# Healthcare Innovation Challenge 2.0

## *Your partner in Digital Transformation of Healthcare*

## Launch - 9th July 2021

# HIC Overview

Digital Technology continues to expand its role in various sectors and demonstrate the value that can be derived from it. While Healthcare sector has started experimenting with the digital technology-based solutions, so far the adoption has been largely at the periphery, largely because the challenges & risks associated with adoption of digital technology solutions are varied and multiple, ranging from fitment of solution to cost of implementation to ease of adoption and compatibility with existing & legacy systems.

NASSCOM CoE has launched first of its kind program called Healthcare Innovation Challenge (HIC) to mitigate the risks & overcome the challenges. The program works closely with Healthcare stakeholders to address the challenges faced by Healthcare Providers through the adoption of Digital Technology solutions.
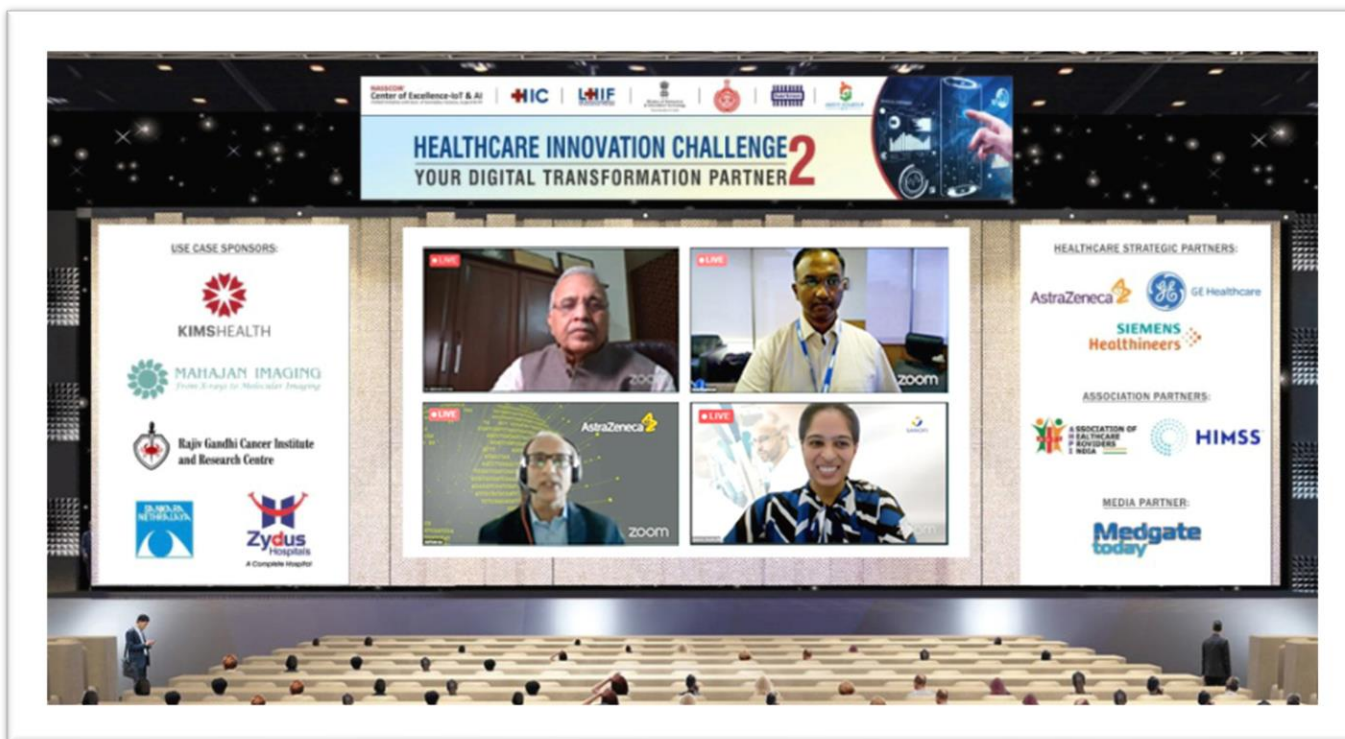
The key objectives of Healthcare Innovation Challenge (HIC) are:

- Driving operational excellence by enabling automation of administrative processes and digitization of clinical workflows through the adoption of digital technology solutions

- Enabling Healthcare Providers to nominate Use Cases as per the digital solution needs

- Driving the program to enable the curation, evaluation & deployment of Technology led Innovative solutions that address the nominated Use Cases

# Sneak Peak into HIC#1

- The last edition of HIC saw the nomination of use cases from seven Hospitals. After categorization, there were six unique use cases.

- Applications were invited from solution providers at a pan India level.

- Over 125 applications were received from various solution providers, which were then pre-screened by the CoE team.

- The pre-screened applications were evaluated by Jury Panelists comprising of key stakeholders from 18 Healthcare Organizations including Hospitals, Pharma Companies, MedTech Enterprises & Diagnostic Chains.

- Winners and runners up were announced during the HIC Finale which has been followed by the initiation of deployments by the Hospitals along with the winning solution providers for each of the use case.

# HIC#2 Launch



This has been a transformational year for India's healthcare, especially healthcare technologies. Initiatives like Healthcare Innovation Challenge will aid the government's efforts to promote digital agenda in India's healthcare infrastructure to make it more resilient, competitive and future-ready.

Digital Technology solutions for doctors and patients including telemedicine and teleconsultation have helped us to take healthcare access to India's hinterland in the pandemic." said **Mr. Saurabh Gaur, IAS, Joint Secretary, Ministry of Electronics and Information Technology (MeitY).**

"COVID has dramatically changed the way healthcare services are delivered. There is a significant focus given to the distributed point of care where the first level point of care can be outsourced labs and remote patient monitoring", said **Girish Raghavan, Vice President - Engineering, GE Healthcare**

**Dr. Girdhar Gyani, Director General, AHPI** shared his insights on the importance of strengthening the healthcare ecosystem through digital technology adoption in order to overcome the challenges faced e.g. low availability of beds, doctor and nurse-patient ratio, infrastructure bottlenecks etc.

In an engaging panel discussion, our esteemed panelists deliberated over their industry-oriented perspectives to enable digital technology adoption in the Healthcare sector and the associated challenges and their mitigation. They also talked about what kind of innovative approaches they are deploying to address their own challenges.

The Healthcare Provider Panel Discussion, moderated by Mr. Ishaq Quadri, Vice President, HIMSS India Chapter, had the representation of key stakeholders from the Healthcare Provider Partners. In this session, they threw light on the Use Cases nominated by them for HIC#2 and the experience of solution deployment through HIC#1.

# USE CASES

**Digital Clinical Assistant for Integrating with Legacy EHR**

The solution should be capable of Translating unstructured Data from Legacy EMR into structured data using SNOMED CT, Prospectively help Clinician to suggest SNOMED codes using NLP and AI and help improving better coding, using NLP and AI to Code the EMR records to make EMR records use for better analysis and Develop Visual analytics of the Structured data. Must be compatible with the current tool sets published in the CDAC website. C-DAC's Toolkit For SNOMED CT (cdac.in)

**Integrating radiology reports and images in to multimedia files**

Radiology reports are not very patient friendly. A solution that can translate radiology reports with complex medical terms into a patient friendly language and integrate relevant images and videos based on the radiology text report in to a multimedia file. Images and reports can be send through an API to cloud server or the solution can be deployed (preferable) on a local system. One modality and one body part can be chosen initially to build a prototype - say CT Chest in patients with interstitial lung disease or MR spine for degenerative disc disease.

**AI based Cancer Diagnosis**

Cancer diagnosis is complex and the radiologists & pathologists in a healthcare setting are burdened as they need to churn out a large number reports on a daily basis. The AI based Clinical decision support system should be able to automate the tedious tasks and provide seamless integration with PACS, LIMS and other existing systems using industry standards. The AI based solution should have self-learning capabilities based on manual inputs.

# USE CASES

**Centralized Tele-Radiology Reporting**

The group of hospitals located globally use different standards of reporting radiology reports, leading to inefficient utilization of Radiologists. The solution needed is a centralized radiology reporting centre in the main hospital. The RCC will Integrate with multiple PACS/RIS system, Accept radiology studies from multiple centres and push reports back, Allow scheduling of radiology studies with Radiologist roster, Provide MIS/Management Dashboards/Efficiency Reports/TAT etc.

**Homecare & Patient Monitoring Solutions**

The hospital has a homecare division which provides at-home medical care. They would like to extend this care window through a solution that provides home care patients with devices and solutions that can allow the hospital to Monitor patients' well-being – ex: key vitals being streamed to the cloud/hospital, Ability to initiate a tele-consult with their doctor or nurse, Track patient progress/vitals chart/medication/treatment etc., A mobile App, A central monitoring station at the hospital to monitor all homecare patients with ability to zoom in on specific patients.

**OT Automation**

Hospitals always struggle with efficient utilization of the resources. The expected solution needs to have the capabilities for OT Booking, PAC ,OT utilization, equipment assignment and TAT record. The solution should integrate with the HMIS and the Billing system as well. The solution should have a Web & App based interface.

**Process Automation**

Medical supply management is a key bottleneck for Hospitals. The solution should be able to automate Goods Receive process through AI integration (Scan Document and convert into Excel) and Barcoding Automated of Goods

# Media Coverage

| Publication | Headline |
|---|---|
| ET Healthworld | https://health.economictimes.indiatimes.com/news/health-it/enabling-ai-and-iot-innovation-will-drive-digitization-in-healthcare-saurabh-gaur/84268451 |
| ET Government | https://government.economictimes.indiatimes.com/news/technology/enabling-ai-and-iot-innovation-will-drive-digitization-in-healthcare-saurabh-gaur/84288725 |
| ANI | https://www.aninews.in/news/business/nasscom-coe-launches-healthcare-innovation-challenge-20-to-focus-on-digital-transformation-of-healthcare20210710160022/ |
| Business Standard | https://www.business-standard.com/content/press-releases-ani/nasscom-coe-launches-healthcare-innovation-challenge-2-0-to-focus-on-digital-transformation-of-healthcare-121071000598_1.html |
| ZEE 5 | https://www.zee5.com/zee5news/nasscom-coe-launches-healthcare-innovation-challenge-2-0-to-focus-on-digital-transformation-of-healthcare |
| Yahoo! | https://in.news.yahoo.com/nasscom-coe-launches-healthcare-innovation-103232481.html |
| The Print | https://theprint.in/ani-press-releases/nasscom-coe-launches-healthcare-innovation-challenge-2-0-to-focus-on-digital-transformation-of-healthcare/693701/ |
| Lokmat | https://english.lokmat.com/business/nasscom-coe-launches-healthcare-innovation-challenge-20-to-focus-on-digital-transformation-of/ |

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# Please refer HIC Portal for more information.



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