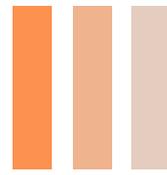


HCHE

Human Centric Healthcare Ecosystem



CHIME
INDIA



ABDM STUDY REPORT

DIGITAL PREPAREDNESS OF INDIAN HOSPITALS

FOR AYUSHMAN BHARAT DIGITAL MISSION

TEAM HCHE



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MESSAGE FROM OUR LEADERS

The Ayushman Bharat Digital Mission (ABDM) has been an ambitious program launched on 15th August 2020. Since its inception, 150 technology partners have been certified on the ABDM platform and as of 22nd March 2023, a total of 34,65,70,617 Ayushman Bharat Health Accounts (ABHAs) have been created, 2,01,653 health facilities have registered on HFR, 1,59,207 healthcare professionals have registered on HPR and 25,89,64,307 health records have been linked with ABHA.



Girish Kulkarni
Chairperson, CHIME India

CHIME and HCHE have been closely observing the developments of ABDM and providing regular feedback to the government on improving the adoption of the platform by healthcare providers.

We took up this study to accelerate the adoption of ABDM across private hospitals in India as it was observed that very few hospitals were on board the platform even after 18 months of roll out of ABDM.

The objective of this study was to understand the barriers to participation by private hospitals and give a voice to the leadership of these hospitals to express their feedback to ABDM.

The preliminary findings of this study were presented on a webinar held in July 2023. Panelists included members from CHIME India members and Shri. Vikram Pagaria from NHA.

In this report, we share with you our analysis based on the survey submissions and interviews conducted thereafter to give insights on the level of readiness of Indian hospitals for ABDM and the likely adoption by 2025.

Our main findings include:

- 1.The current level of digitization is between 40-60% at most Indian hospitals, clinical usage of EMR for both inpatients and outpatients has been done by less than 10% of respondents.
- 2.Over 60% of hospitals are optimistic about increasing the level of digitization by 2025, however, they foresee challenges due to limited budgets and lack of adoption by clinicians.
- 3.ABDM is seen to benefit patients by over 90% of respondents. However, the hospitals do not see the financial benefits of participation in ABDM.
- 4.Respondents fear loss of patients to competitors and risks of data privacy, perhaps due to a misunderstanding and misconceptions about ABDM.



Bharat Gera
Founder, HCHE

Based on the results of this survey, we have concluded that the NHA must work on the following:

- 1.Improve awareness and address misconceptions about ABDM.
- 2.Provide financial incentives for digitization and explain current and planned incentives.
- 3.Collaborate closely with CIOs and IT Heads of hospitals to discover use cases that create win-win opportunities.

CHIME and HCHE are highly grateful to the respondents of the study and appreciate the participation of NHA with CHIME members to accelerate adoption of ABDM/Digital Health Ecosystem by private hospitals. Our outlook for 2025 is highly optimistic, we believe that a majority of hospitals will join the digital health ecosystem within the next couple of years with the required support from NHA.

Best wishes for a bright future in digital health for a Digital India!!

DIGITAL MATURITY AND TRANSFORMATION PREPAREDNESS

With population of 1.42 billion, a diverse geography, multiple languages, and a multi-cultural society, digitalizing Indian healthcare system is a challenge. Additionally, the Indian healthcare system is also complex because of its diverse care delivery models that includes public (primary, secondary, and tertiary care facilities managed by the central and state governments) and private sectors.

To make this complex system work towards Universal Health Coverage (UHC) and meet the Sustainable Development Goals (SDG) for healthcare, the government has embarked on an ambitious program to create a Digital Public Goods Infrastructure (DPGI) called the Ayushman Bharat Digital Mission (ABDM).

Inspired by the success of Aadhar and Unified Payment Interface (UPI) for government services and banking and financial services, ABDM promises to solve problems at scale using Unified Health Interface (UHI) and Ayushman Bharat Health Account (ABHA). The ABDM promises to revolutionize the adoption of digital health across the ecosystem by making it easier for patients to navigate the system.



Presently, patients consult multiple physicians for an ailment in different locations in the country and struggle with keeping the thread of conversations together in scattered files, folders, images, digital and phone conversations, and other places. Healthcare digital transformation aims to help create longitudinal health records owned by the patients, thereby eliminating the need to carry physical files on every visit to the doctor.

To understand the preparedness of Indian hospitals towards the adoption of ABDM and the digital health ecosystem, CHIME India and Human Centric Healthcare Ecosystem (HCHE) conducted this ABDM study.



OBJECTIVES AND METHODOLOGY

- Guidance to CIOs/IT Heads of Indian hospitals on assessing the current level of preparation and setting realistic and achievable goals for digitization and the adoption of ABDM/ Digital Health Ecosystem by 2025.
- Feedback to the NHA (National Health Authority) on awareness of ABDM and support needed to achieve the expected level of digitization for participation in the Digital Health Ecosystem.

DATA COLLECTION AND ANALYSIS

To achieve the goals of this study, the following steps were taken:

- Shortlisted target hospitals eligible for the study
- Outreached CHIME members through an official invitation to participate in the study
- Structured survey questionnaire
- Interviewed participants on the phone or through online meetings
- Analyzed results

INCLUSION CRITERIA

Any hospital or group of hospitals in India having:

- At least 100 inpatient beds
- Using any HIS or EMR application
- Single specialty, multispecialty, or a general hospital

EXCLUSION CRITERIA

Small hospitals below 100 beds, clinics, or group clinics.

DEMOGRAPHY

The responses were obtained from 47 different hospital CXOs or IT managers. 98% of respondents are NABH Accredited.

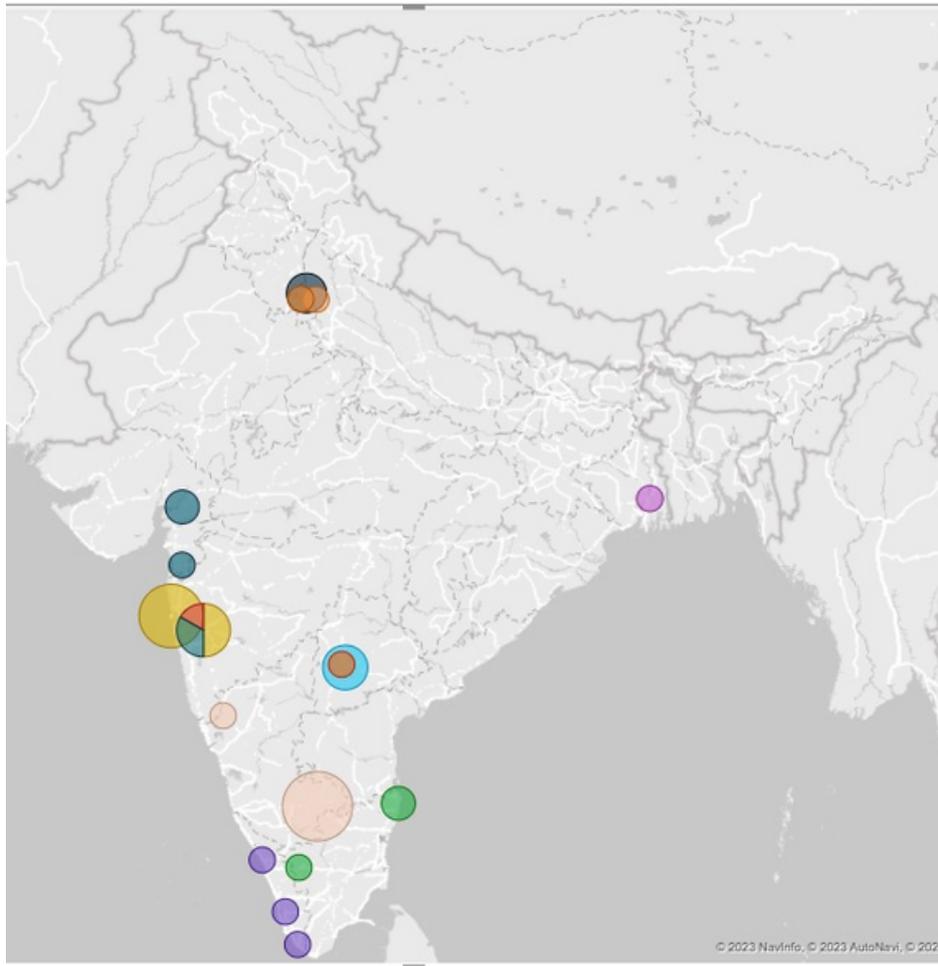


Figure 1: Respondents hospitals by location

INDIAN HEALTHCARE GOING DIGITAL BY 2025

About 50% of Indian hospitals surveyed indicated they would be more than 80% digitized over the next two years. This indicates the confidence of Indian hospitals in digitization of the Indian healthcare system. The ingenuity of Indian healthcare leaders and their teams to work with shoestring budgets has resulted in several interesting implementations in the Indian hospitals.

55.5%
Present digitization status

76.8%
Digitization expected in the next two years

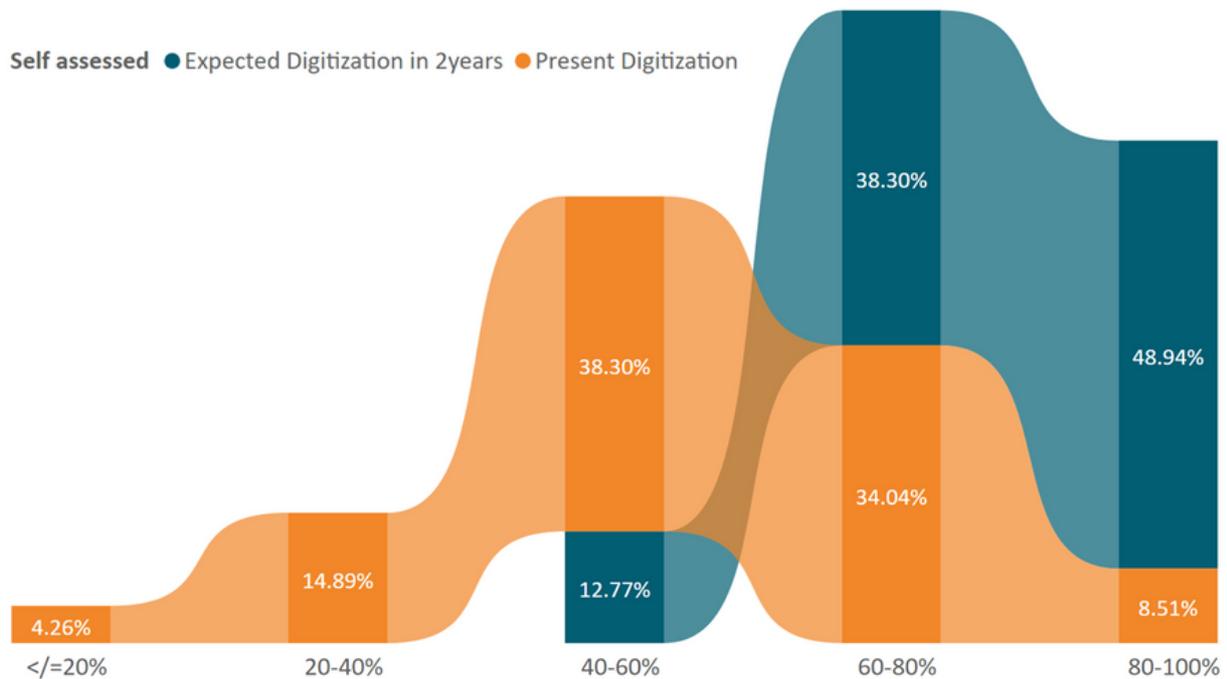


Figure 2: Digitization status, current vs. in next two years

“

OPD end-to-end workflow is digitalized. Some services are self-service based, using kiosks. In fact, we have multiple channels for engaging patients. We also have a WhatsApp integration (chatbot with WhatsApp at the front end) for registration and UHID retrieval. Our Kannur center is almost fully digitalized, and we are looking forward to digitalizing IPD, ICU, and more at our Calicut center in the next two years.

”

Saji Mathew
COO, Baby Memorial



“

We believe in technology to bring excellence in the clinical care and internal processes. We have enabled automated outpatient journey in our hospital from the registration to the automated e-Prescription, meaning end-to-end automated journey.

”

Bhoopendra Solanki
CIO, Sakra World Hospital



PREPAREDNESS FOR ABDM

The building blocks established by ABDM play a pivotal role in digital transformation. The basic infrastructure to enable the vision of ABDM includes ABDM-certified software for documenting patient records, registering on the HFR and HPR, creating the ABHA ID, and using the ABHA mobile app for patient records. To assess preparedness, the respondents were asked to rank the steps required for being ABDM-ready and their perceptions of the risks and benefits of ABDM adoption. Using these responses, we could assess respondents' awareness and motivation of respondents to adopt ABDM.

“ Digital processes bring transparency and agility. ABDM infrastructure will be a game changer for India. ”



Girish Koppar
General Manager, IT,
Wockhardt

ABDM ONBOARDING STEPS

According to the study for 44% of hospitals, EMR adoption is the most important requirement for digital transformation, followed by registering health facilities on the Health Facility Registry (HFR), and then adopting ABDM- approved software. Interoperability, according to the hospitals, is the final step toward digitization after the basic infrastructure is in place.

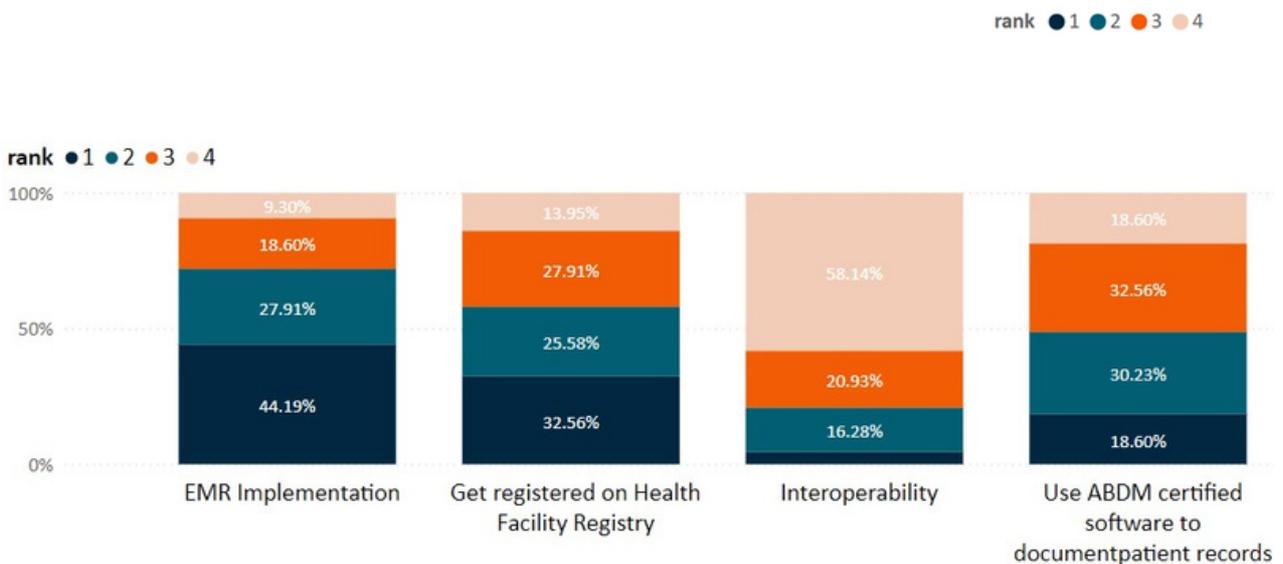


Figure 3: Awareness of ABDM onboarding Steps

PERCEIVED BENEFITS OF ABDM

The results provide interesting insights into the respondents' perspectives of ABDM. The advantages of ABDM were seen favourably by 82% of those surveyed. Among the perceived benefits, 40% of respondents highlighted improved clinical outcomes, while 63% deemed financial help to be the least significant benefit (perhaps due to a lack of awareness about the Digital Health Incentive Scheme (DHIS)).

“ Healthcare digital transformation touches the fabric of human life across the journey of wellness and sickness. India’s strength lies in its human resources, who have learned from the successes and failures of their global counterparts. With the ABDM infrastructure and the collaborative efforts of all stakeholders including the patients, physicians, ancillary staff, and policymakers, healthcare digital transformation in India can be a success.



Jyoti Goswami
Health IT Consultant

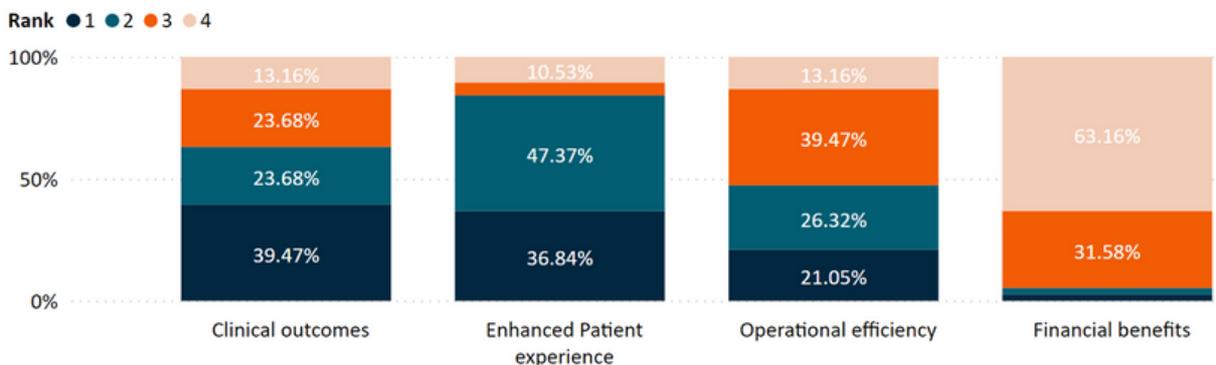


Figure 4: Benefits of ABDM

RISKS ASSOCIATED WITH ABDM

The survey findings indicate that more than 50% of the respondents are concerned about potential risks related to ABDM. Data security and privacy rates are high among these issues, with almost half of the participants viewing them as valid risks.

Furthermore, 30% of respondents show concerns about potential patient loss to competitors. Misconceptions and a lack of awareness regarding the safety and privacy-by-design features of Digital Public Goods Infrastructure (DPGI) among hospital IT executives may have contributed to this feeling of risk.

“Patient data privacy is still a concern in India, as we don’t follow protocols like HIPAA or GDPR guidelines. Also, the Data Protection Bill must not be forgotten as it reflects India’s commitment to enhancing data privacy in today’s digitizing world. While the Act introduces crucial safeguards, it also leads to an important aspect of balancing data privacy, legitimate use, and government.”



Shweta Bhatnagar
Head IT
Symbiosis University Hospital
and Research Centre

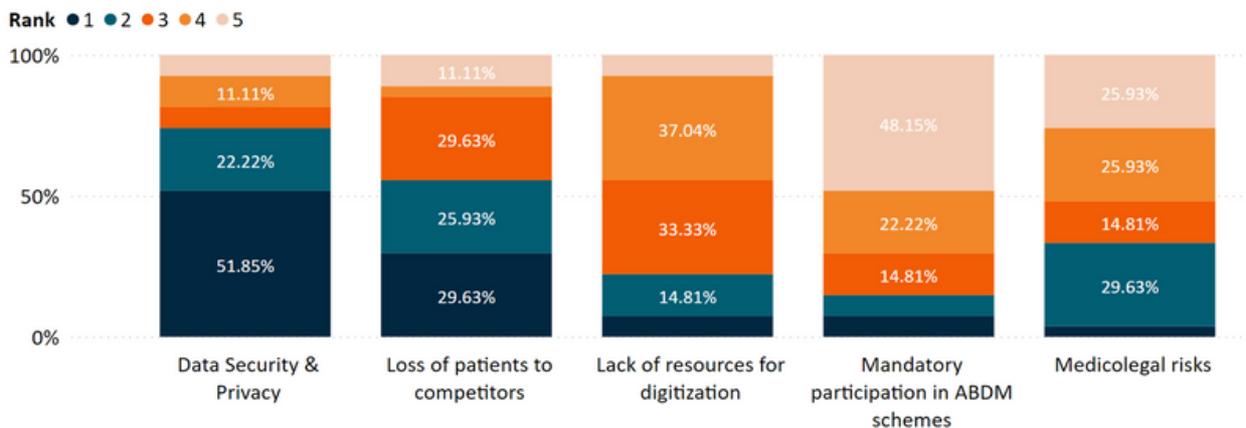


Figure 5: Risks associated with ABDM

HOW THE INDIAN HEALTHCARE LEADERS ARE DOING THINGS DIFFERENTLY

The study revealed that 8.7% of the respondents are ready-to-go for digital transformation and are ahead of the curve in providing digital services. The remaining 71.7% are not yet ready, and 19.6% are far from ready with minimal digitization levels (20-40%).

The leaders in our cohort are considerably ahead of the rest, with high levels of digitization (>80%). They demonstrate high adoption of innovative technologies and collaboration across the ecosystem.

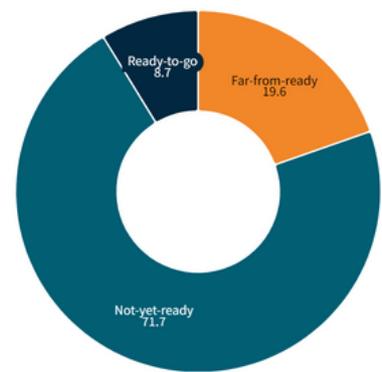


Figure 6: Digitization levels across Indian hospitals

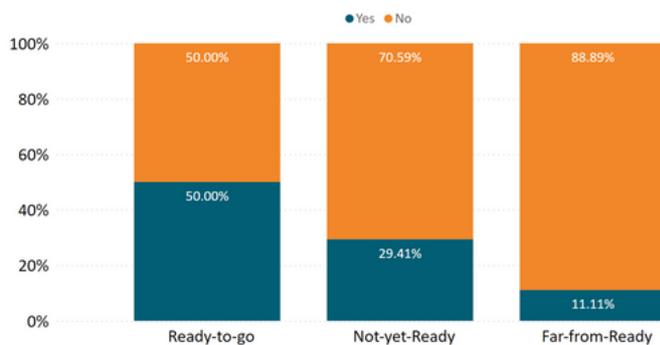


Figure 7: Willingness to implement emerging technologies

50% of the ready-to-go group of leaders are enthusiastic about implementing emerging technologies.

The leaders in our cohort have higher adoption of mobile applications for patient engagement. They address the entire patient journey, from the time a patient schedules an appointment to the completion of their care management.

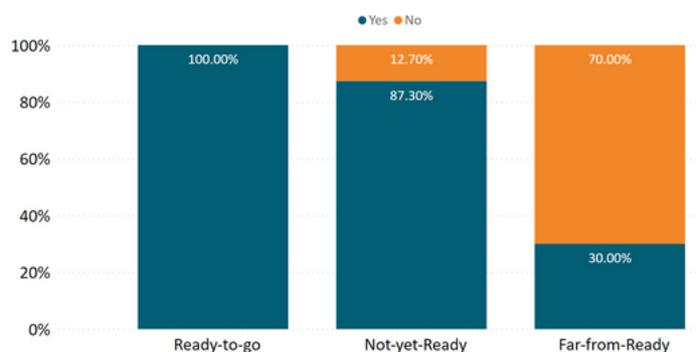


Figure 8: Use of mobile apps for patient engagement

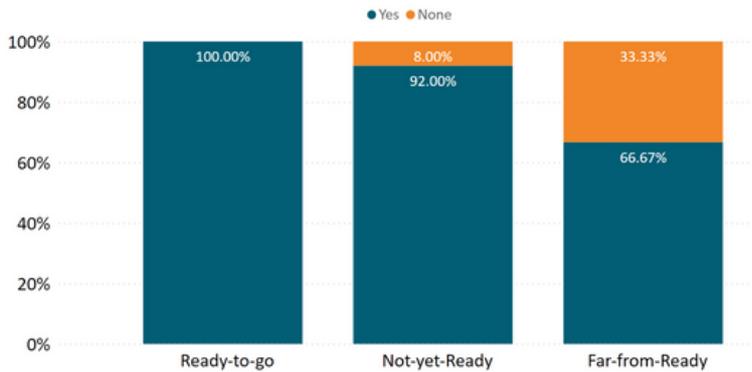


Figure 9: Willingness to collaborate with the digital health ecosystem

There is a continuous effort to stay connected with patients post discharge through digital interfaces, like collaborating with partners on home delivery of medicines, providing extended hospital-at-home services, and enabling proactive management of chronic diseases using digital tools.

The leaders are invested in comprehensive HIS and EMR systems reducing the dependency on integrating third-party applications to an optimal number (5-9).

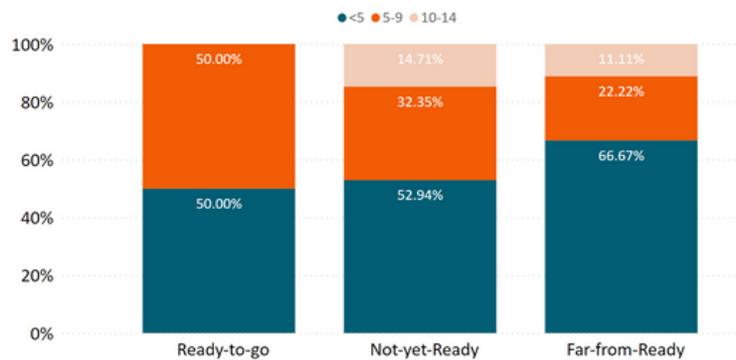


Figure 10: Number of third party apps integrated with HIS/EMR

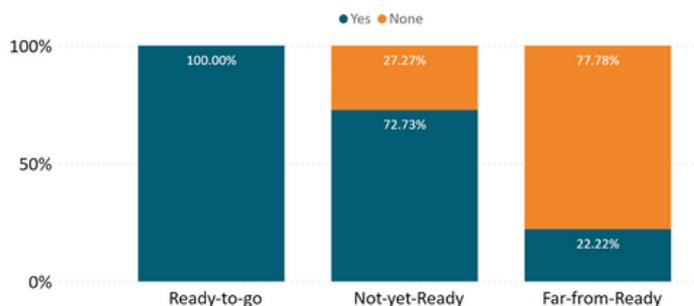


Figure 11: Presence of data repository

The leaders have data repositories in place, and while the practice of AI is not yet in place, they have the vision for using this data in the future.

Leaders spend more than one percent of their annual turnover as IT budget, 25% of them spend over 2%. Out of this budget, digital health solutions make up 50% of the spend for the leaders. Whereas others spend even less than 1% and lower component of spend on digital.

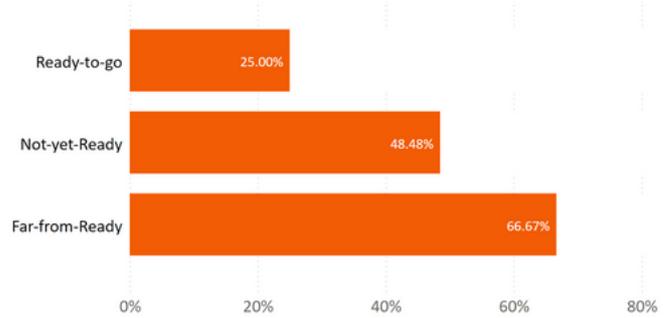


Figure 12: Spend on digital health solutions is <25% of total IT budget

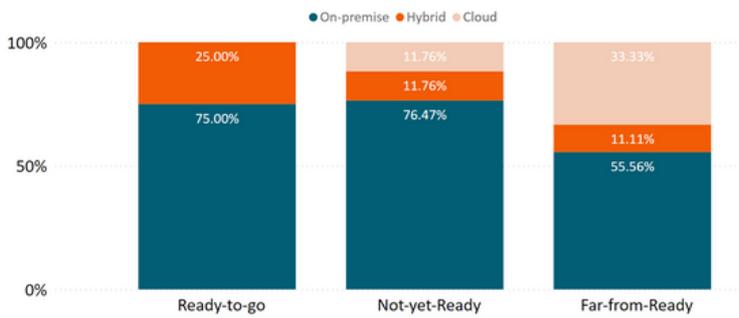
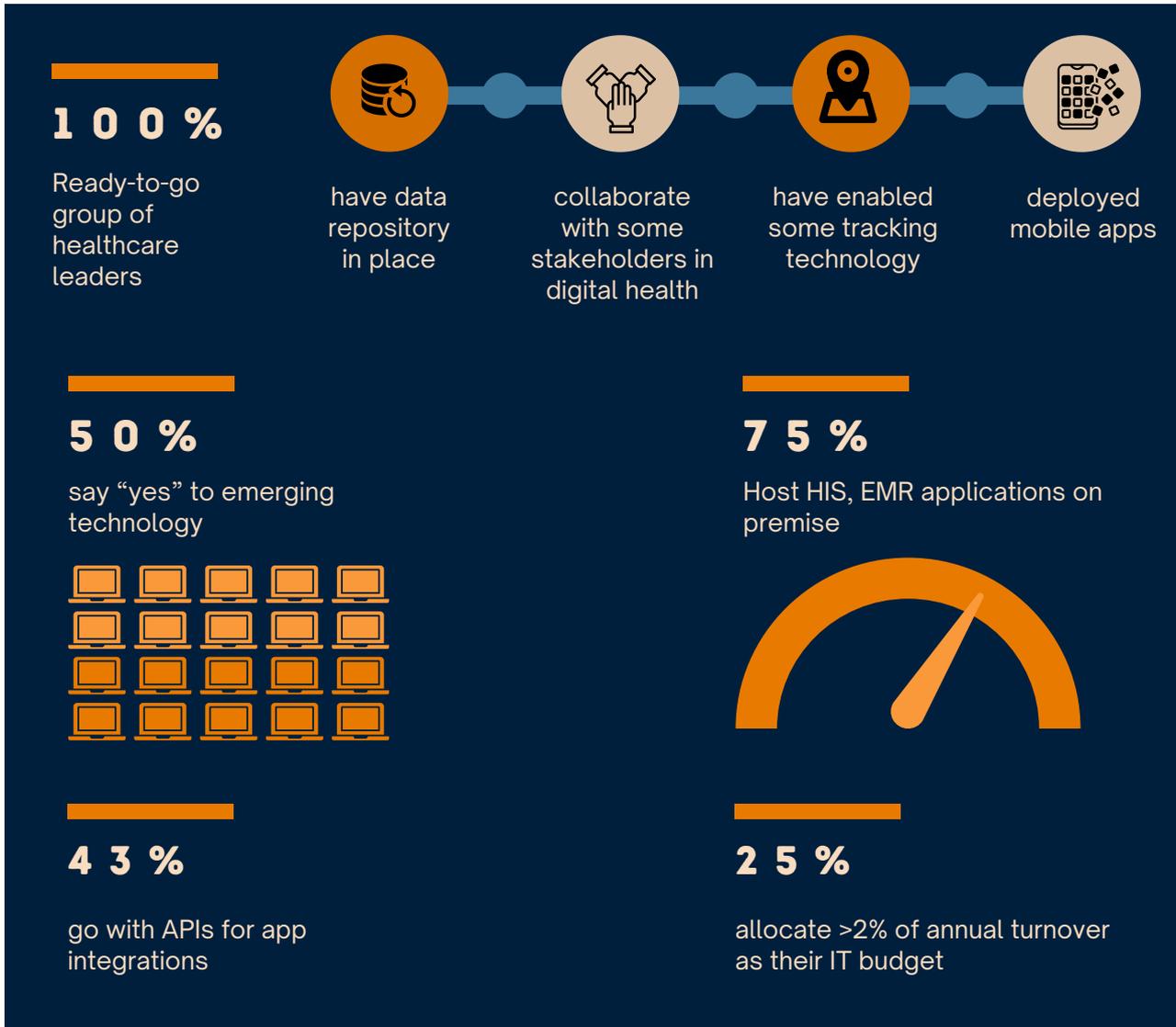


Figure 13: Hosting of HIS/EMR applications

Cloud adoption is low among the leaders as they need more comprehensive features and customization. Hospitals with lower levels of digitization are more open to cloud adoption. This is probably due to lower cost and ease of operating cloud based applications versus on-premise.

CHARACTERISTICS OF READY-TO-GO GROUP OF LEADERS



Leading hospitals in India demand management to be cost-conscious and agile in order to bring forward the best tools with the resources at their disposal. IT is a cost centre. However, many CIOs are running successful initiatives with effective communications for management buy-in and using resources at their disposal.

PATIENTS ARE INCREASINGLY EXPECTING MORE FROM THEIR HEALTHCARE PROVIDERS

Patients are increasingly expecting more from their healthcare. As technology engages and empowers them with tools, they are becoming more proactive participants in their own care. In an increasingly competitive healthcare landscape, hospitals and healthcare providers must scale up in offering a "consumer comes first" level of service to their patients, much of which can be accomplished with digital health. If we consider the optimism for the next couple of years, more than 50% will be fully prepared by 2025. However, the far-from-ready group of hospitals will not be ready in such a short period. In this context, expecting an ecosystem-wide adoption will take at least two more years. Budget and lack of skilled resources are the primary barriers to digital transformation. The far-from-ready hospitals are spending <25% of their IT budget on digital health solutions, which may not suffice for the change they aspire.

50%

hospitals will be fully prepared by 2025

<25%

far-from-ready group of hospitals are spending less on digital health solutions

The Digital Health Incentive Scheme (DHIS) and HealthCare Exchange (HCX) will give extra leverage for hospitals to embrace ABDM because they will see a return on their investments. CIOs believe that digital transformation may boost profits by increasing patient experience and satisfaction levels. Innovation in health technology for enhanced clinical results, patient experience, and operational efficiency will accelerate in the coming years. Digitization of sample collection, medication distribution, and home care will continue irrespective of ABDM incentives, as hospitals see it as an opportunity.

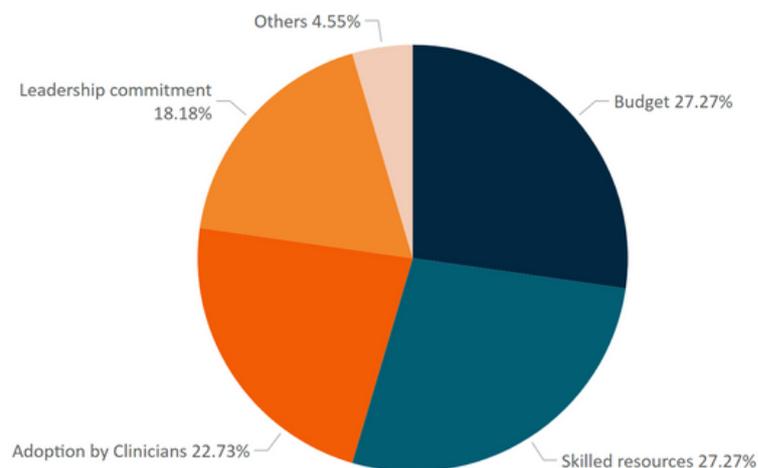
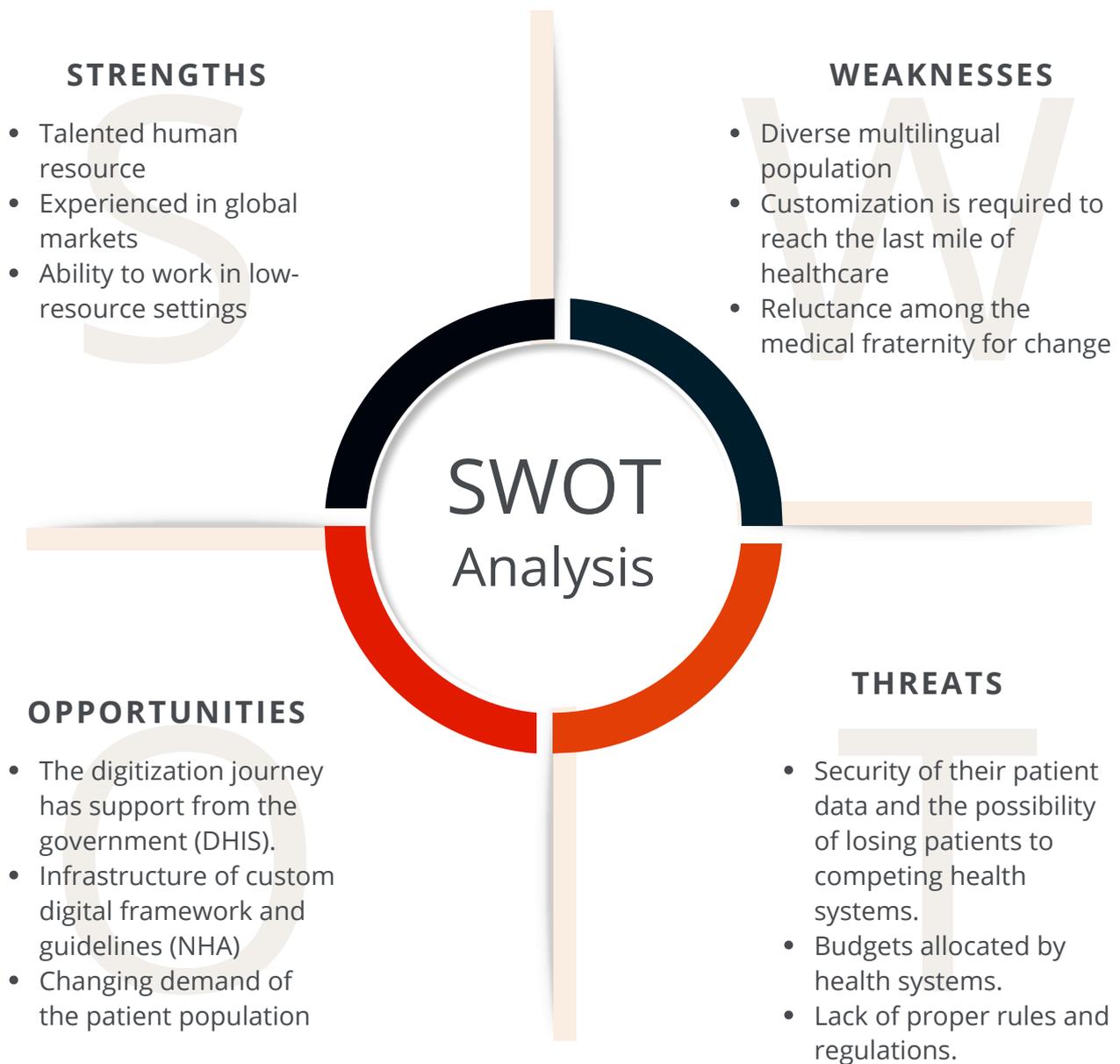


Figure 14: Barriers to digital transformation



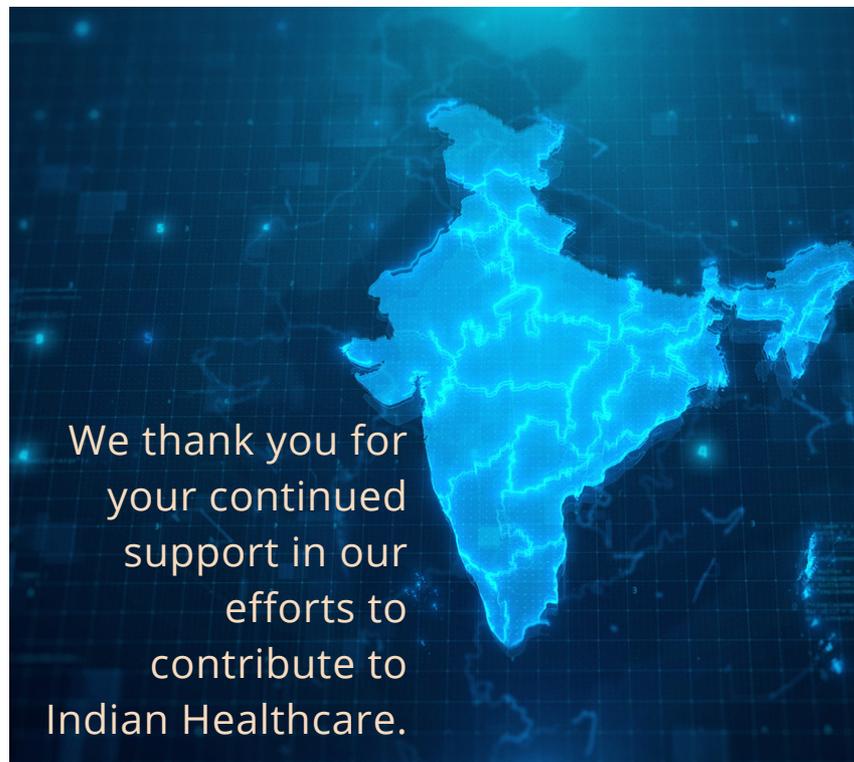
CHIME India Chapter is the forum for Health IT decision makers in India.

Humanta (HCHE) is on a mission to create a 'human-centric healthcare ecosystem' across the care journey of patients. We work across the ecosystem to improve 'care navigation' for patients and 'care orchestration' by providers using Innovative Digital Health Technologies. Our three pillars are Human Centric Design, Digital Health Platform and Ecosystem Enablement.

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We thank you for
your continued
support in our
efforts to
contribute to
Indian Healthcare.