



Harmonizing Health: Optimizing Surveillance Systems for Enhanced One Health Approaches

Dela Darji¹, Elizabeth Creel¹, Romain Tohouri², Daniel Otzoy-Garcia³, Jenny Nyeche^{1,2}, Steve Ollis^{1,2}, Stephanie Watson-Grant^{1,2}, Jonathon Gass^{4,5}, Felicia Nutter⁴, Janetrix Hellen Amuguni⁴

Affiliations: ¹JSI; ²Country Health Information Systems and Data Use (CHISU) program; ³RECAINSA; ⁴Tufts University, School of Medicine; ⁵Tufts University, Cummings School of Veterinary Medicine

Key Messages

The One Health Information Assessment Tool (OHIAT), developed by JSI/CHISU team members under the USAID-funded Strategies to Prevent (STOP) Spillover project, helps countries assess their current One Health information systems and identify gaps. Country stakeholders can use the OHIAT's maturity model to assess the current capacity of a country's system and identify gaps for potential improvement.

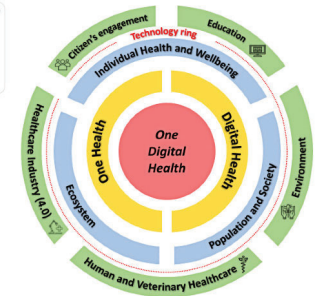


Learn more about CHISU's One Health work and access JSI's OHIAT tools



Introduction

- One Health can help to address the full spectrum of disease control—including prevention, detection, preparedness, response, and management—and contribute to global health security.
- Successful disease detection, pandemic prevention, and response rely on integrated surveillance and information systems.
- Implementing the One Health approach requires robust research and policy to guide strategic actions—and it's challenging to ensure these systems are ready to exchange data effectively to respond to public health threats.



Methods

- Conducted a comprehensive assessment of countries' readiness for One Health surveillance systems.
- Completed a desk review of existing maturity assessment models like Health Information System (HIS) Stages of Continuous Improvement (SOCI), ICT Infrastructure Assessment Tool (ICTIAT), Global Digital Health Monitor, and IS4H as well as documents like the Global Strategy on Digital Health 2020–2025 and others.
- Engaged with key stakeholders: Pan American Health Organization (PAHO), World Health Organization (WHO), Africa Centers for Disease Control (CDC), WHO Health Data Collaborative (HDC) Digital Health & Interoperability (DH&I) working group (WG) members.

Results

- Development of two components within the One Health toolkit:

Rapid Assessment Tool for One Health (RATOH)	One Health Information System Assessment Tool (OHIAT)
A preliminary survey completed to evaluate the basic requirements for completing a full assessment	A maturity model assessment that provides a more detailed review of the domains, and allows scoring from nascent to optimized

- OHIAT allows users to score requisite domains by stages (from nascent to optimized) in seven key areas of enabling areas of interventions:
 - » Human and Veterinary Health Care
 - » Human Capacity
 - » Health Care Industry
 - » Citizens' Engagement
 - » Environmental Health
 - » Infrastructure
 - » Infrastructure

- Within these domains are OHIAT's 37 assessment areas, which provide a nuanced understanding of a country's One Health landscape. This supports strategic decision-making and resource allocation for strengthening health information system capabilities.

STAGES	OVERVIEW
1. Nascent	Component is non-existent
2. Emerging	Component is just coming into existence
3. Established	Component exists and is functional
4. Institutionalized	Component is integrated and functional at the national level
5. Optimized	Component is aligned with regional and global interventions/recommendations, and there are ongoing, consistent efforts for improvement

Conclusion

In today's rapidly evolving society, it is important to think holistically across sectors in planning for One Health surveillance system readiness to enhance pandemic preparedness and prevention. The goal is to expand the OHIAT to continue guiding countries with their One Health readiness.