Punjab Launches AI-Enabled Cancer & Vision Screening Devices

Overview

The Punjab government has introduced advanced AI-enabled, radiation-free screening devices to strengthen early detection of cancer and vision disorders. The initiative is supported by ACT Grants and marks a significant step in enhancing preventive healthcare infrastructure in the state.

Key Features of the Initiative

- **Diseases Covered:**
    - **Breast cancer**
    - **Cervical cancer**
    - **Vision impairments**
- **Technology Used:**
    - **Portable, radiation-free, artificial intelligence-based devices**
    - **Designed to be simple to operate at primary health centers**
    - **Capable of delivering quick results with high accuracy**

Rollout Plan

- **Initial Implementation: Devices will be deployed across eight districts of Punjab in the first phase.**
- **Target Population: Women and vulnerable groups with limited access to advanced diagnostic facilities.**

- **Healthcare Integration: Screening to be carried out at government hospitals, community health centers, and wellness clinics.**

Expected Benefits

- **Early Diagnosis: Early identification of cancers significantly increases chances of successful treatment.**
- **Accessibility: Radiation-free devices make screening safer and more widely applicable, especially in rural areas.**
- **Cost-Effectiveness: AI-powered devices reduce dependence on expensive diagnostic imaging.**
- **Scalability: Potential to expand across the state and eventually integrate into national health programs.**

Government's Perspective

Officials emphasized that the project aligns with Punjab's vision of digital health transformation, focusing on prevention rather than late-stage treatment. The AI-based tools are expected to bridge gaps in healthcare delivery, particularly in underserved regions.

Public Health Significance

- **Tackles the rising burden of cancer in India by bringing advanced diagnostics closer to communities.**
- **Supports national programs on non-communicable diseases (NCDs) and women's health.**
- **Demonstrates how public–private partnerships can accelerate healthcare innovation at the grassroots level.**