

Strengthening cholera Surveillance through data and interoperability standards

Leveraging the WHO SMART guidelines framework

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**World Health
Organization**



Collaborative Surveillance: A modern vision of disease surveillance integration and collaboration

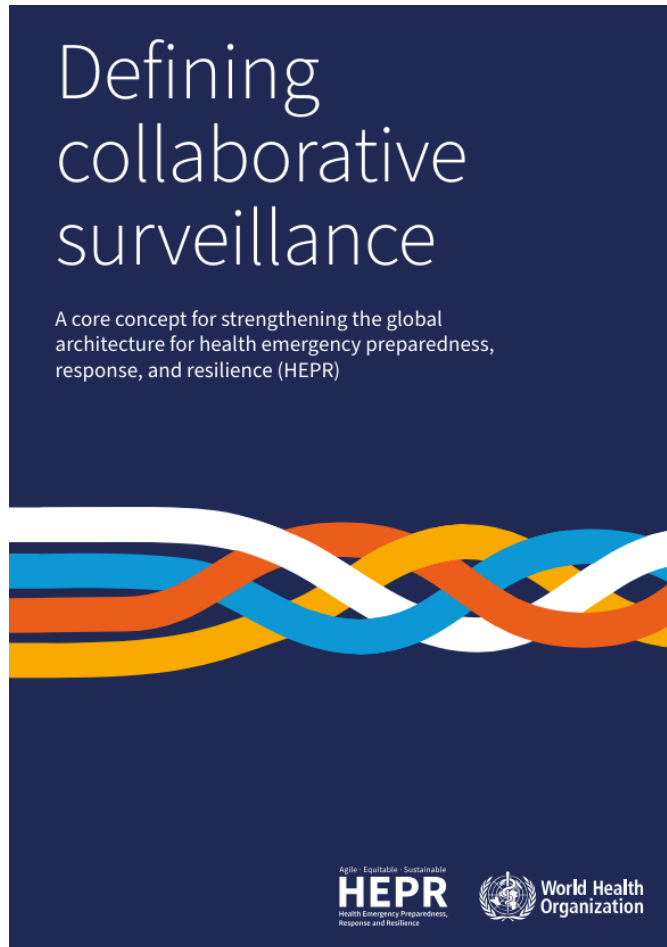
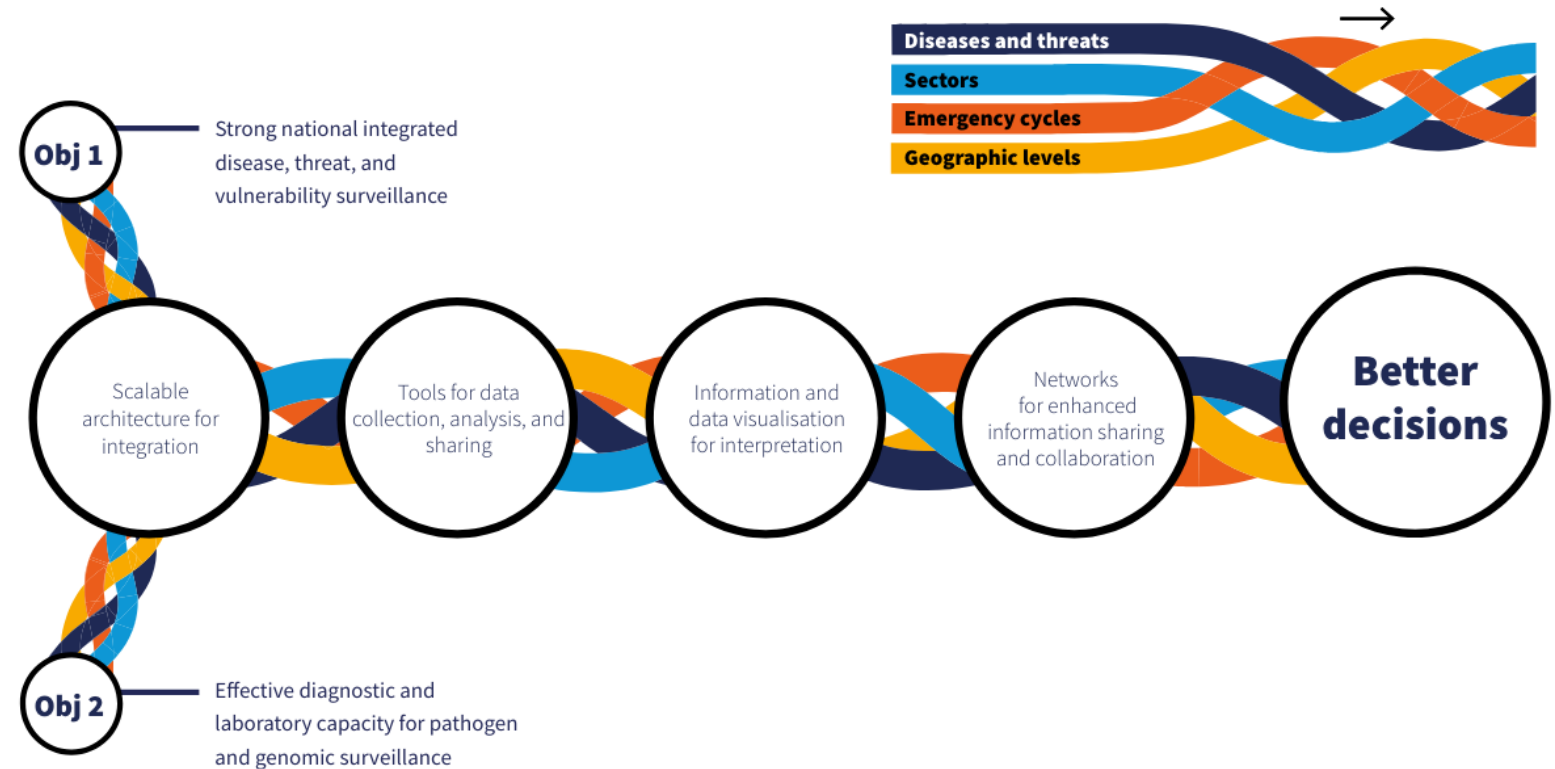
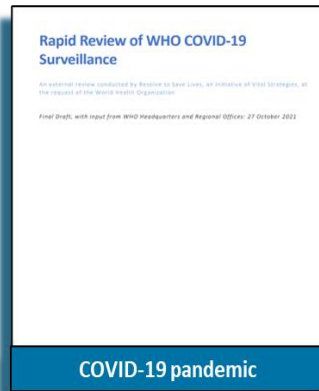
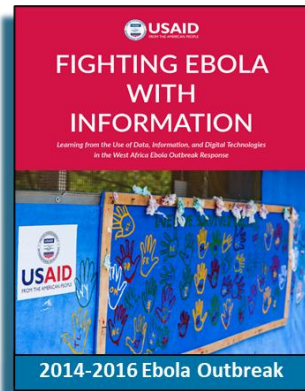


Fig. 6. Capabilities for facilitating collaborative approaches for event detection, risk assessment, and response monitoring



Why Surveillance Data Standards Matter?



Lessons learned from past outbreaks

Challenges in the collection, transmission and use of data

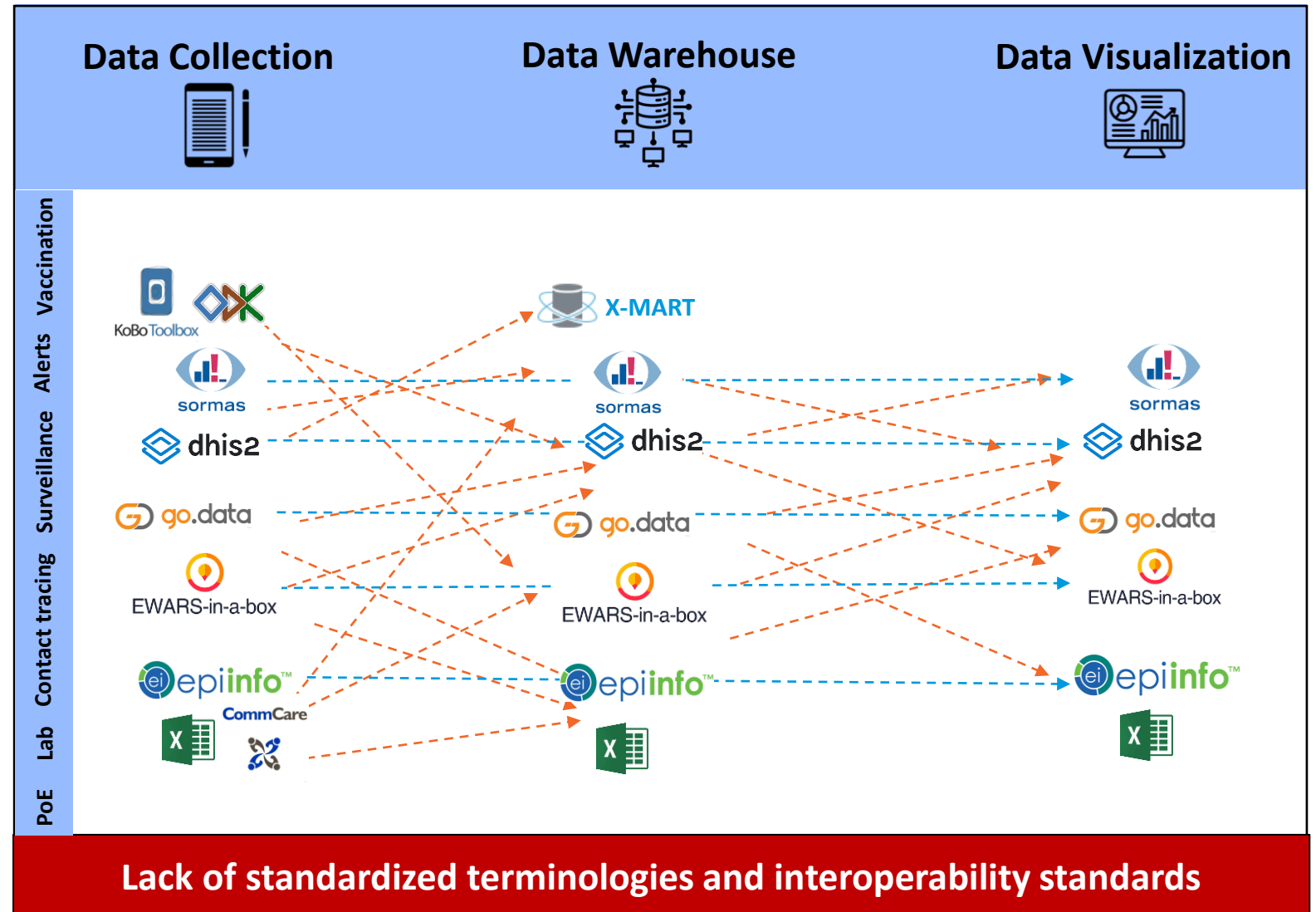
Multiple forms, formats, and platforms used to collect data

Burden and duplication of data collection efforts

Inconsistent adoption of WHO surveillance guidelines



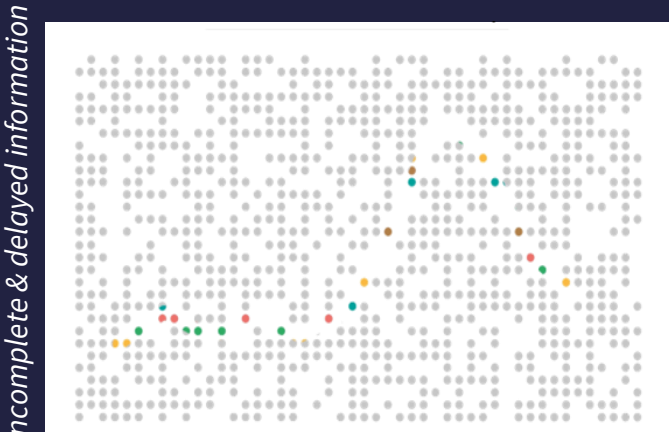
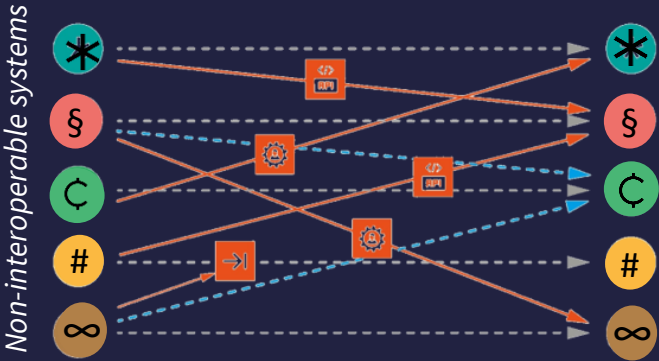
Multiple systems, many integrations, maintenance burden, high costs



Surveillance data standards for better data systems integration

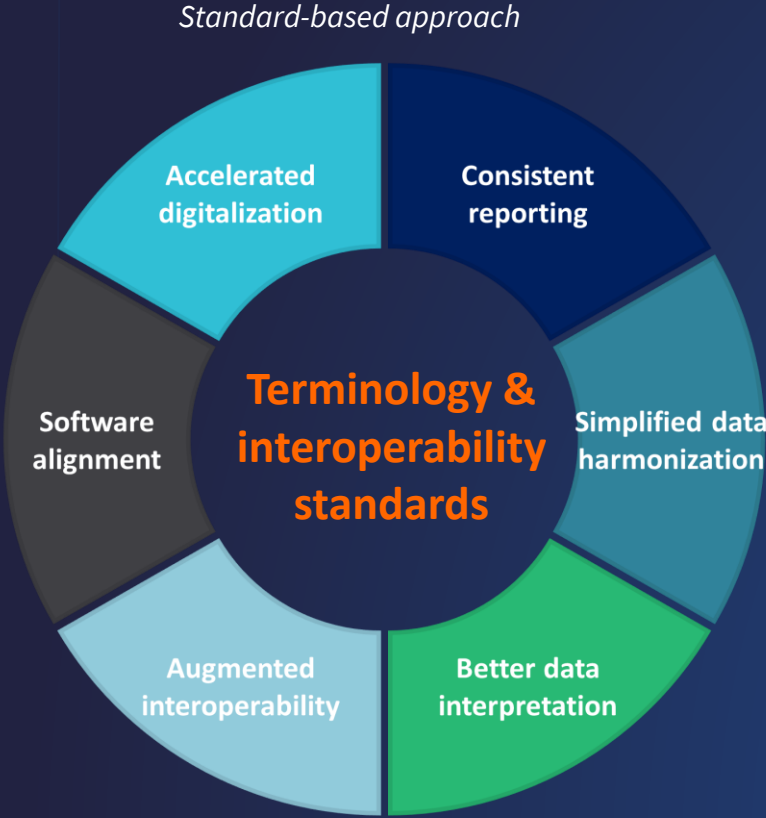
Current state

Fragmented data sources and complex integration pathways, leading to inconsistent and incomplete interpretation of outbreak dynamics and **delayed response times**



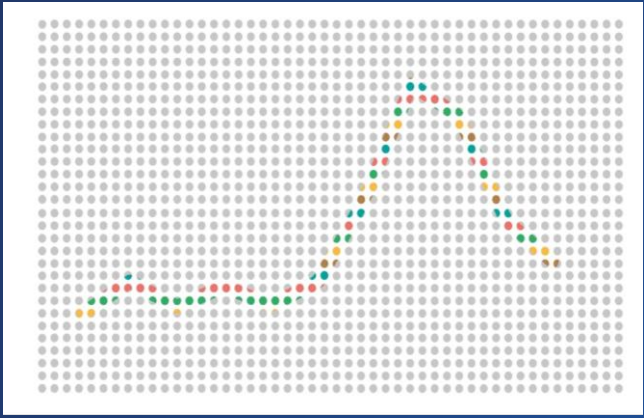
Approach

Development of **data and interoperability standards** tailored for digitalized and integrated epidemiological surveillance

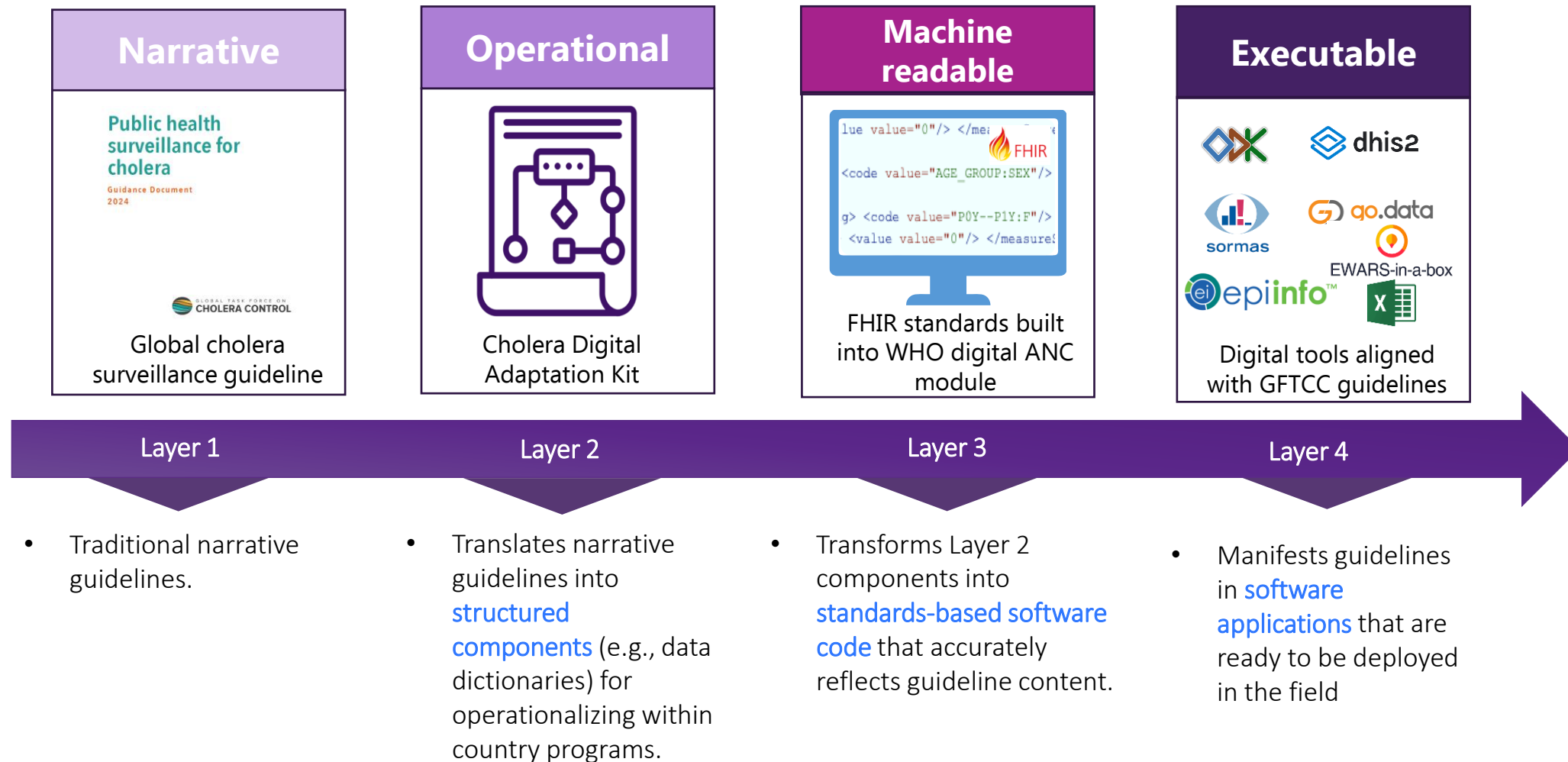


Future State

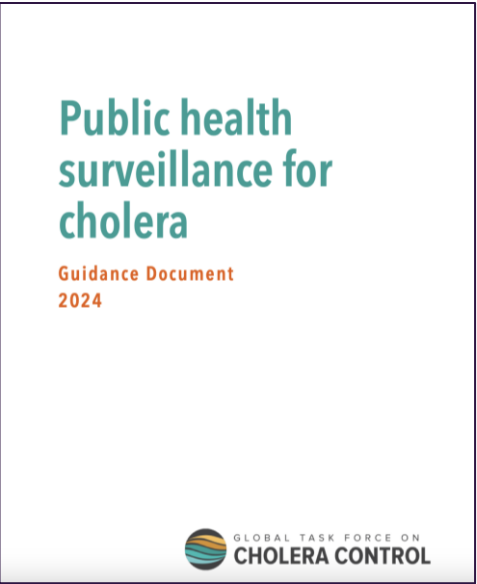
Better integration of systems leading to more **efficient data transmission** and interpretation, and ultimately, **swifter responses to public health emergencies**.



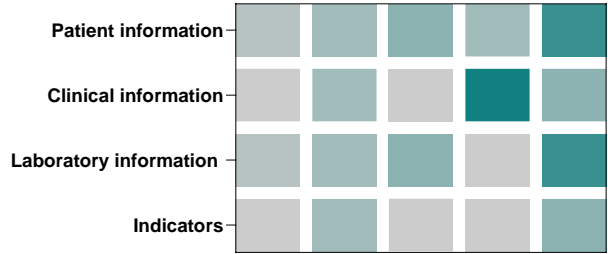
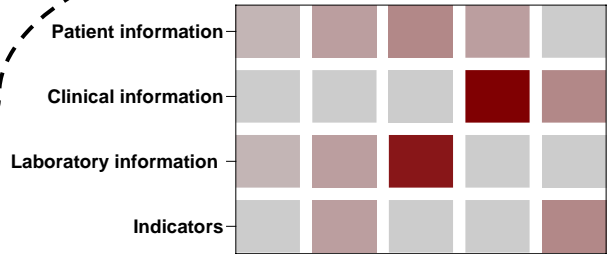
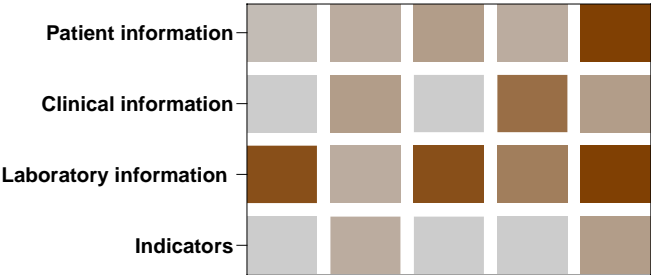
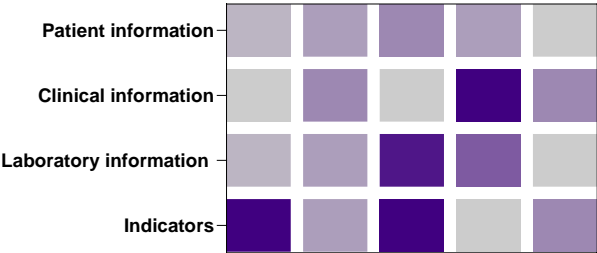
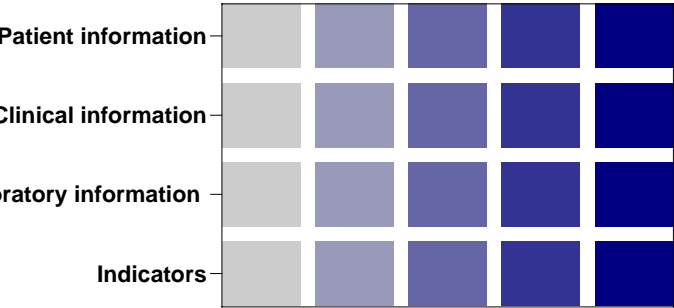
SMART Guidelines – A structured process for interoperability



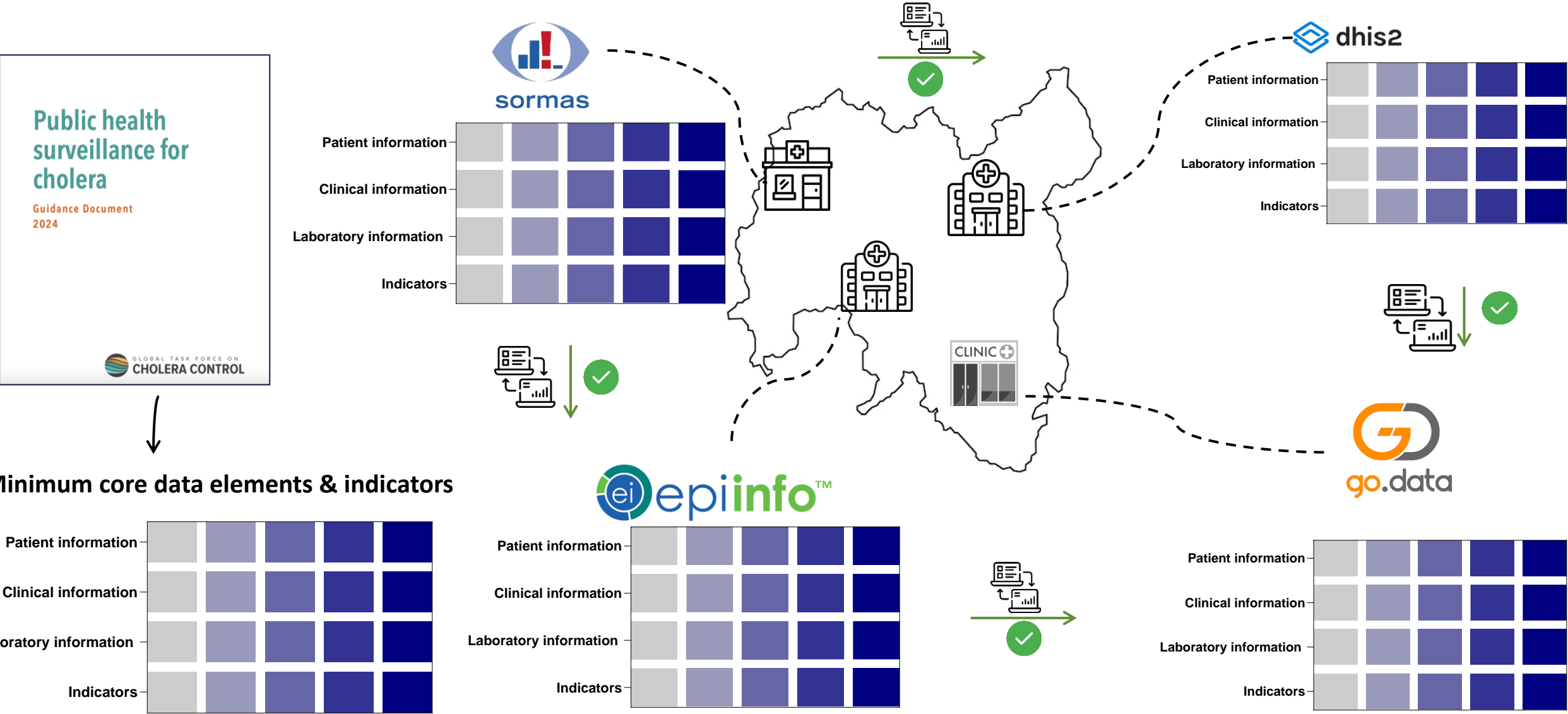
Current state: No adoption of cholera surveillance data standards produces a fragmented digital health landscape



Minimum core data elements & indicators



Future state: Adoption of cholera surveillance data standards promotes a cohesive digital health landscape



Value Proposition & Public Health Impact for Countries

Surveillance SMART guidelines can:



Accelerate the adoption and adaptation of GFTCC guidelines on cholera surveillance



Make data reporting easier, data harmonization faster, and data use better



Facilitate data exchange and integration through enhanced interoperability

This will help countries:

- Strengthen the **quality, reporting and use** of surveillance data, leading to **better informed decision making**
- Better understand and visualize outbreak dynamics, leading to **faster detection and response to cholera outbreaks**
- **Strengthen coordinated efforts** across borders by enhancing comparability of data across different countries and regions
- **Reduce cost** associated with data integration and software development

A collaborative approach



Stakeholders engaged to-date

Regional meetings

- ✓ PAHO Connectathon and Information Systems meeting (Sao Paulo Nov. 2023)
- ✓ ECOWAS regional surveillance digitalization workshop (Accra Nov. 2023)
- ✓ GFTCC annual conference (Caire May 2024)

Internal WHO teams

- ✓ DDI, DHI, SRH
- ✓ Meningitis, Cholera, COVID-19, Measles, Yellow Fever
- ✓ HIV, TB
- ✓ WHO SMART guidelines CoP

Member States

- ✓ AFRO interoperability hackathon (Kigali Oct. 2023)
- ✓ AFRO VPD data integration workshop (Accra May 2024)

External partners and organizations

- ✓ ECDC, US CDC
- ✓ Swiss TPH, Global.health
- ✓ MSF/Epicentre, Resolve to save lives

Software developers

- ✓ DHIS2, SORMAS, Intellisoft

A collaborative approach



Opportunities for engagement for actors at all levels

- **Inform and support** the development of surveillance data standards using SMART guidelines.
- **Invest** in tools that are aligned with the data standards
- Participate in **test implementations** and case studies
- **Adopt Smart Guidelines** as the primary mechanism to improve the functionality and interoperability of tools
- **Advocate** for the adoption of data standards using SMART guidelines

Way forwards

Project Launch & Communication

- Stakeholder mapping and engagement
- Change management
- Communication

Horizon Scan & Gaps Analysis

- Existing initiatives
- Country case studies (gaps/challenges)

Data Standards Development (using SMART guidelines approach)

- Cholera, yellow fever, meningitis, measles, COVID-19
- Guideline review
- Data standards development (SMART guidelines)

Country Implementation

- Workshop and/or Connectatons
- Implementation research
- M&E
- Case studies



- Lessons Learned
- Investment case
- Scale-up

Thank you

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