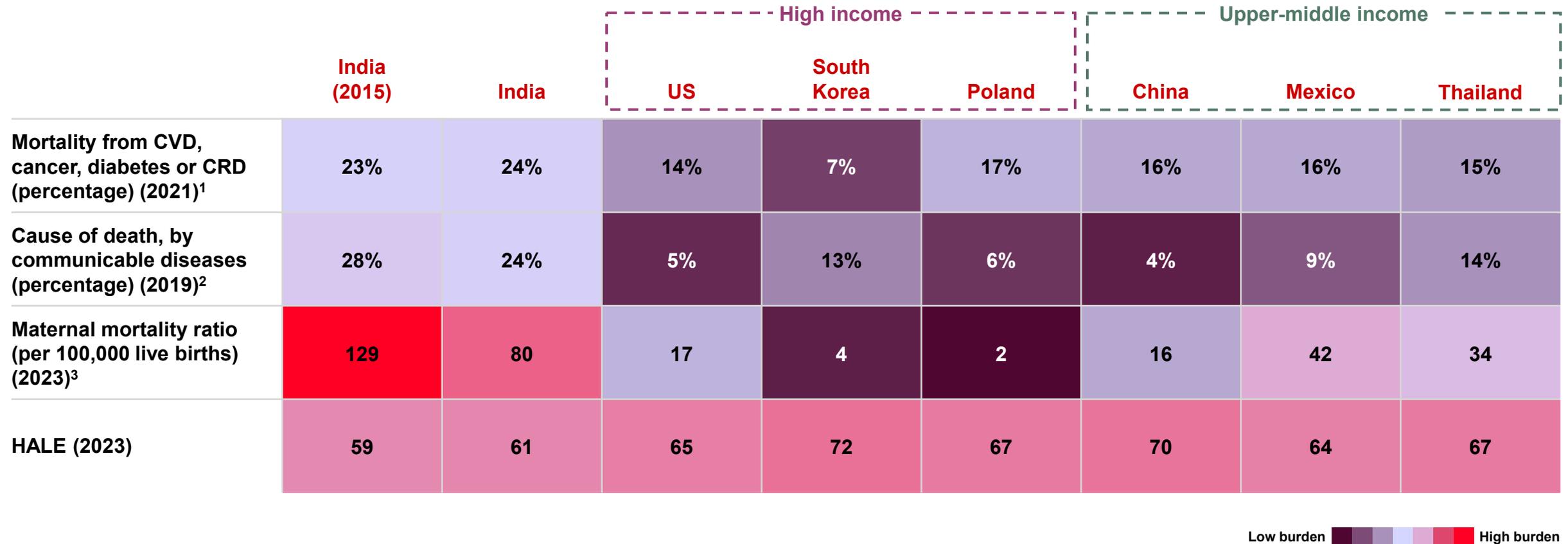
## Focus on MCH, disease programs led to steady decrease in MMR; ~90% immunization



- ▶ **1985–90: UIP, vertical disease focused drives** under influence of international bodies (WHO)
- ▶ **2000–02: Immunization revived** as India accepted MDG (2000) and National Health Policy of 2002
- ▶ **Post-2014: Mission Indradhanush** drove steady immunization growth; Covid-19 caused a brief dip, with strong recovery from 2021 onward

Notes: OOP is out-of-pocket expenditure; THE is total health expenditure; MMR is maternal mortality ratio; NCD is non-communicable diseases; WHO is World Health Organization; DTP is diphtheria, tetanus, and pertussis; GHE is government health expenditure; PHC is Primary Health Centre; HRH is human resources for health; NRHM is National Rural Health Mission; RSBY is Rashtriya Swasthya Bima Yojana; UIP is Universal Immunization Programme; MDG is Millennium Development Goal; MCH is maternal and child health; SHC is Sub-Health Centre; Peer countries: US, China, Poland, Thailand, Mexico, South Korea | Sources: World Bank data; Rural Health Statistics; National Health Mission; National Health Profile; National Health Policy; lit. search

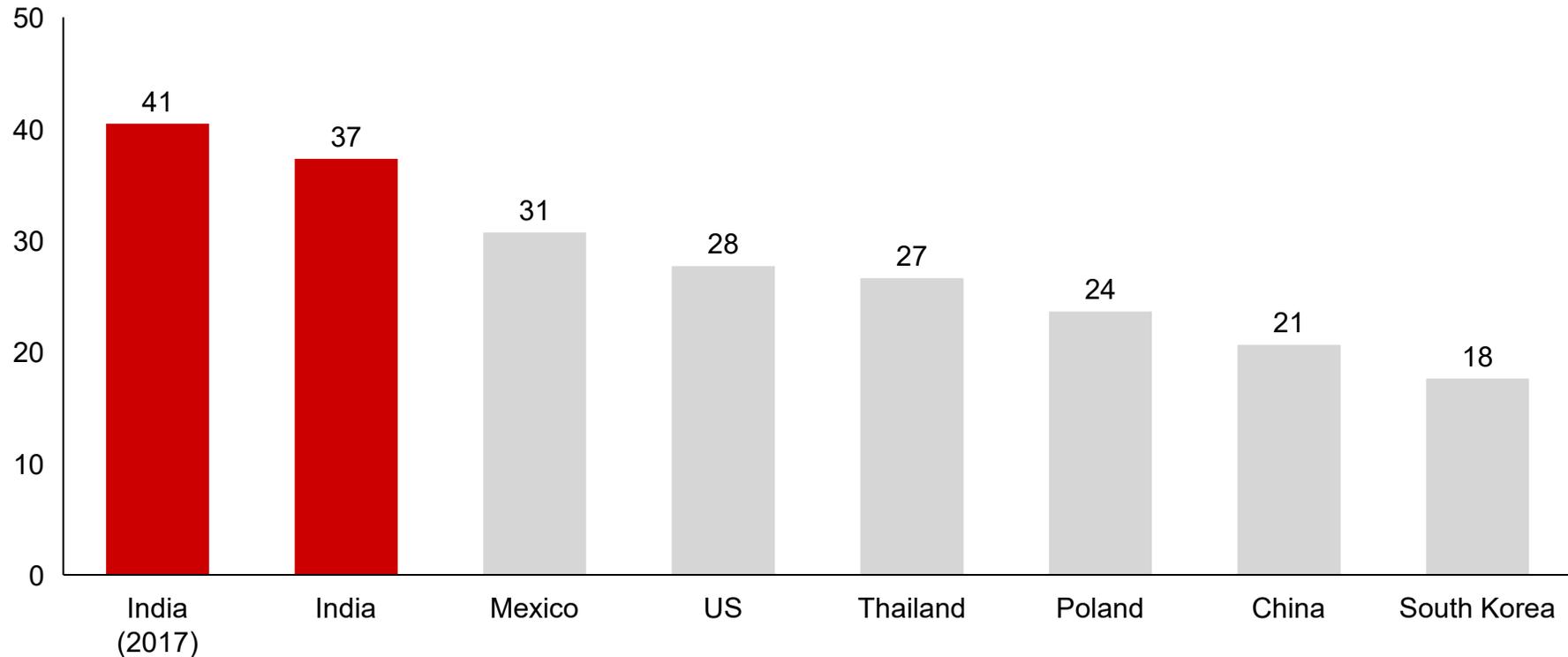
# India's disease burden is still high and poses a significant risk to the economic and health ambitions of Viksit Bharat



Notes: 1) Percent of 30-year-old people who would die before their 70th birthday due to these major noncommunicable diseases; 2) Share of all deaths for all ages by underlying causes (including communicable diseases and maternal, prenatal, and nutrition conditions); 3) Modeled estimate as per World Bank; HALE is health-adjusted life expectancy; CVD is cardiovascular disease, CRD is chronic respiratory disease  
Source: World Bank DataBank

# This disease burden imposes an opportunity cost of \$0.8–\$1.0 trillion annually

Age-standardized DALYs per 100,000 population (thousands, 2023)



***India's current disease burden translates to an opportunity cost of \$0.8–\$1.0 trillion annually led by lower workforce productivity and participation.***

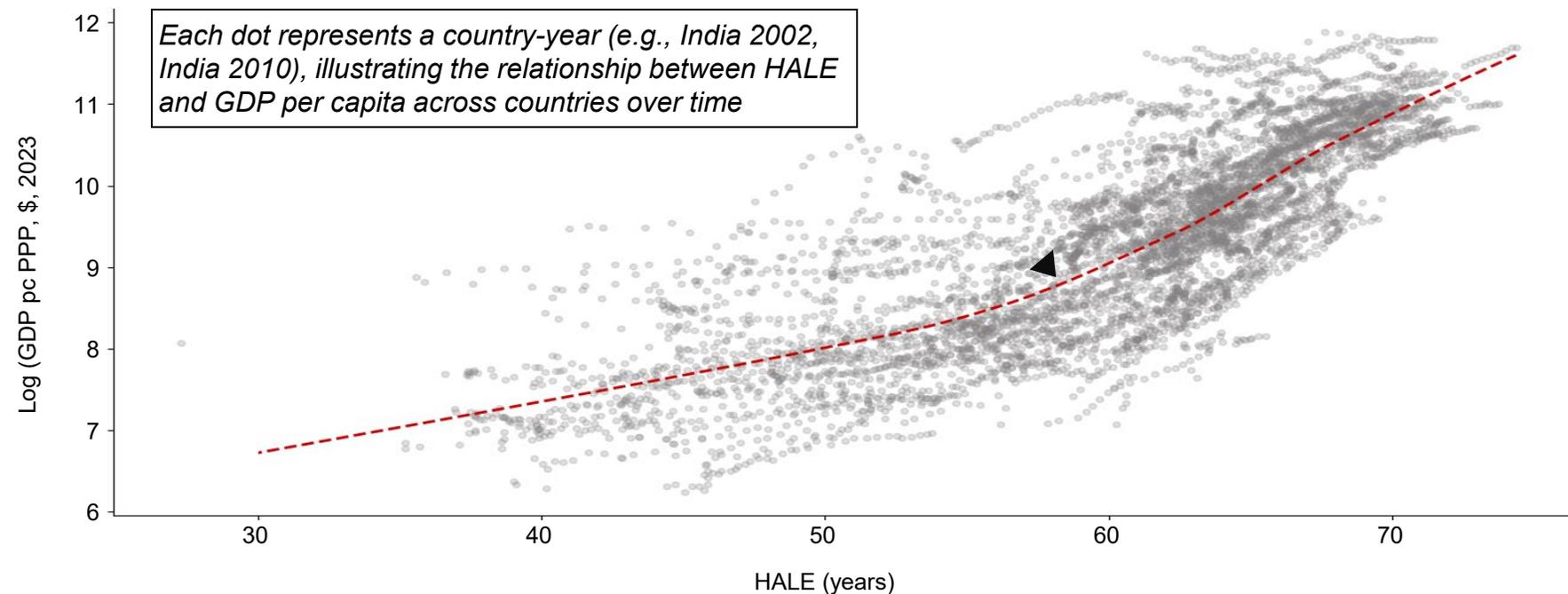
Notes: DALYs are disability-adjusted life years; an age-standardized rate is a weighted average of the age-specific rates, where the weights are the proportions of a standard population in the corresponding age groups; the potential confounding effect of age is removed when comparing age-standardized rates computed using the same standard population; the economic impact is estimated using total DALYs across all age groups and does not rely on age-standardized values (number of DALYs = 484,350,717); high DALYs mean significant disease burden, representing a high number of years-of-life lost (YLL) to premature death and years lived with disability (YLD) or illness

Source: Institute for Health Metrics and Evaluation—Global Health Data Exchange (GHDx) Global Burden of Disease Study 2023 (GBD 2023) database

# Increasing HALE to more than 60 years leads to an inflection in GDP per capita

Longitudinal analysis across ~190 countries links incremental HALE gains to higher GDP per capita

**Relationship between healthy life expectancy and GDP per capita**



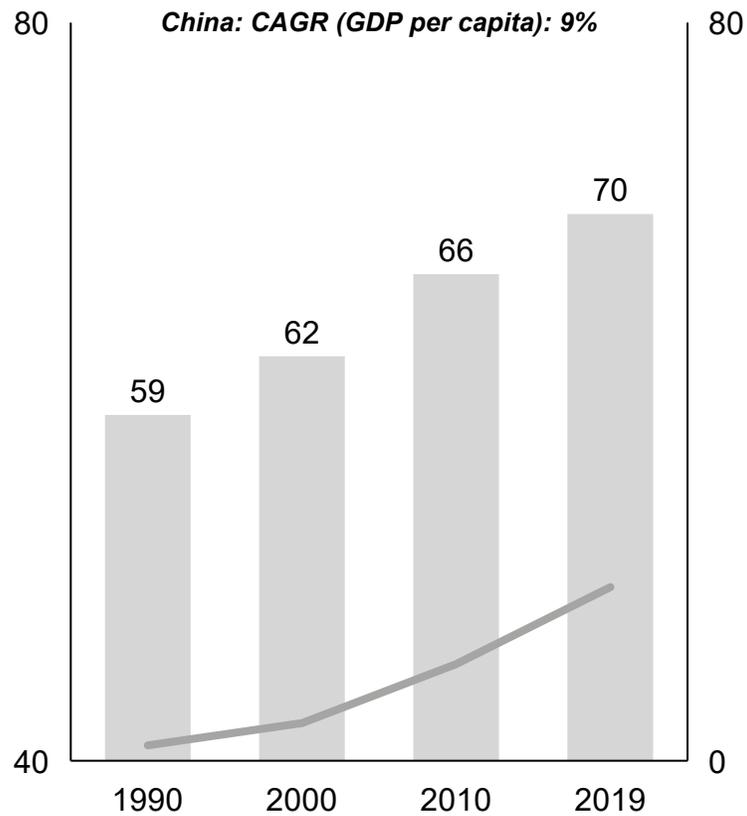
**Inflection observed at 57–60 years, beyond which every incremental HALE year drives a significant uplift in GDP per capita**

Notes: Analysis refers to real GDP per capita (inflation adjusted at 2021 prices); HALE is health-adjusted life expectancy; logging linearizes the relationship, reduces the influence of extreme values, and allows effects to be interpreted in proportional (percentage) terms rather than absolute dollars; PPP is purchasing power parity

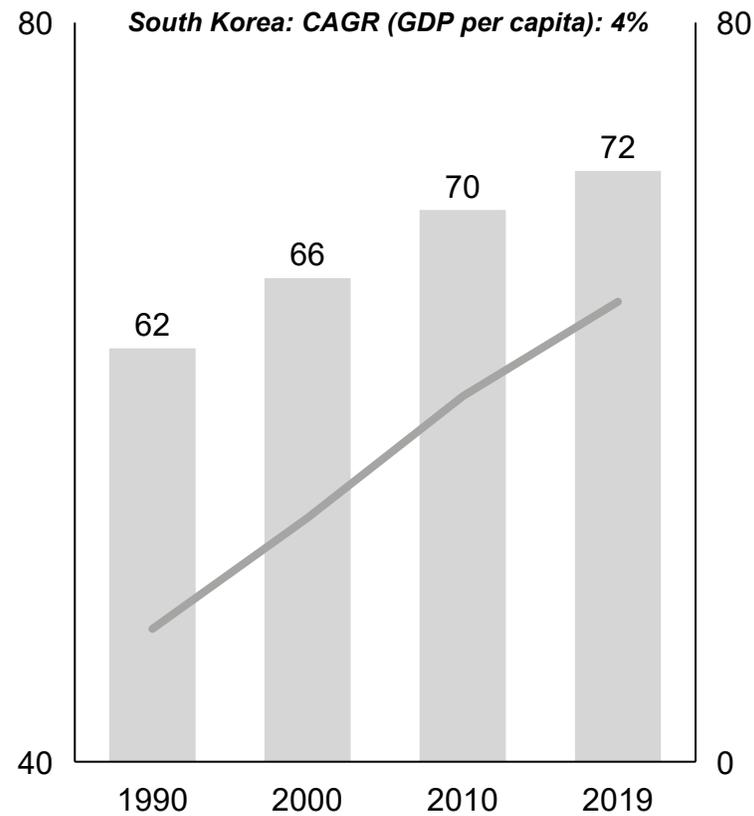
Sources: World Bank DataBank; Institute for Health Metrics and Evaluation—Global Health Data Exchange (GHDx) Global Burden of Disease Study 2023 (GBD 2023) database; Bain analysis

# Exemplar countries achieving 5- to 10-year HALE gains demonstrate how expanding healthy lifespan fuels rapid GDP growth

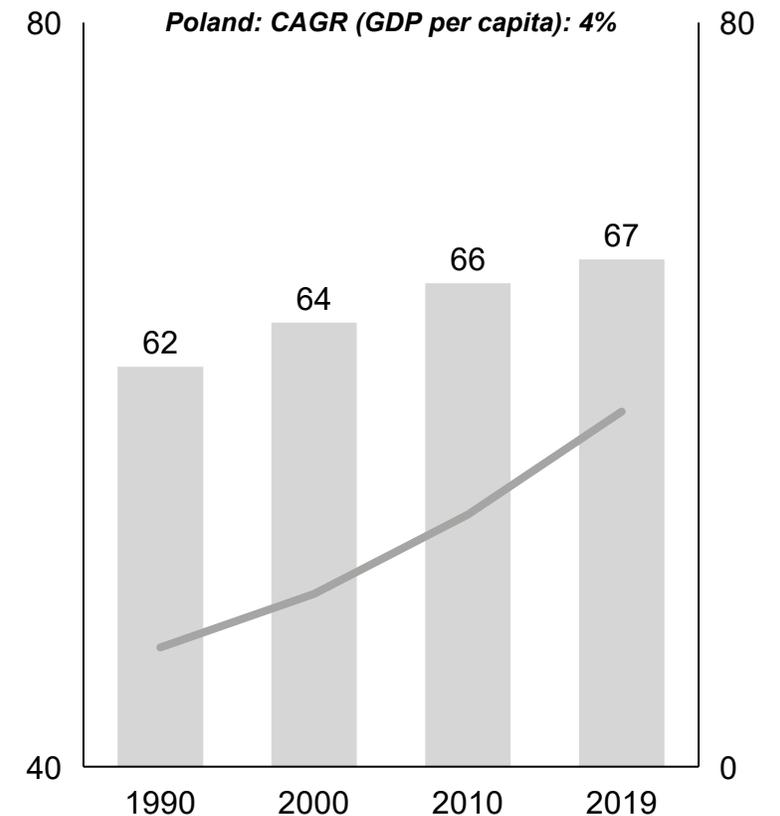
HALE (years) GDP per capita, PPP (\$ thousands)



HALE (years) GDP pc, PPP (\$ thousands)



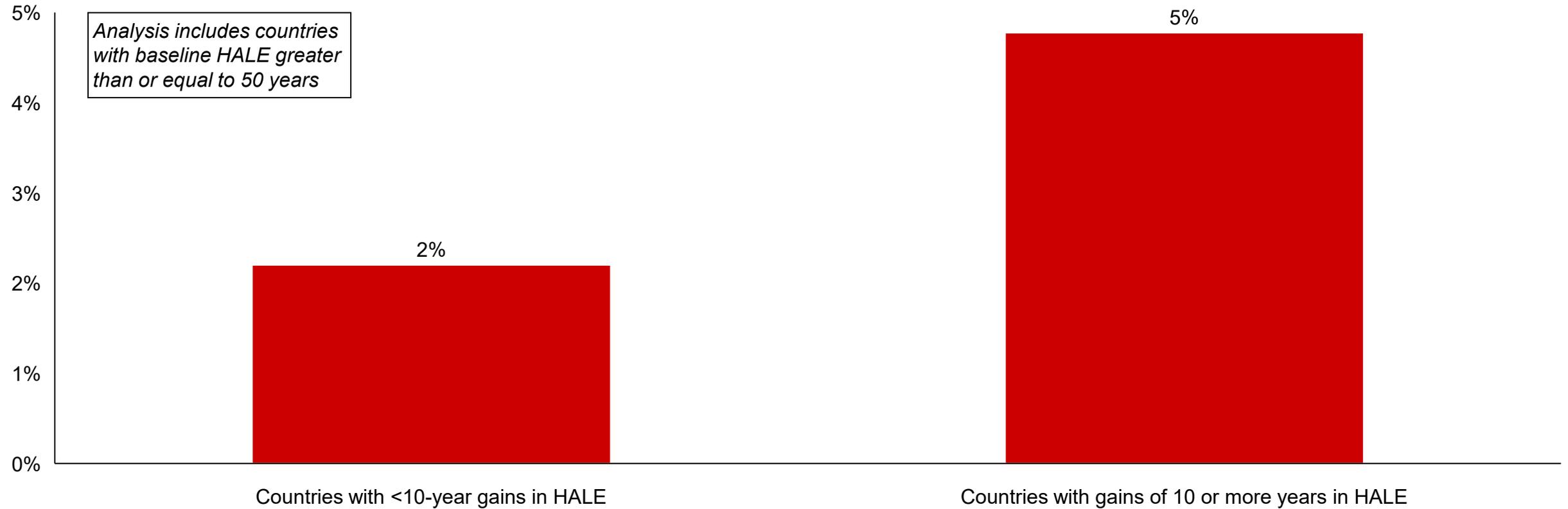
HALE (years) GDP pc, PPP (\$ thousands)



Notes: Analysis refers to real GDP per capita (inflation adjusted at 2021 prices); HALE is health-adjusted life expectancy; PPP is purchasing power parity  
Sources: World Bank \DataBank; Institute for Health Metrics and Evaluation—Global Health Data Exchange (GHDx) Global Burden of Disease Study 2023 (GBD 2023) database; Bain analysis

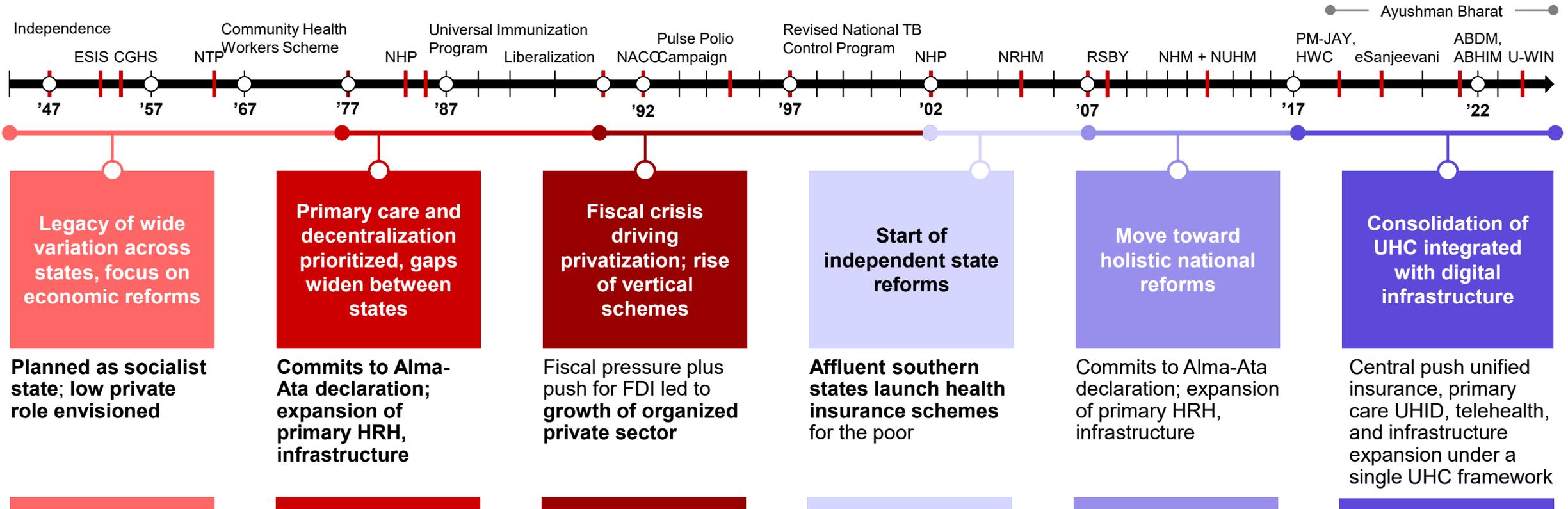
# Countries delivering ~10-year gains in healthy life expectancy realized two-times higher GDP per capita growth vs. other countries

Average GDP per capita CAGR over 3 decades (1990–2023)



Notes: Analysis refers to real GDP per capita, PPP (purchasing power parity; inflation adjusted at 2021 prices); HALE is health-adjusted life expectancy  
Sources: World Bank DataBank; Institute for Health Metrics and Evaluation—Global Health Data Exchange (GHDx) Global Burden of Disease Study 2023 (GBD 2023) database; Bain analysis

# Multiple initiatives by states and the central government over decades have created the building blocks for India to take the next step



Notes: TB is tuberculosis; FDI is foreign direct investment; HRH is human resources for health; ESIS is Employee State Insurance Scheme; CGHS is Central Government Health Scheme; NTP is National TB Programme; NACO is National AIDS Control Organization; NRHM is National Rural Health Mission; RSBY is Rashtriya Swasthya Bima Yojna; NHM is National Health Mission; NUHM is National Urban Health Mission; NHP is National Health Policy; PM-JAY is Pradhan Mantri Jan Arogya Yojana; HWC is Health and Wellness Centre; ABDM is Ayushman Bharat Digital Mission; ABHIM is Ayushman Bharat Health Infrastructure Mission; U-WIN is Universal Immunization Win; UHC is Universal Health Coverage; UHID is Unique Health Identification  
Sources: Umang.gov; National Health Systems Resource Centre; Press Information Bureau; Ayushman Bharat Digital Mission; World Bank; National Health Mission; National Tuberculosis Elimination Programme; Know India; lit. search; Bain analysis

# Learnings from exemplar nations indicate a coordinated set of actions across universal coverage, investment in infrastructure, increase in capacity ...

## Key learnings

 <p><b>Expand UHC to underserved pop., including preventive care as essential component</b></p>	China	Expanded UHC via <b>insurance schemes tailored to population segments</b> : UEBMI for formal workers (funded by employees and enterprises) and <b>URRBMI (funded by government and households) for unemployed and rural residents</b> , raising coverage from ~13% to ~95% of total population (2003–23)
	Thailand	Thailand's UHC model (2001) goes beyond insurance, <b>incorporating preventive care, adult screenings, and NCD detection</b> through a strong primary care system
 <p><b>Extend infrastructure capacity (hospitals, beds) deliberately</b></p>	China	Implemented vertical integration <b>linking tertiary hospitals with county and township facilities</b> via <b>shared management, specialist rotations, aligned funding, and strengthening district care</b> , improving quality and <b>reducing unnecessary referrals to major city hospitals</b> (tertiary referrals fell by 64.8% from 2021–24)
	Thailand	Temporarily paused new urban hospital investment and <b>redirected capital budgets to build rural infrastructure</b> ; built a district health system where a network of <b>health centers and a district hospital together served the population in that district</b>
	South Korea	Expanded healthcare capacity by introducing <b>universal insurance with government-set, activity-based payments that guaranteed predictable reimbursement, enabling large-scale private investment in hospitals, beds, and workforce training</b> under a regulated national framework
 <p><b>Extended capacity in ancillary services (doctors, nurses, primary care)</b></p>	Thailand	Strengthened rural primary care via CPIRD/ODOD reform that <b>recruited rural-background students, trained them in provincial and district hospitals, and enforced bonded rural service</b> (3–12 years with penalties for noncompliance) for reliable staffing in underserved areas with generalists for frontline service  Institutionalized a network of about <b>1 million Village Health volunteers</b> (number as of 2024) as the community extension of primary care, conducting household health surveys, maintaining family health records, supporting NCD screening, participating in prevention campaigns, and undertaking home visits for chronic patients to monitor treatment adherence

Note: UHC is Universal Health Coverage; UEBMI is Urban Employee Basic Medical Insurance; URRBBI is Urban and Rural Resident Basic Medical Insurance; NCD is non-communicable disease; CPIRD is Centre for Public Health and Integrated Research and Development; ODOD is One District One Doctor  
Sources: World Bank; World Health Organization; lit. search; Bain analysis

# ... along with a shift to prevention, incentivizing specific behaviors and accelerating the adoption of technology

## Key learnings

 **Shift from treatment-led systems to prevention-first models**

South Korea

Launched National Health Screening Programs (1980), followed by National Cancer Screening Program (1999) and general checkups, **providing free or low-cost screening that aided in improved cancer survival** (43% in 1993–95 to 78% in 2013–17) and strengthened NCD detection, such as HTN and diabetes; also launched **world's first population-based national lung cancer** screening program in 2019, decreasing the mortality rate by ~3.2% within one year of launch

Thailand

Launched universal coverage (2002), incorporating routine **NCD screening for all age groups within a benefits package accessible at no or minimal cost** (~55% hypertension screening by 2013), alongside cancer screening and strong immunization programs to improve early detection and reduce reliance on hospital care



**Support nation-wide rollout and adoption of EHR/ EMR**

South Korea

Legally recognized EMRs and launched a five-year national plan to digitalize medical information in early 2000s, later introducing a national EMR certification program to standardize hospital systems. By 2022, **EMR adoption reached ~95% of hospitals**. It also launched My HealthWay as a consent-based, interoperable platform connecting to hospital EMRs and enabling patients to access 113 standardized health data categories and securely share information across hospitals



**Leverage policy to steer behavior, not just fund** (pricing, regulation, taxes/subsidies)

South Korea

Raised **tobacco taxes in 2015, which led to 80% increase in cigarette prices** and discouraged smoking, with additional revenue supporting national health and cessation programs, contributing to a **marked decline in smoking** (nearly 40% of those who smoked before 2015 had quit by 2017)

Thailand

Imposed a **tiered excise tax on sugar-sweetened beverages** (introduced in 2017 and progressively strengthened) to reduce sugar consumption and **applies a 2% surcharge on alcohol and tobacco, which funds ThaiHealth**, which in turn supports nationwide prevention campaigns, community health programs, and healthy lifestyle initiatives

# NHP 2017 delivered progress; closing remaining gaps and accelerating toward Viksit Bharat demands higher investment and integrated execution

Primary metrics	Progress made
 <b>Life expectancy and healthy life</b>	<i>Life expectancy targets were met (~72 years), total fertility rate declined below replacement levels (~1.9), and routine DALY-based burden tracking was established</i>
 <b>Mortality by age and/or cause</b>	<i>Although mortality indicators improved significantly (i.e., MMR, IMR, neonatal mortality), none of the final targets were fully achieved</i>
 <b>Reduction of disease prevalence/incidence</b>	<i>Leprosy and kala-azar elimination achieved; LF and TB elimination and premature NCD mortality reduction (~14% vs. 25% target) remain unmet</i>
 <b>Coverage of health services</b>	<i>Immunization targets achieved; gains in public health utilization, family planning, and NCD control fell short of targets (~35%–40% hypertension control)</i>
 <b>Cross sectoral goals related to health</b>	<i>Tobacco use declined (32% in 2015 to 22% in 2024); child stunting, occupational injury, and universal sanitation (~19% households without toilets) targets remain unmet</i>
 <b>Health finance</b>	<i>Public health spending ~1.9% vs. 2.5% target; state allocations ~6% vs. 8% target; catastrophic expenditure reduction below 25%; all remain unmet</i>
 <b>Health infrastructure and human resource</b>	<i>Health workforce and infrastructure expanded nationally but remain insufficient; IPHS staffing, volunteer ratios, and facility norms have yet to be fully met</i>
 <b>Health management information</b>	<i>Digital reporting and surveillance have improved; a fully integrated national health information network is yet to be established</i>

**To achieve 2047 vision, the primary priorities are to:**

- ▶ Increase healthcare investment to benchmark levels
- ▶ Establish an “integrated governance” to manage a larger and more complex ecosystem

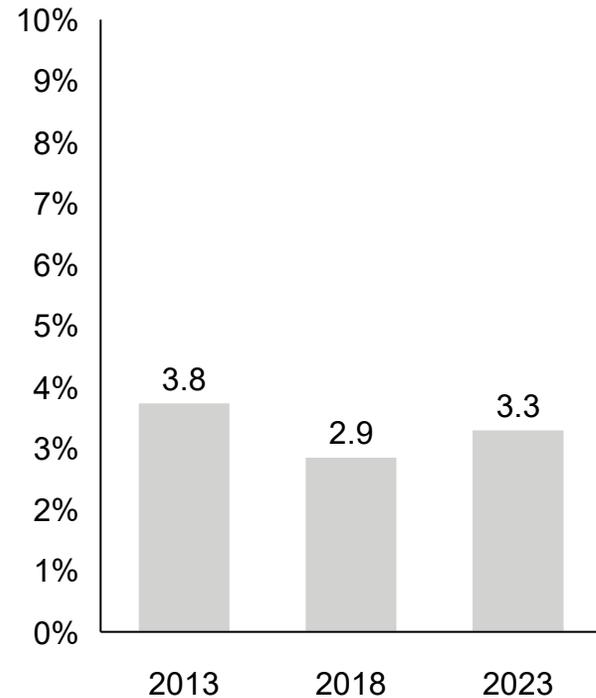
Progress ■ Significant ■ Moderate ■ Limited

Note: Life expectancy as of 2024; TFR as of 2025; Premature NCD mortality as of 2025; Hypertension control as of 2023-24 survey; Households without toilets as of 2019-21 NFHS survey; Public health spend as of 2023-24; State allocations as of 2020-21; IPHS are Indian Public Health Standards; MMR is maternal mortality rate; IMR is infant mortality rate; NCD is non-communicable disease; LF is lymphatic filariasis; TB is tuberculosis; NHP is National Health Policy; DALY is disability-adjusted life year | Source: National Health Policy 2017; Bain analysis

# India will need to double its investments in healthcare to meet levels comparable to benchmark countries

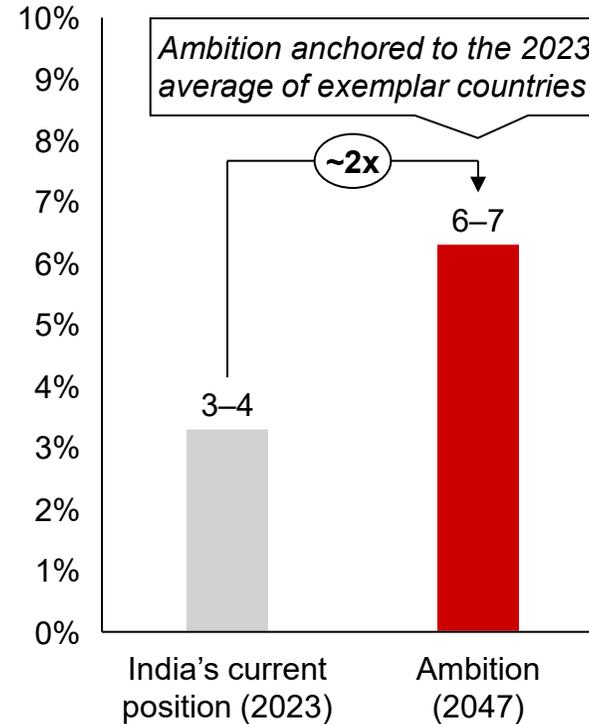
## Health spend has remained flat over the past decade

India CHE as a percentage of GDP



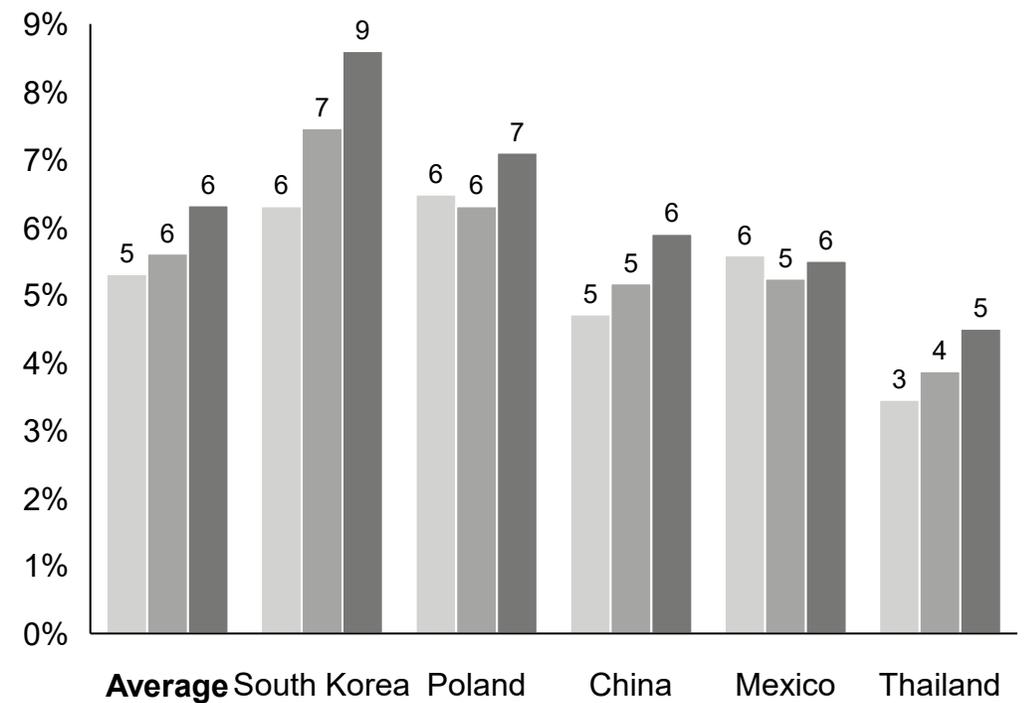
## Achieving peer parity demands nearly 2x of health investment

CHE as a percentage of GDP



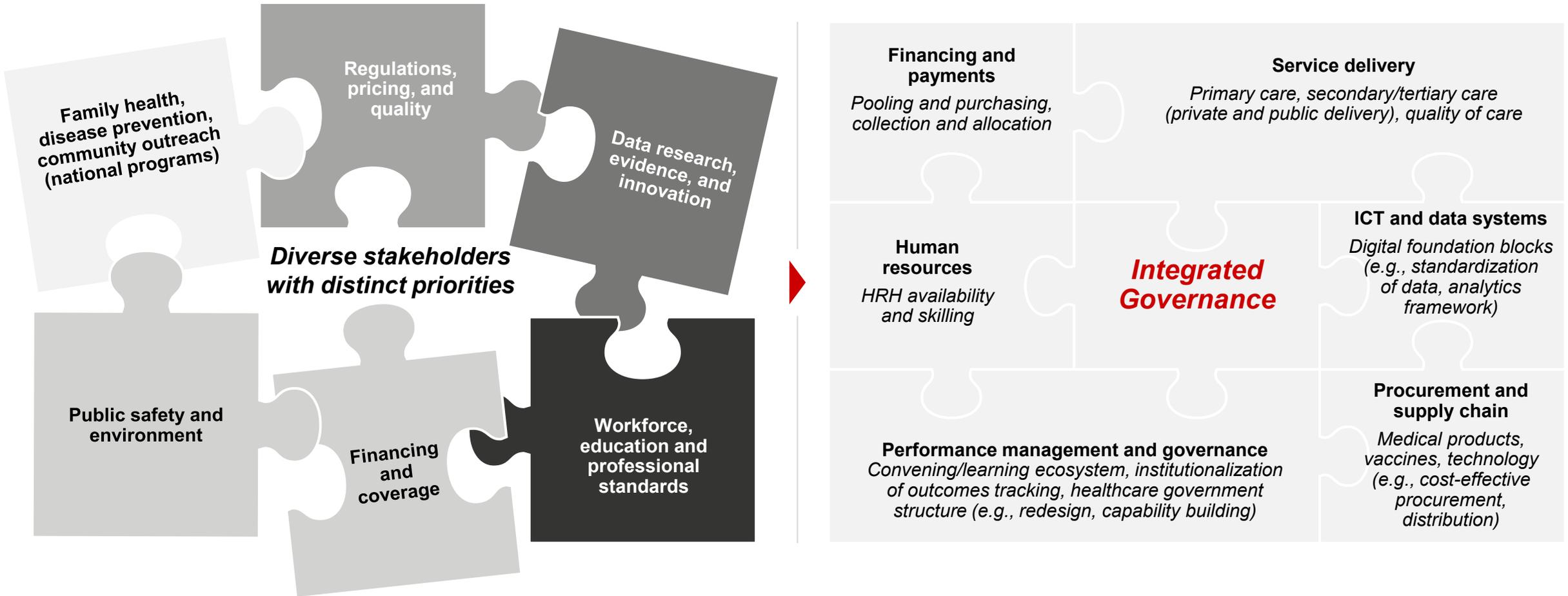
## India materially underinvests in health vs. exemplar countries

CHE as a percentage of GDP



Note: CHE is current health expenditure; GDP is gross domestic product  
Source: World Bank DataBank; Bain analysis

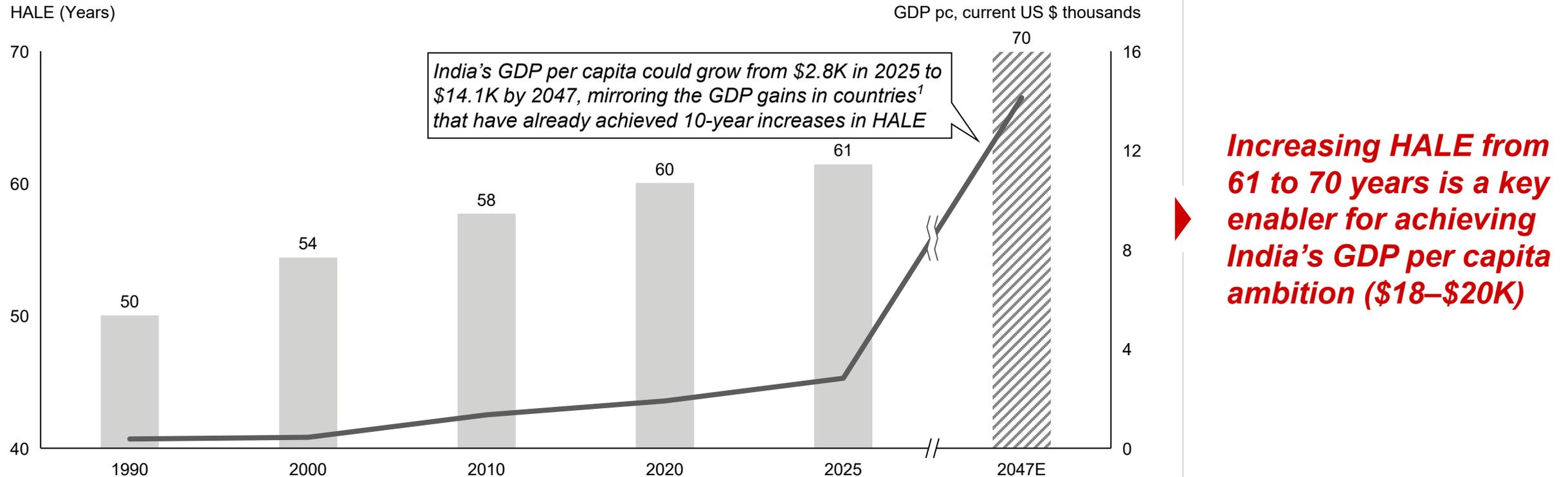
# India can benefit from establishing integrated governance to align reforms and policy across the healthcare ecosystem under a single accountable framework



Note: HRH is human resources for health; ICT is information and communication technology  
Source: Bain analysis

# Rapidly increasing HALE could unlock five times GDP per capita and propel India's progress toward Viksit Bharat

India: CAGR 1990–2025 (GDP per capita): 6%



Note: HALE is health-adjusted life expectancy; PPP is purchasing power parity; estimated HALE for 2025 based on historical growth (2013–23); 1; estimates are based on the average GDP per capita CAGR (in current US \$) of countries that achieved 10+ years of HALE gains; using current US\$ yields a higher growth rate (8%) compared to PPP-based calculations (5%)

Sources: World Bank DataBank; Institute for Health Metrics and Evaluation—Global Health Data Exchange (GHDx) Global Burden of Disease Study 2023 (GBD 2023) database; Bain analysis; International Monetary Fund



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