Transforming Primary Healthcare in India through AB-HWCs

July 14th 2022

DRAFT

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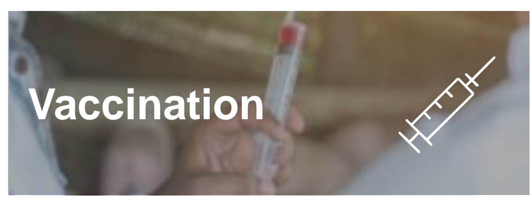
COVID has provided boost to healthcare and increased consumer awareness and focus on health

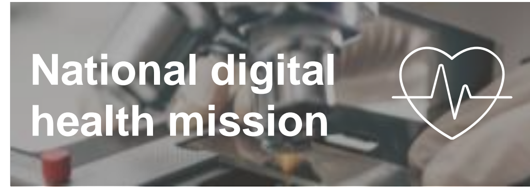


- **Government's investment and readiness** to tackle and mobilize the resources along with **coordination with private providers** played a key role in the vaccination drive

2B+ **vaccines administered**

70K+ **vaccination centers across India**

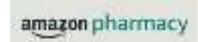
- Increasing use of telehealth led by **government approval of protocols** and tele-health guidelines; **building tele-health platforms** to provide services (e.g., Public: eSanjeevani platform, Private: Practo, Pharmeasy)
- **eSanjeevani** (**30M+** consultations till Mar' 22)
  - **eSanjeevaniOPD**: Enables video/ audio/text clinical consultations b/w doctor & patient
  - **eSanjeevani AB-HWC**: Doctor at the HWC can connect to the doctor at a tertiary hospital



- **Connecting different stakeholders in the healthcare system digitally** to strengthen the accessibility and equity of health services
  - **100K+ health IDs** issued in the pilot phase
- **Development of digital platforms** (e.g., eAushadhi)
  - **eAushadhi**: Web-based supply chain management solution for distribution of drugs, surgical and sutures

- **Massive investment plans from traditional healthcare providers**

- **Entry of new players** in the e-pharmacy market



- **Robust funding to Indian healthcare startups**

Source: NITI National Digital Health mission strategy overview, MoHFW data, Lit search

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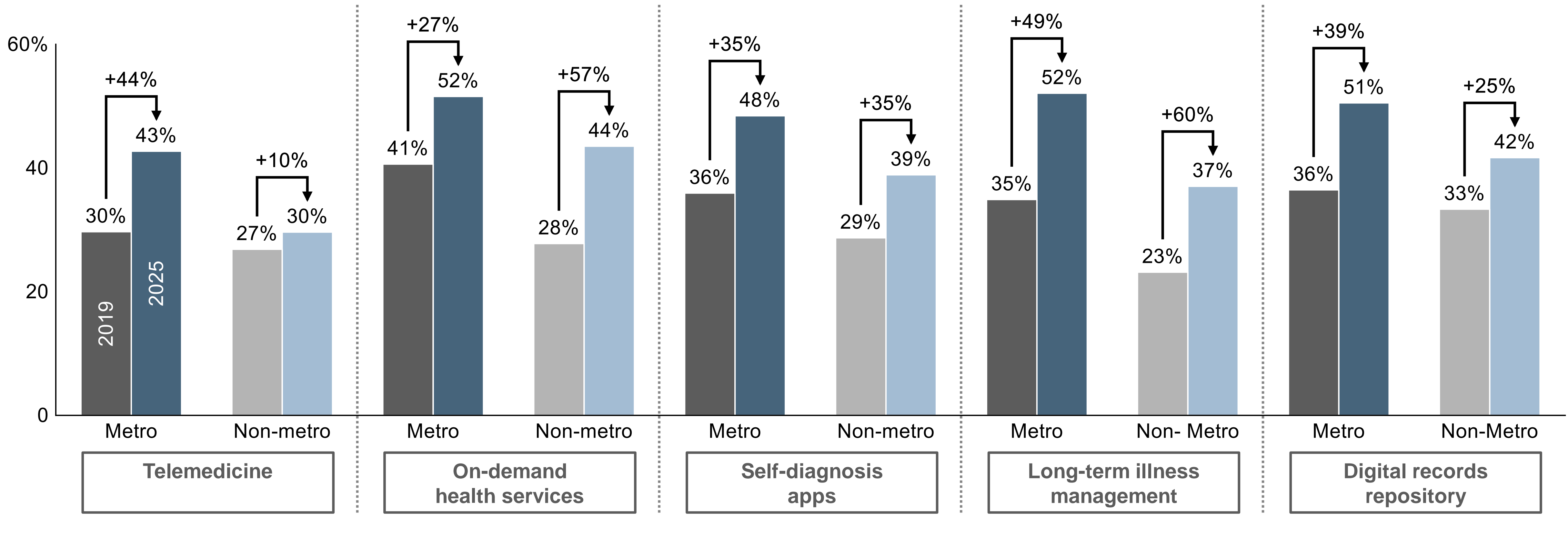
There has been significant change in adoption of digital in health….

Which of the following digital health services do you currently use/would use in the next 5 years? (N=300, 2019)



55% smartphone penetration in 2020

12GB data consumption per capita

900M internet users by 2025

38B+ UPI transactions in 2021

Note: % calculated as respondents who responded "In the past 12 months" and "In the next 5 years" as a % of total Metro and Non-metro respondents
Source: Bain Frontline of Healthcare APAC Survey 2019 (India n=300)

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Government is very committed to improving primary healthcare in India through Ayushman Bharat Health and Wellness Centres (HWCs)

Overview

- Envisioned in **National Health Policy 2017,** to provide **Comprehensive Primary Health Care (CPHC)**
- Announcement of **creation of 1.5 lakh HWCs** by Dec'22, under Ayushman Bharat, in **Union Budget 2018**

"***Health and Wellness Centres** will in a way work as **family doctors for the poor.** Earlier there used to be a family doctor in middle class and upper class families. These Wellness Centres will now become **the extension of your families**. These will be **associated with your day to day lives**.*"

Prime Minister of India, Shri Narendra Modi

"1.5 lakh HWCs will bring health care system closer to the homes of people. These centres will provide comprehensive health care, including for NCDs and MCH services. These centres will also provide free essential drugs and diagnostic services. I am committing INR 1200 crore in this budget for this flagship program. I also invite contribution of private sector through CSR and philanthropic institutions in adopting these centres."

Then Finance Minister, Late Shri Arun Jaitley, (Union Budget 2018)

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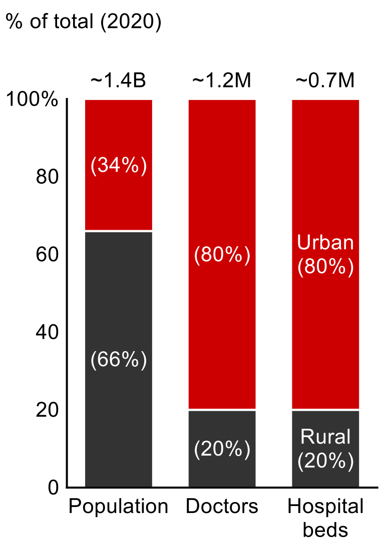
As we step back … we need to recognize that current health system has low access, varying quality (accreditation/unorganized), low infra and low spend by Government

Limited infra and HR, skewed towards urban

% of total (2020)

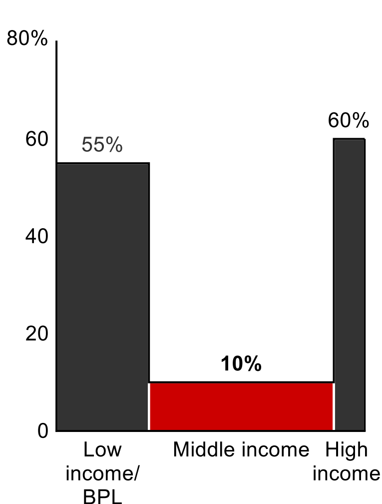


80% of doctors, pharmacies in **urban areas where only 1/3rd of the population lives**

In rural areas, **2 out of 3 medical practitioners are quacks**

Fragmented schemes driving low coverage

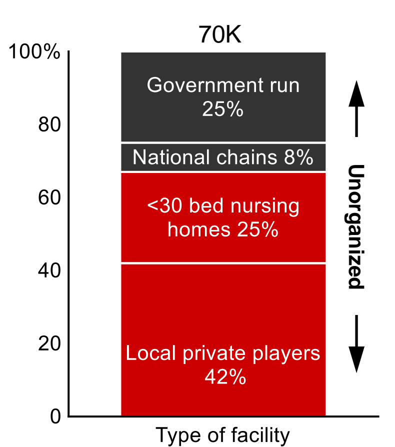
Insurance coverage in % (2017)



In the **absence of a low-cost health insurance product**, the missing middle remains uncovered despite the ability to pay nominal premiums. Efforts underway by the govt. to launch a better product for this segment

~70% India's HC delivery network is unorganized

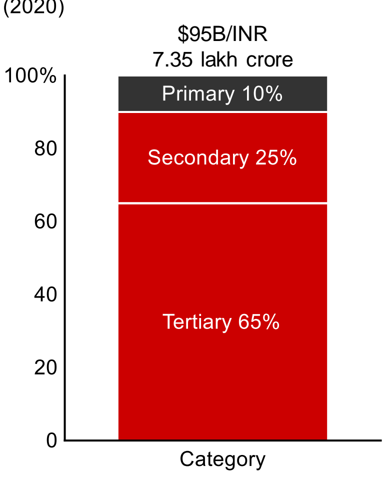
Treatment delivery facilities (2020)



Healthcare **predominantly an unorganized sector**
< 1% of hospitals and nursing homes **accredited by NABH**
<1% of diagnostics labs **accredited by NABL**

HC spend conc. on secondary/tertiary

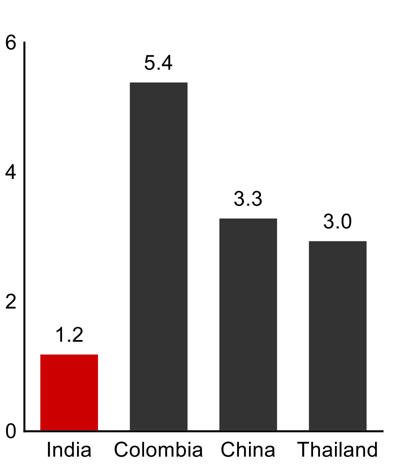
Total HC treatment spend by category (2020)



People have developed a preference to use secondary and tertiary health facilities even for conditions which can be managed at the primary care level

Low public health spend relative to other countries

PHE as % of GDP (2014)



In India, more than **60% healthcare expenditure is covered through private sources** as per World Bank

Note: HC – Healthcare; NH – Nursing homes; JCI - Joint Commission International; NCD – Non-communicable diseases; CMNND- Communicable, maternal, neonatal and nutritional diseases; NABH: National Accreditation Board for Hospitals & Healthcare Providers; NABL: National Accreditation Board for Testing and Calibration Laboratories; Urban is defined as a town with population>5K, density>400 per sq. km. and more than 75% of the working male population engaged in non-agricultural employment
Source: IMHE (Institute for Health Metrics and Evaluation); Secondary research; Market participant interviews; NITI Health Insurance for India's Missing Middle; Bain analysis

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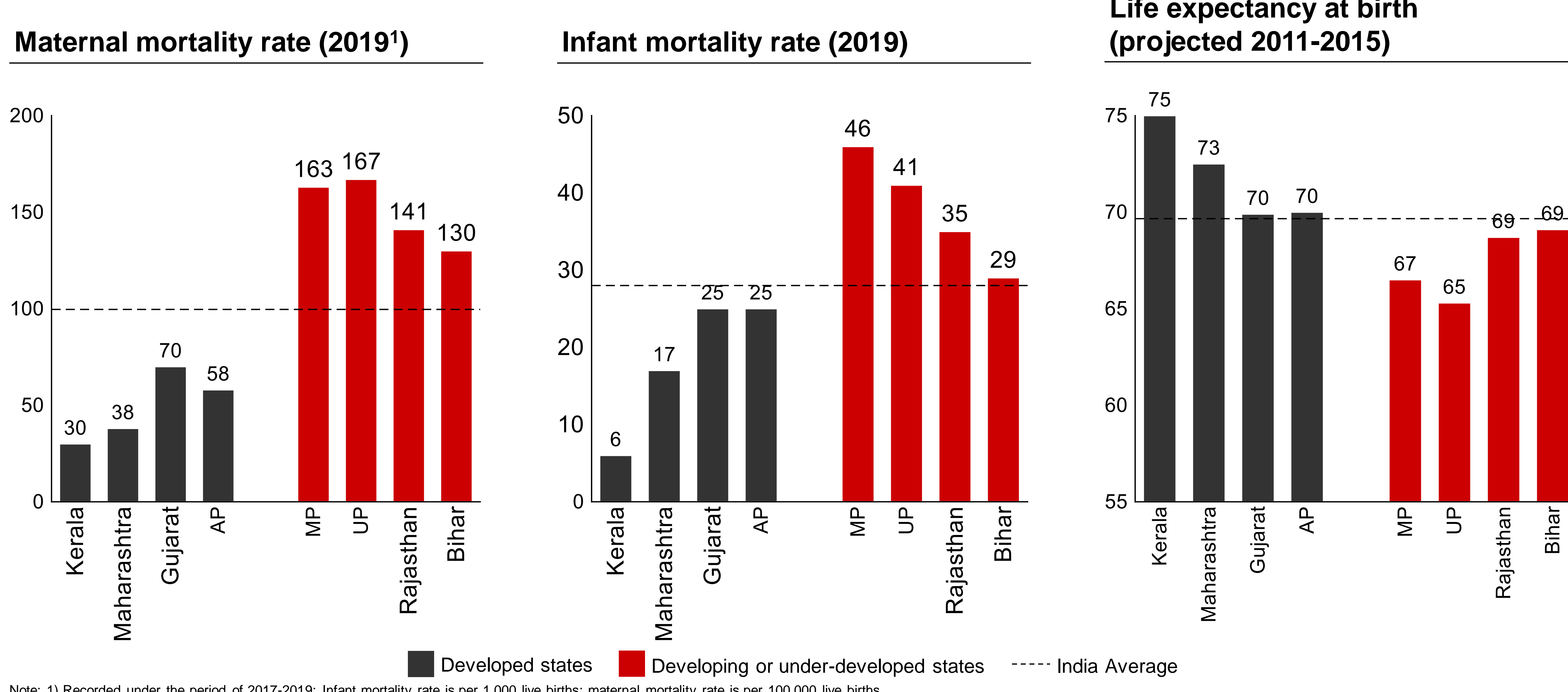
And very significant variations in infrastructure, healthcare consumption and outcomes across states and geographies



Note: 1) Recorded under the period of 2017-2019; Infant mortality rate is per 1,000 live births; maternal mortality rate is per 100,000 live births
Source: United Nations Development Program; Inequality-adjusted Human Development Index (IHDI) report; RBI database; Census India; Central Bureau of Health Intelligence (CBHI); Bain analysis

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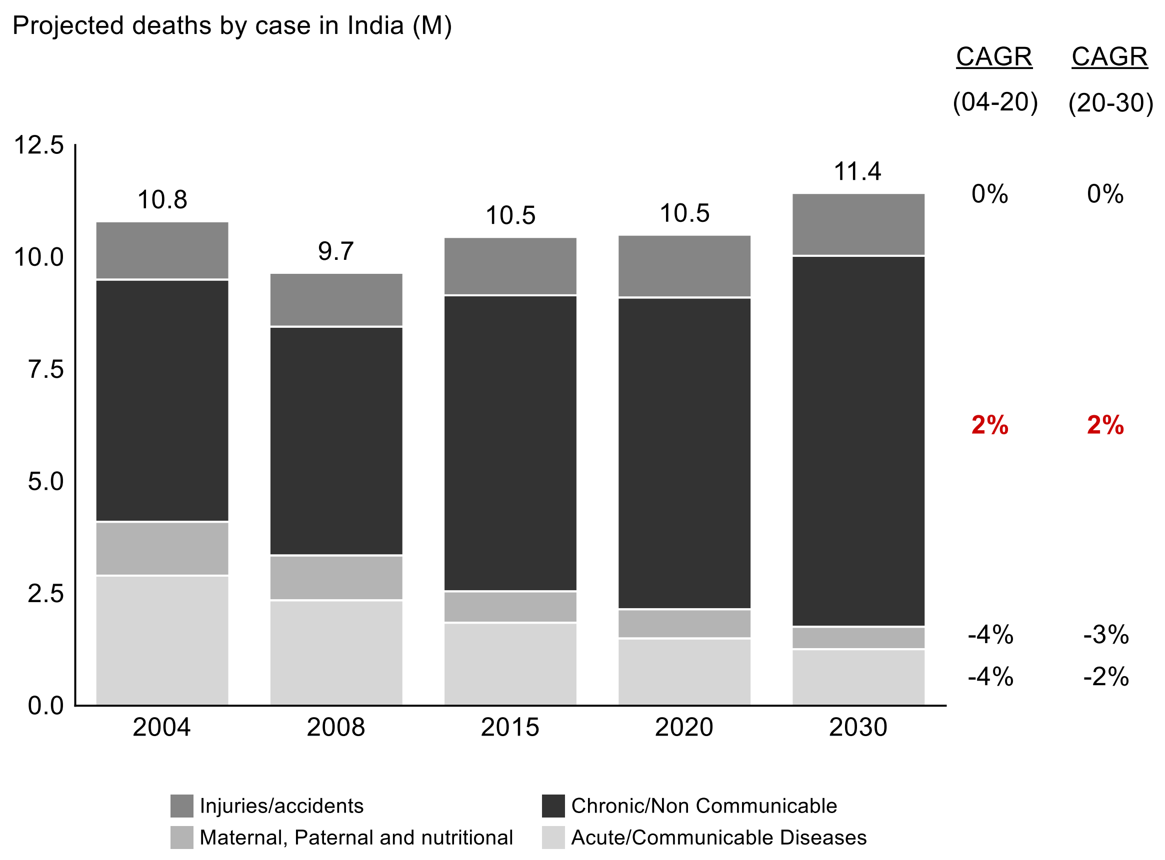
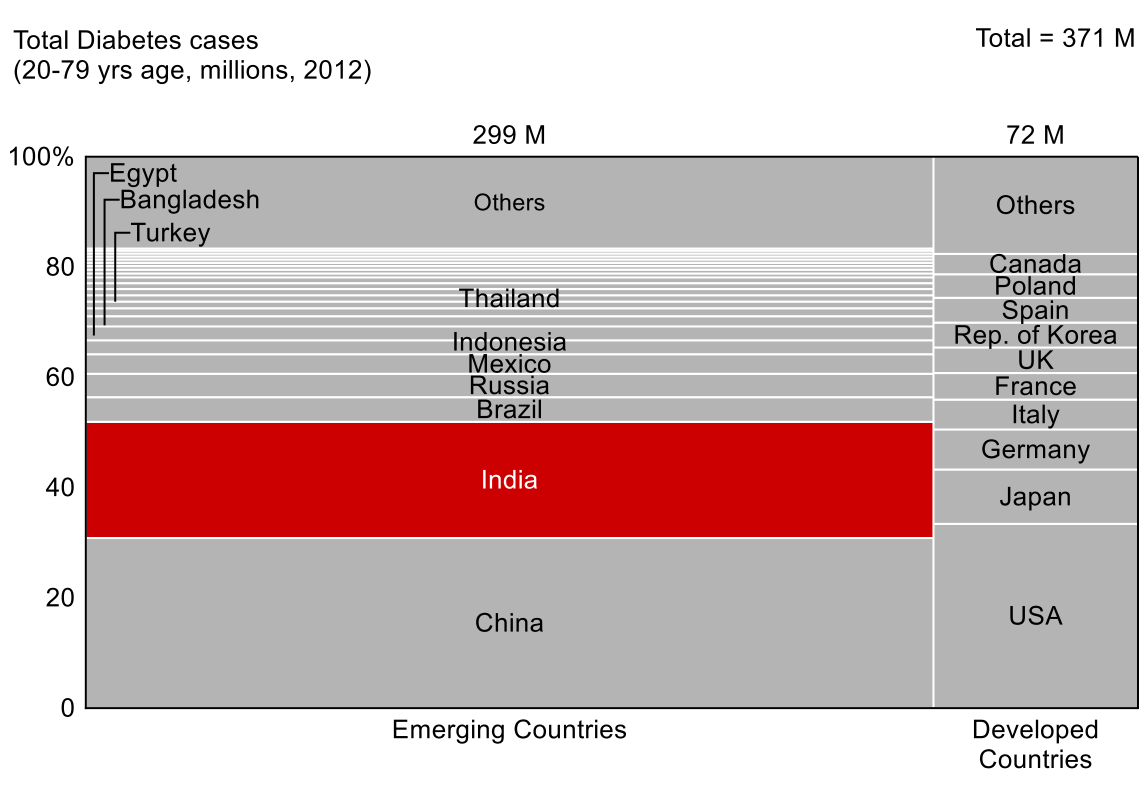
Another key imperative is to address NCD tsunami

Chronic diseases are growing at a rate faster than other diseases



Amongst chronic diseases, diabetes is the most prevalent and is expected to reach 100M by 2030



Source: Chronic diseases and injuries in India, Lancet publishing; data.gov.in for DALY; BMI, IDF, Bain analysis

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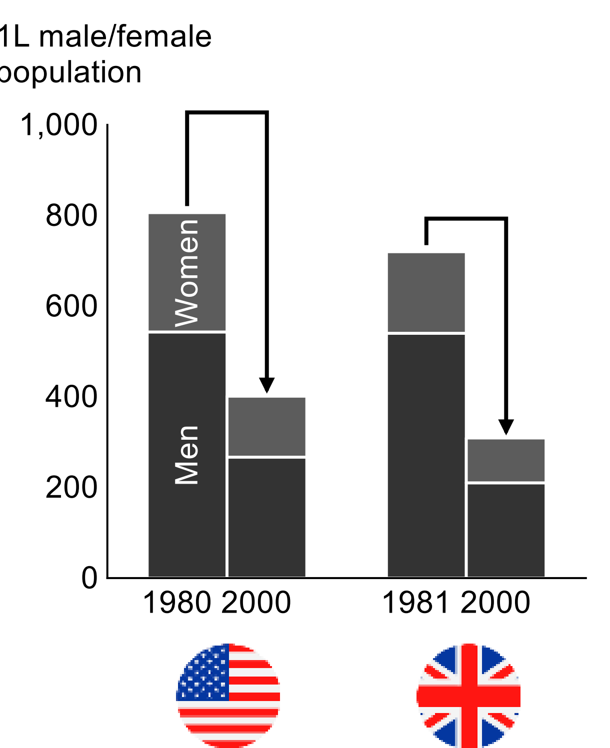
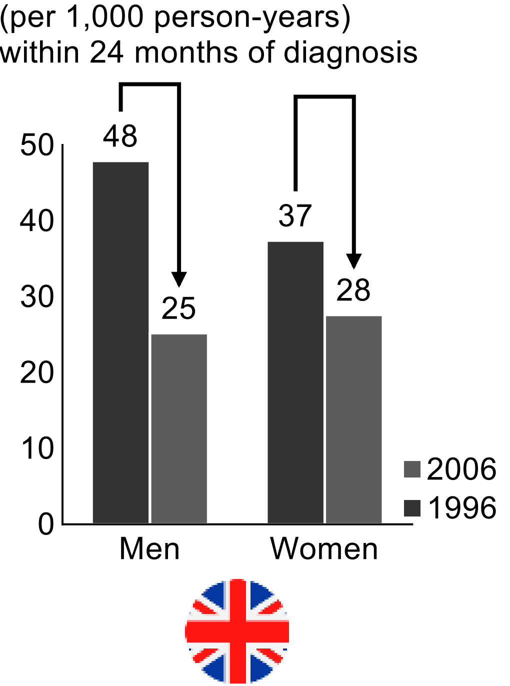
Learnings from other countries strongly suggest importance of proactive and early intervention to reduce chronic disease morbidity and mortality

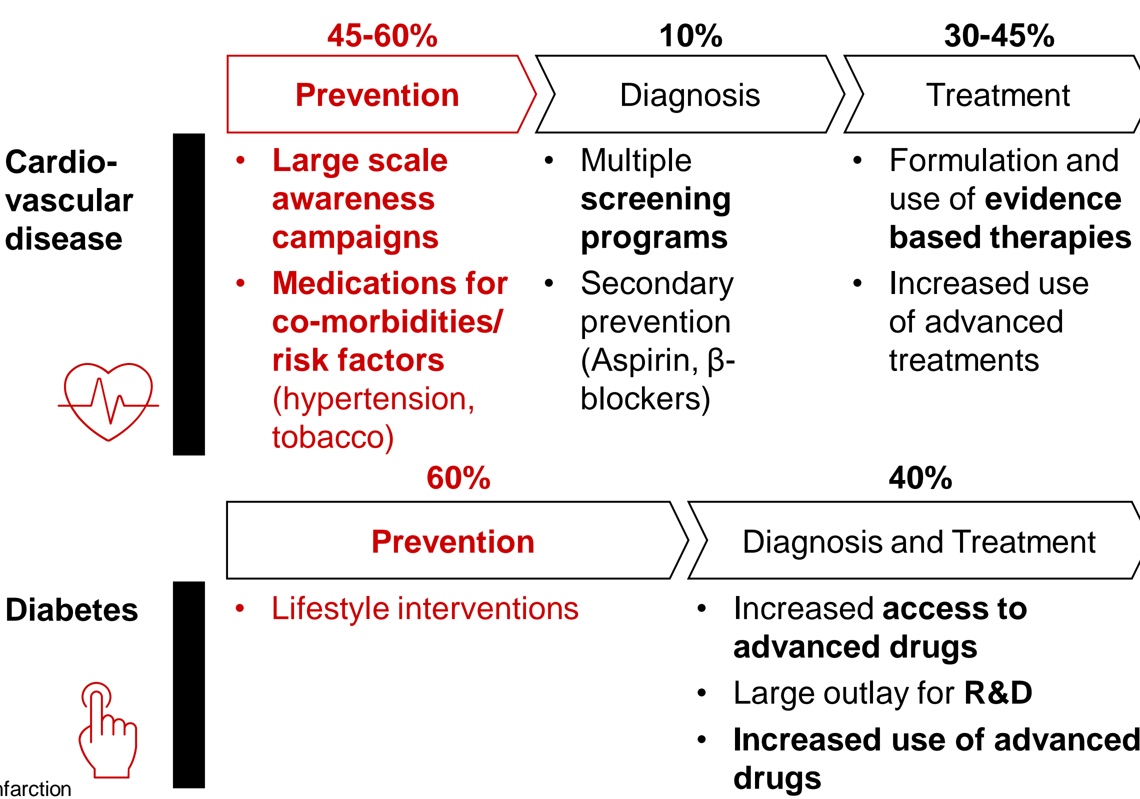
50% decline in CHD mortality



35% decline in diabetes mortality



Significant portion of reduction attributable to activities aimed at prevention & early diagnosis



Note: CVD data includes men and women 25 to 84 years old, Diabetes data includes men and women >30 years old, MI-Myocardial infarction

Source: Explaining the decrease in U.S. Deaths from Coronary Disease, 1980-2000, Ford et al, N Engl J Med 2007, American Society of Nutritional Sciences, American Heart Association, Explaining the Decline in Coronary Heart Disease Mortality in England and Wales Between 1981 and 2000, Unal, Critchley Et Al, British Heart Foundation, Action on Smoking and Health, National Screening Committee website, Explaining the Decline in Early Mortality in Men and Women With Type 2 Diabetes, Charlton Et Al; New England Journal, Cancer Prevention and Early Detection Facts and Figures 2013,American Cancer Society, National Cancer Institute ,US, The growth of Palliative Care Programs in US Hospitals, 2005, Morrison et.al, Journal of Palliative Medicine, Explaining the decrease in U.S. Deaths from Coronary Disease, 1980-2000, Ford et al, N Engl J Med 2007, American Society of Nutritional Sciences, American Heart Association, Explaining the Decline in Coronary Heart Disease Mortality in England and Wales Between 1981 and 2000, Unal, Critchley Et Al, British Heart Foundation, Action on Smoking and Health, National Screening Committee website, Explaining the Decline in Early Mortality in Men and Women With Type 2 Diabetes, Charlton Et Al; New England Journal, Cancer Prevention and Early Detection Facts and Figures 2013,American Cancer Society, National Cancer Institute ,US, The growth of Palliative Care Programs in US Hospitals, 2005, Morrison et.al, Journal of Palliative Medicine, Secondary research

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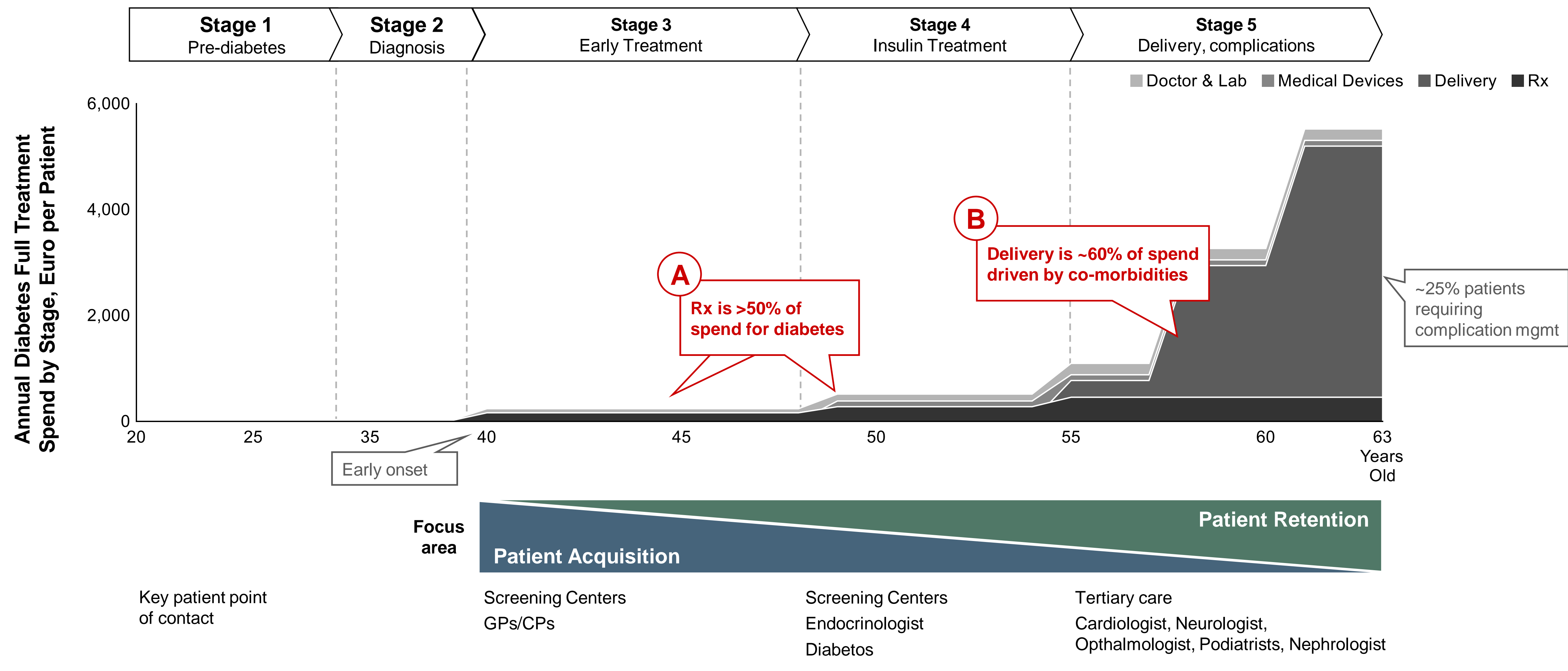
And strong evidence of preventive and primary care to be cost effective



Source: Primary interview to diabetes patients and experts; Analyst reports

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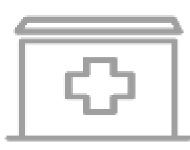
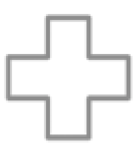
In summary, primary healthcare can be critical role to create sustainable health system



First point of access to healthcare for communities



Instrumental in **providing majority of out-patient care**, including maternal & child health services and Non-Communicable Diseases (NCDs) care. Capable of **addressing 80% of all health needs** of people, throughout their lifespan

Affordable and effective path to achieving **Universal Health Coverage** and **Sustainable Development Goal (SDG) 3- 'Good Health and Well-being'**

Reduce burden on Secondary and Tertiary healthcare facilities

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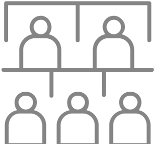
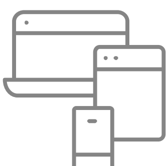
Key barriers in achieving a good primary healthcare system



Absence of clearly specified and continuously updated comprehensive **primary care protocols**

Protocols and standard treatment workflows are at a nascent stage and the guidelines need to be advocated by a body. Primary care providers hesitate to provide services because of lack of clarity in protocols



A culture of transactional primary care

Absence of essential components including empanelment of a defined population, risk stratification, proactive outreach, case management, & landscape epidemiology

Absence of strong technology backbone

Lack of set of standards around which new software platforms should be developed making it difficult for the software eco-system to evolve, be interoperable and mutually reinforcing

Absence of a well-trained complement of staff

Dearth of skilled resources for hospitals and primary care is present across the country especially for the paramedics and the nurses

Weak business models

Patients in India, at all income level, still are incurring high out of pocket expenses (~63%). Certain factors driving this can be low quality of services, switching behavior of patients, higher value proposition of private care, etc.

Source: Nachiket. (2020). Primary Care Design for India, Secondary research

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Significant variation of primary care condition of SHC/PHC – HWC across states

Relative scale: Low | Med | High

State	Complement of resources[1]		Monthly attendance per facility[4]		Total # of drugs available		Total # of diagnostics available		Referral for chronic disease mgmt. to higher doctor & its compliance		Competency assessment of CHOs by video OSCEs
	SHC[2]	PHC[3]	SHC	PHC	SHC	PHC	SHC	PHC	Referral	Compliance	
Andhra Pradesh	70%	40%	497	1287	13	34.8	2.5	13	58%	22%	70%
Arunachal Pradesh	83%	75%	62	0	17.3	43.3	5.2	9.8	61%	73%	83%
Assam	83%	25%	311	625	17	39.8	7.3	12.8	26%	30%	83%
Bihar	100%	0%	303	345	17	50.5	6	9	0%	0%	33%
Chhattisgarh	44%	75%	357	636	17.3	46.8	7	10.2	71%	97%	57%
Gujarat	89%	75%	270	705	15	43.7	10	15.3	100%	54%	44%
Jharkhand	17%	0%	177	NA	18.2	63.5	7.8	17.5	23%	100%	33%
Karnataka	11%	25%	506	829	16.7	55.3	7	15.7	NA	NA	33%
Maharashtra	67%	22%	437	1158	16	40.3	5.3	17.5	47%	56%	67%
Manipur	50%	67%	165	168	16.3	47.5	7.8	14.8	33%	56%	100%
Meghalaya	67%	50%	331	1083	19.8	48.2	9.4	14.8	20%	50%	100%
Mizoram	100%	100%	NA	237	20.8	51	7.8	15.2	29%	67%	100%
Nagaland	67%	75%	116	NA	18.1	52.8	6.1	12	30%	25%	67%
Odisha	50%	25%	359	1151	14.3	50.1	6.7	10.1	48%	100%	0%
Punjab	80%	25%	314	401	13	38	4.5	3.7	30%	54%	0%
Sikkim	33%	75%	135	826	14.6	41.8	4.4	10	58%	42%	100%
Tripura	17%	50%	202	291	13.5	33.8	6.8	3	31%	80%	33%
Uttar Pradesh	50%	0%	384	601	16.9	46.1	6.8	12.1	95%	85%	50%

Note: 1) Complement of resources for PHC - Medical Officer (MBBS) – 1; Nurse -2; Lab Technician -1; Pharmacist -1 and for SHC – as per CPHC OGL 2) SHC – Sub health centre 3) PHC – Primary health centre 4) Mar'21; Union Territories, North-Eastern states, Goa, J&K, West Bengal excluded due to insufficient data for analysis;
Source: MoHFW Ayushman Bharat Health and wellness centres assessment in 18 states

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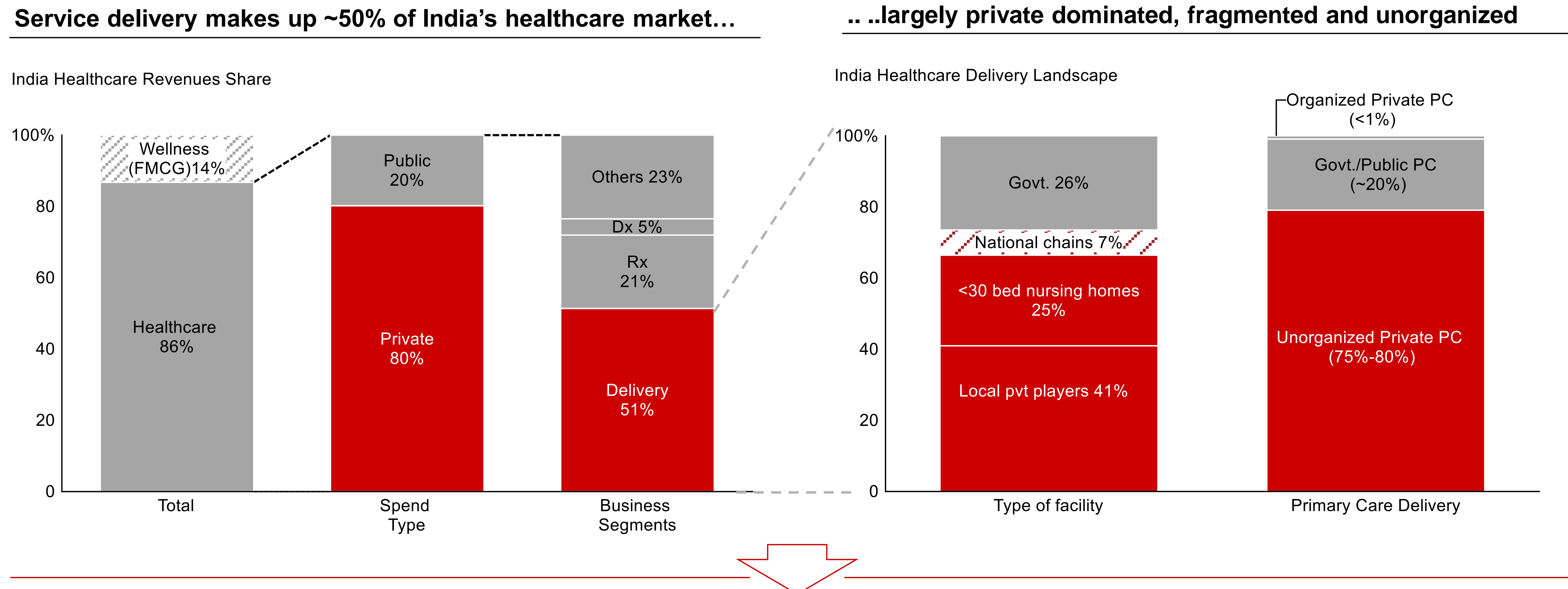
Given dominance of private sector in India's healthcare delivery space; engagement with private sector will be critical



Clinics, nursing homes will be critical actors in reform pathway due to their dominant presence; formalizing/ utilizing the unorganized sector will require experimentation

Note: Wellness includes wellness services, ayurvedic medicines, herbal OTC, infant nutrition, malted beverages, medical skin creams/lotions, functional foods, sanitary napkins, diapers,health shampoos/conditioners; rural urban definition by Census India; PCP refers to Primary Care Practitioners
Source: Bain Analysis (India Healthcare Model), expert interviews, Analyst reports

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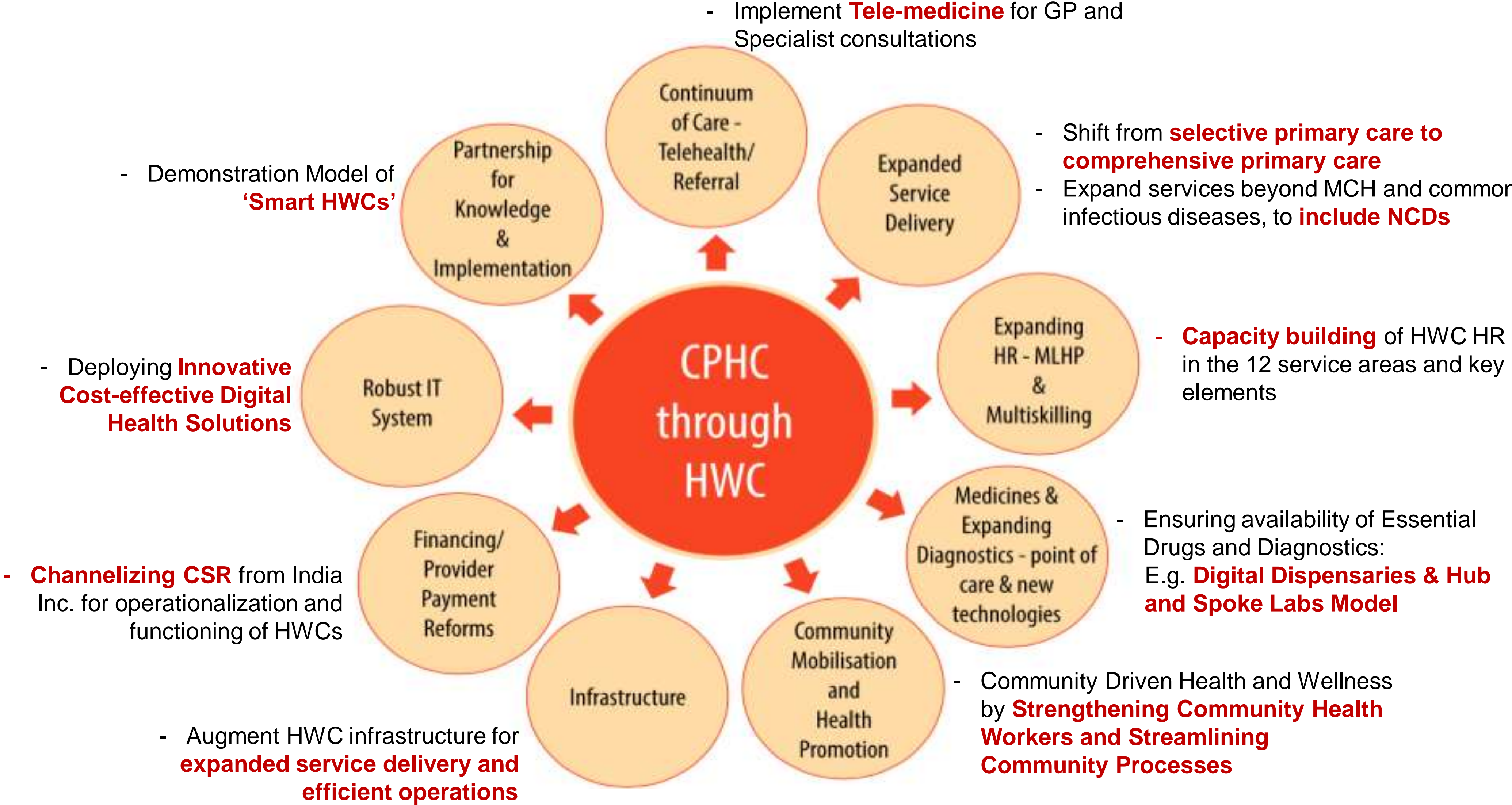
Private health sector expertise across key elements of HWC can be leveraged to benefit HWCs



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Opportunity for us to come together to make a real difference…

- **Let's be bold** and make revolutionary decisions on our healthcare system from investments to execution

- **Let's confront challenges and issues** and innovate solutions to eradicate those

- **Let's learn** from the successes and shortcomings of our own healthcare system and of others

- **Let's experiment** and implement potential solutions; fail fast and evolve

- **Let's partner** with stakeholders (public, private or individual) and come-together as a whole to transform Indian healthcare system

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Appendix

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Learnings for primary healthcare from 1-2 key countries

Brazil

- Brazil launched Family Health Program where a **family Health team delivers services at a community clinic**
  - Family health team consists of 1 physician, 1 nurse, 1 medical assistant, 4-6 community health agents and **is expected to serve 3.5K individuals within its region**
- The health system utilized empanelment where **each individual is assigned to a family health team within the geographic region**
  - Geographic empanelment has helped to prevent gaps in population coverage & overlap b/w family health teams
- Community health agents perform **regular home visits** and conduct neighborhood **health promotion activities;** and address prioritized diseases by assessing individuals, making interventions and implementing clinical guidelines and reporting to the authorities

Thailand

- Thai system attempts to **integrate medical and public health services** so that health promotion and disease prevention run alongside curative care
- **Public health officers manage "sub-district health promotion hospitals"** where the services are provided
  - **Public health officers have degree-level qualifications** in health promotion and disease prevention and can also offer basic treatments
- Sub-district health promotion hospitals serve as a **node for delivering preventive medicine and health promotion and treatment for non-serious illness**
- The health promotion hospitals also act provide access to pharmaceuticals from national essential drugs list and **diagnostic and curative services**

Source: Nachiket. (2020). Primary Care Design for India, Secondary research

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NCDs is serious epidemic for India

• NCDs account for 53% of all deaths in India

• High prevalence of
• risk factor & disease burden

- Daily tobacco smoking (Male): 25%
- Physical inactivity (14%)
- Overweight (11%)
- Raised cholesterol (27%)

- 63M diabetics
- 49M CVD cases
- 1M cancer cases

• Sub optimal diagnosis & treatment

- Late diagnosis for 70% of Cancer Cervix (Stage III /IV)
- ~24% urban diabetics on oral tablets
- ~14% of hypertensives receiving drugs

• …affecting younger demographic

- 1/8 strokes in <40 year
- Earlier onset of diabetes (51 vs. 58 in US)
- First MI (59 vs. 66 for males in dev. markets)

- Source: WHO Country Profiles, 2011; "Burden of Disease in India" – NCHM Background Paper; http://globocan.iarc.fr/Pages/fact_sheets_cancer.aspx;
- Wasay, M. *et al. Nat. Rev. Neurol.* advance online publication 11 February 2014; http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3342717/; Bain analysis; AIOCD-AWACS

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