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Scaling AI for Equitable Healthcare: India's Strategy & AIIMS' Role

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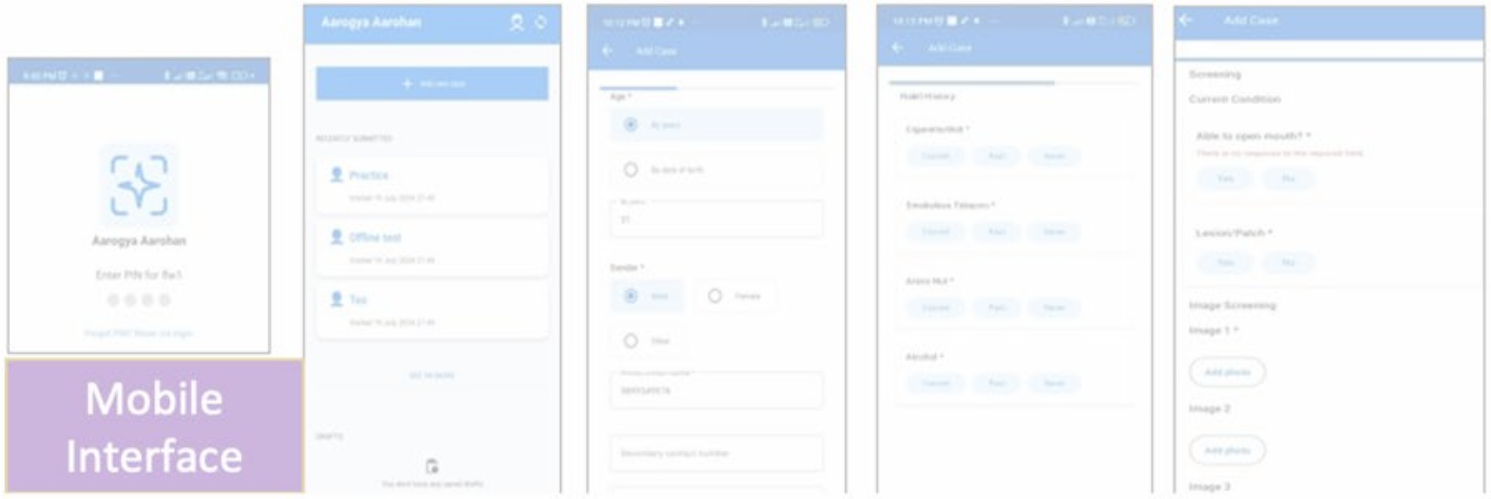

Mobile Interface

AI enabled Oral cancer screening tool

Training of Field Workers

Outreach screening

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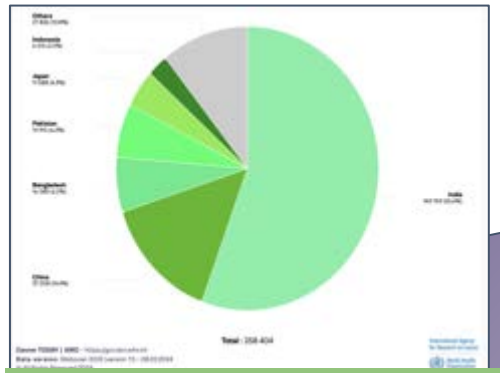
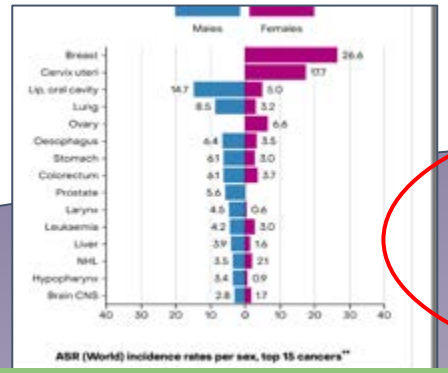




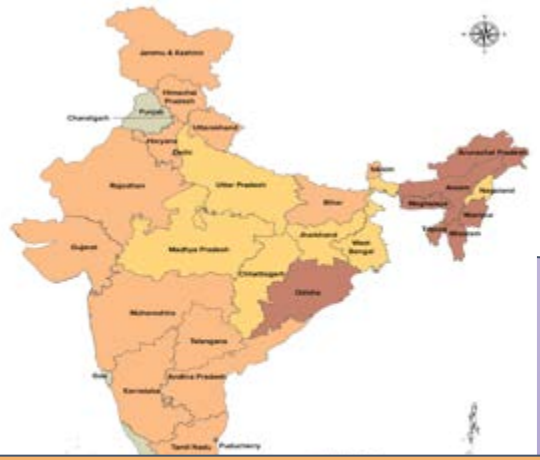
India ranks first in incidence and mortality of **ORAL CANCER**

Males, rural, low socioeconomic status, late diagnosis

National loss of $5.6 billion (0.18% GDP). Developed countries- costs approx. 60% of GDP per capita

National Cancer Registry ~ 16.4% coverage (230 Million)

Stage-wise Data Gaps, Lack of data: Early Detection & tobacco usage for advisory/ policy



Tobacco use: **0.27 billion** (**28.6%,** 42% males)

AI-driven screening, diagnostics & health system integration

PATIENT's JOURNEY

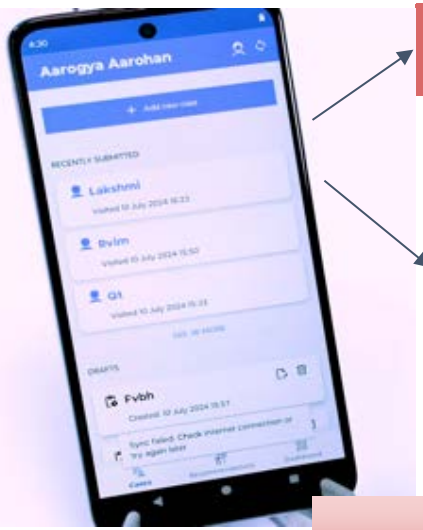
First time tobacco user → Regular usage → No / Early symptom/ sign → Presence of Lesions → Advanced stage

Main setting	Home	Home	HWC/PHC	DH/CHC/GH	Tertiary Care
Stage	No lesion	No lesion/ Pre-cancer	No lesion/ Pre-cancer/ cancer	Precancer/ cancer (Stage 1/ advanced)	Advanced cancer (stage 3 or 4)
Intervention	AI enabled Tobacco cessation & **patient support platform** Education & Awareness	Tools to encourage Tobacco and areca nut (TAN) cessation	Arogya Arohan app for screening with tobacco habit history Tools to encourage Tobacco cessation	AI Integrated imaging & spectroscopy Tools to encourage Tobacco cessation	AI Chip development for multimodal deployment Histopathology & Multi OMICS integration Tobacco related research
Beneficiary	Patient	Patient / Family	ASHA/ ANM/ Nurse	Doctors	Specialists
Partner State and National Programs					

AIIMS' AI-Driven Public Health Innovations

AI-powered point-of-care screening tools

Aarogya Aarohan



ASHA, ANMs, & field workers

Tele Pathology & Decision Support Systems

Continuous validation and Model update

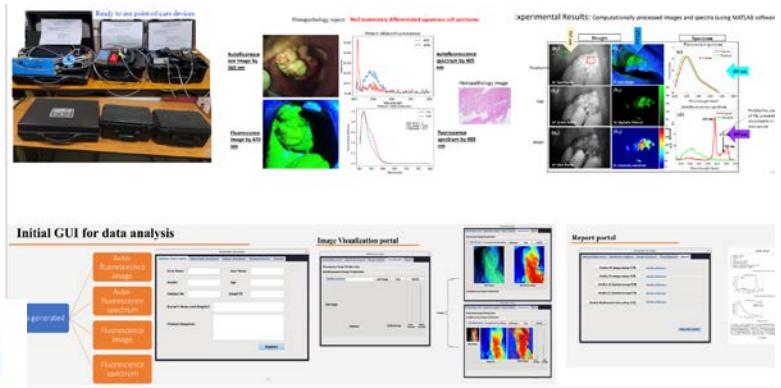
- **Real time monitoring**
- **Dashboarding of data**

Tobacco usage

Oral cancer screening
- **Suspicious**
- **Non-suspicious**

Tertiary care data

AI integrated imaging & Spectroscopy device



MIDAS

Empowering Healthcare through Data

Medical Imaging Datasets for India (MIDAS) is a joint initiative by ICMR, IISc and ARTPARK to create high quality and standardized medical datasets representative of Indian population

MIDAS

- Integration into **National cancer screening programs**
- Incorporation of **other cancers** (cervical, breast)

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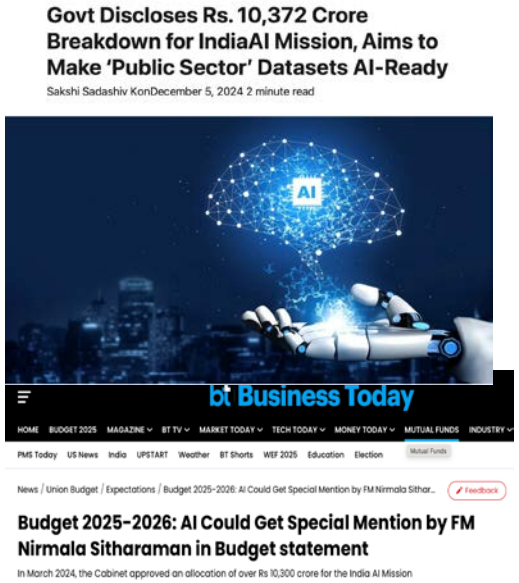
Strategic Approaches by AIIMS, Delhi

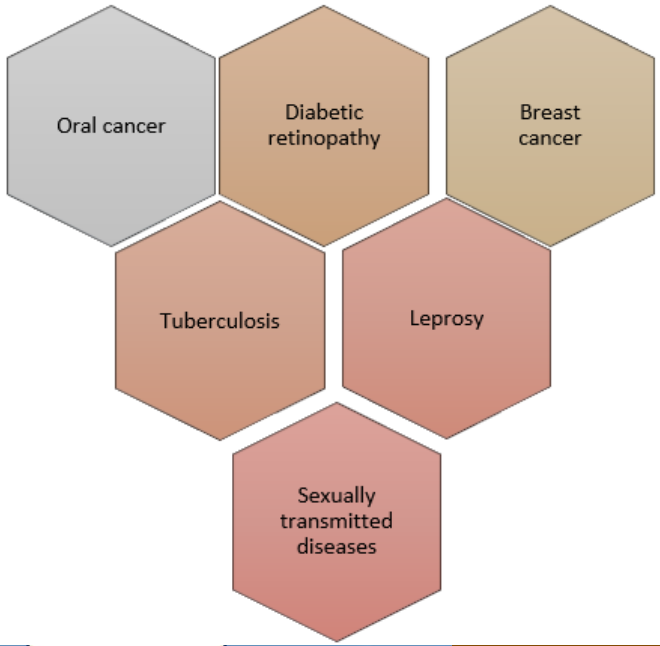
Number of Outpatient- 1.9 million/year

Analyzing the Country's health care system

Identification of Inefficiencies

Evaluation of National Healthcare programs





- **Reduce turnaround times**
- **Quality-graded datasets**
- **Digital Public goods**
- **Digital diagnostics**

Ministry of Education
Government of India

AI-Centres of Excellence on Healthcare

Disease based approach

Deployable Patient Centric AI to be integrated into national programs

Join Us in Scaling AI for Health

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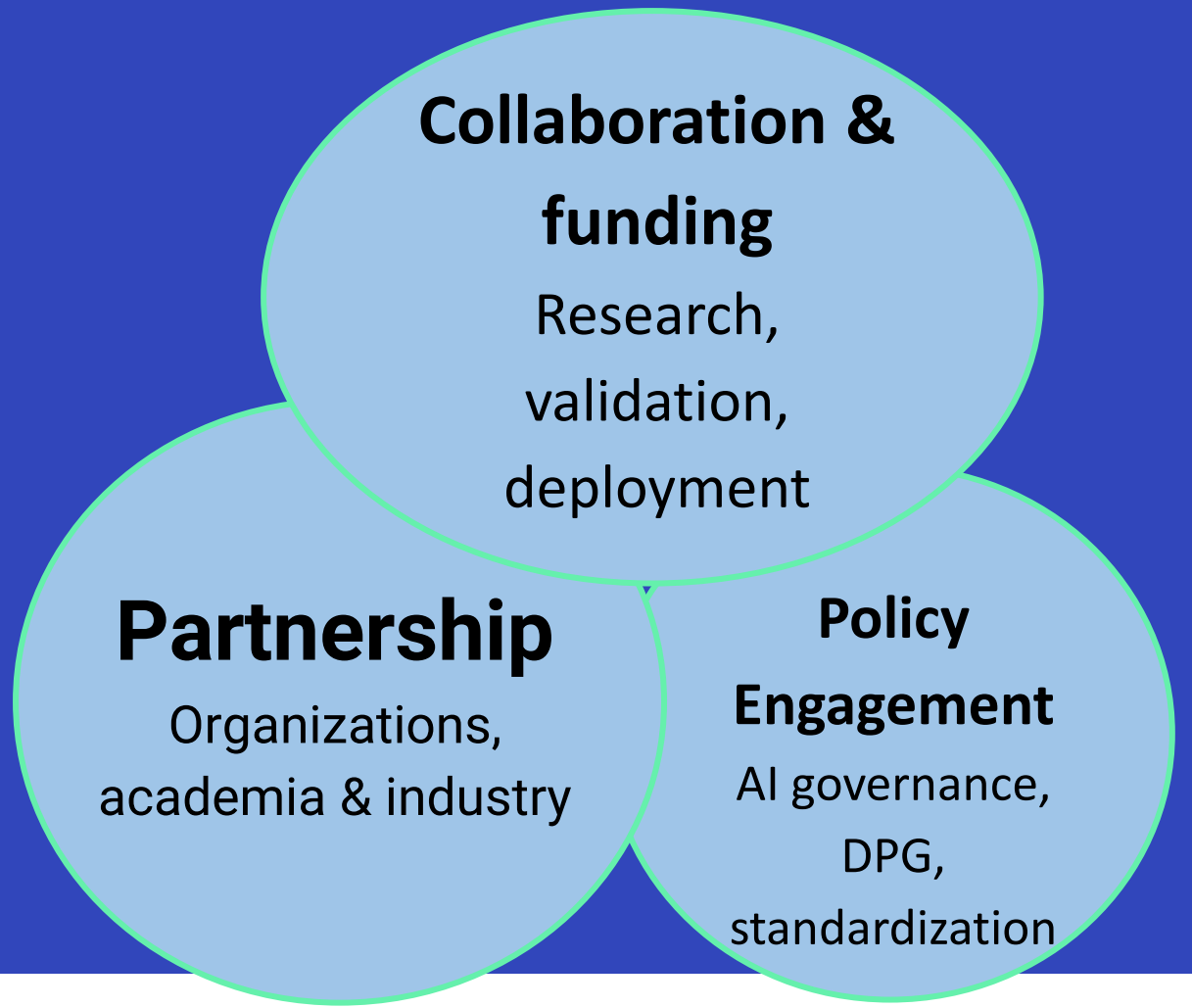

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THANK YOU!

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