Concept Note

Digital innovations are reshaping health security across the Global South at a moment when countries are confronting increasingly complex threats arising from rapid urbanisation, high population density, ecological disruption, and resource-constrained health systems. Recent public health emergencies such as COVID-19, Ebola, Zika, and Nipah have exposed longstanding gaps in surveillance, laboratory readiness, antimicrobial stewardship, and cross-sectoral coordination. These gaps are further compounded by socio-economic barriers, climate-related vulnerabilities, weak regulatory oversight, and high mobility across borders. To address these challenges, digital technologies offer low- and middle-income countries an opportunity to leapfrog traditional infrastructure limitations by supporting early detection, remote monitoring, community-level reporting, and timely public health response. Notably, countries in the Global South are leveraging digital tools to strengthen preparedness and resilience in their health systems.

Several BRICS+ nations are making significant strides in digital health innovation. Ethiopia's Digital Health Extension Platform equips rural health workers with mobile devices for real-time disease tracking and surveillance, enhancing early response and healthcare delivery in resource-limited settings. Indonesia's SATUSEHAT initiative has unified health data nationwide, enabling remote consultations and effective public health planning, particularly for populations in far flung regions. These best practices exemplify how digital transformation can address surveillance gaps and extend essential health services across diverse, low-resource communities, offering valuable models for scalable health security measures in the Global South.

This webinar organised by DAKSHIN – Global South Centre of Excellence at RIS in partnership with Jhpiego India will serves as a knowledge-sharing platform on how digital tools such as AI-powered surveillance systems, mobile health applications, digital diagnostics, telemedicine, and community engagement platforms can strengthen preparedness and response capacities in diverse Global South settings. Participants will hear examples of successful models from BRICS+ and other regions, learn how countries have integrated innovations with national health information systems, and reflect on policy and governance measures that ensure interoperability, data protection, and long-term sustainability. The discussion will bring attention to scientific advances that enhance real-time analytics, support

decision-making in low-resource settings, and encourage inclusive participation from communities that are often left out of digital transformation initiatives.

The webinar aims to answer key questions such as

- How can AI and predictive analytics improve the timeliness and accuracy of outbreak detection in low-resource settings?
- Which digital diagnostic and telemedicine tools are most feasible and effective for primary health-care environments in the Global South?
- How can mobile health platforms and multilingual, culturally relevant digital content strengthen community-based reporting while ensuring frontline workers are not overburdened?
- How can countries integrate digital innovations into national health systems and scale them effectively while avoiding fragmentation and capacity challenges?
- What governance structures and regulatory measures are needed to balance digital innovation with responsible data use, privacy protection, and equitable access?

The expected outcome of the webinar is a deeper understanding of regionally appropriate digital innovations that can advance health security across the Global South, along with clearer insights into the policy, regulatory, and operational strategies needed for sustainable implementation.