NEXT IAS

DAILY EDITORIAL ANALYSIS

TOPIC

FIRST STEP TO UNIVERSAL HEALTHCARE: MAKING DIAGNOSTICS ACCESSIBLE AND CHEAP

FIRST STEP TO UNIVERSAL HEALTHCARE: MAKING DIAGNOSTICS ACCESSIBLE AND CHEAP
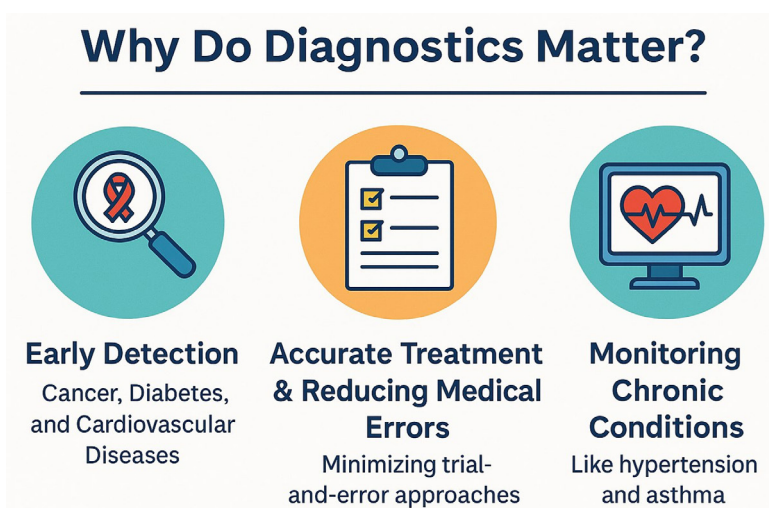
Context

- **Universal healthcare** — the ideal system where every citizen, regardless of income, receives quality medical care — needs to begin by making diagnostics accessible, affordable, and ubiquitous.

About Universal Health

- It means that all people have access to the full range of quality health services without financial hardship.
- Key components of UHC include:
    - **Access to Care:** Everyone should be able to obtain necessary health services when they need them.
    - **Quality Services:** The care provided should be effective, safe, and of good quality.
    - **Financial Protection:** Individuals should not face financial difficulties due to medical expenses.
- India is committed to **Universal Health Coverage (UHC)**, as outlined in the National Health Policy 2017 **and the UN's SDGs**.

Role of Diagnostics in Effective Healthcare

- Accurate diagnosis is the foundation of effective medical treatment. It relies on patient history, clinical examination, and laboratory tests to confirm or adjust the initial assessment, often predicting disease progression.

Why Do Diagnostics Matter?

Early Detection
Cancer, Diabetes, and Cardiovascular Diseases

Accurate Treatment & Reducing Medical Errors
Minimizing trial-and-error approaches

Monitoring Chronic Conditions
Like hypertension and asthma

- Diagnostics guide over 60% of clinical decisions globally, from identifying diseases early to tailoring treatments and monitoring progress.
    - In India, diagnostics receive less than 5% of total health spending.
- Without timely and reliable diagnostic services, patients risk delayed or incorrect treatment, leading to worse outcomes and higher costs.

Current Gaps in Diagnosis & Need for Localised Services

- **Limited Access and Affordability**: Diagnostics account for **10 – 15% of out-of-pocket health expenditure**, especially in outpatient care.
    - Most public health facilities lack basic diagnostic infrastructure — only 12% of PHCs have labs that meet minimum standards.
    - Private labs dominate the market but are often unaffordable for rural and low-income populations.
- **Poor Quality and Regulation:** India has over 100,000 labs, but fewer than 2% are accredited by NABL.
    - Many labs operate without standardized protocols, proficiency testing, or external audits.
    - Faulty diagnostics lead to misdiagnosis, delayed treatment, and irrational drug use, fueling antimicrobial resistance.

- **Evolving Health Needs and Priority Areas:** Shifting demographics and lifestyles have brought **non-communicable diseases (NCDs)** like diabetes and heart disease to the forefront, alongside persistent infectious diseases such as tuberculosis and malaria.
- **Fragmented Data and Digital Disconnect:** Lack of integration between public and private diagnostic data systems undermines continuity of care.
    - The **Ayushman Bharat Digital Mission** aims to bridge this gap, but implementation is uneven.
- **Neglect of Preventive Diagnostics:** Insurance schemes like PM-JAY focus on inpatient care, excluding preventive diagnostics.
    - Non-communicable diseases (NCDs) like diabetes and cardiovascular conditions require early detection, which is often missed due to lack of routine screening.
- **Workforce and Training Deficit:** Many technicians lack proper training in test administration, quality control, and ethical practices.
    - Rural areas suffer from acute shortages of skilled diagnostic personnel.

Government and Policy Responses

- **National List of Essential Diagnostics (NLED):** The ICMR's updated **NLED** reflects India's health and technology transitions. Key inclusions:
    - **PHC-level HbA1C testing** for diabetes monitoring;
    - **Rapid tests** for sickle cell anaemia, thalassaemia, hepatitis B, syphilis, and dengue at sub-centres;
    - **Molecular TB testing** starting from sub-centres, with in-house testing at higher facilities;
    - Expanded blood chemistry tests at PHCs;
    - **Dental X-rays** at Community Health Centres (CHCs)
- **Ayushman Bharat Health and Wellness Centres:** These centers are being equipped to offer frontline diagnostic services, including HbA1c tests for diabetes and rapid tests for infectious diseases.
    - The **Ayushman Bharat Digital Mission (ABDM)** integrates diagnostics with electronic health records, enabling better data sharing and predictive care.
- **Vision 2035 by NITI Aayog:** Emphasizes lab networks and surveillance systems as critical components of public health infrastructure.
- **G20 Health Working Group:** Advocates decentralized manufacturing and regional diagnostic strategies to improve access and affordability.

Innovations and Solutions

- **Tele-diagnostics:** Services like tele-radiology and tele-pathology bridge expertise gaps between rural clinics and urban hospitals.
- **Point-of-Care Devices:** Portable diagnostic tools are expanding reach in underserved areas.
- **AI and Genomics:** Advanced technologies are improving diagnostic accuracy and enabling personalized medicine.
- **Technological Advances in Diagnostics:** District hospitals now offer enhanced imaging, while PHCs are equipped with semi-auto analysers. Modern healthcare benefits from:
    - **Molecular diagnostics** for higher precision;
    - **Tele-diagnostics** *(tele-radiology, tele-pathology, tele-dermatology)* to bridge expertise gaps;
    - **Point-of-care devices** for frontline use.
- **Cost-Effectiveness and Evidence-Based Practice:** Choosing the right tests involves balancing accuracy and cost. **ICMR** plays a key role in developing diagnostic algorithms to guide healthcare providers on:
    - Sequential vs. simultaneous testing;
    - Cost–benefit trade-offs;
    - Maximum value per diagnostic step;

Lessons for India

- Countries like **Rwanda and Thailand** have shown that **investing in diagnostics pays off**.
    - **Rwanda's community health worker model** includes basic diagnostic tools, leading to early detection of diseases like malaria and pneumonia.

- ◆ **Thailand's universal coverage scheme** includes free diagnostics, which has drastically reduced out-of-pocket expenses.
- **Lessons from TB and COVID-19:** The COVID-19 pandemic accelerated the spread of **RT-PCR and molecular diagnostics** across India.
  - ◆ These technologies are now critical for faster TB detection and drug-resistance monitoring, replacing older, less sensitive techniques.

Roadmap: Democratizing Diagnostics

- **Public-Private Partnerships:** Encourage collaborations between government and private labs to set up low-cost diagnostic centers in underserved areas.
- **Mobile Labs and Telemedicine:** Deploy mobile diagnostic vans and integrate remote consultations to reach remote populations.
- **Subsidies and Insurance Coverage:** Include diagnostics in government health schemes like Ayushman Bharat, ensuring tests are covered and not just treatments.
- **Local Manufacturing:** Invest in domestic production of diagnostic equipment and reagents to reduce dependency on imports and lower costs.
- **Training and Workforce Development:** Scale up training for lab technicians and radiologists, especially in Tier 2 and Tier 3 cities.
- **Building Technical Capacity:** Beyond equipment supply, healthcare delivery needs:
  - ◆ More trained laboratory technicians;
  - ◆ Skilled frontline workers for point-of-care testing
  - ◆ Clinical training in interpreting diagnostic probabilities
- AI could support providers in interpreting results and reducing errors.

Conclusion

- Achieving UHC in India requires diagnostics that are affordable, available close to home, and supported by trained personnel.
- By strengthening the diagnostic backbone—through policy, technology, and training—India can ensure early detection, reduce treatment delays, and improve health outcomes for all.

Source: IE

Mains Practice Question

Q. Discuss why making diagnostics accessible and affordable should be considered the foundational step toward achieving universal healthcare in India. Support your answer with examples and policy implications.

■■■■