Strategy on Epidemic Intelligence for Strengthening Early Warning of Health Emergencies in the Americas

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Health Emergency Information and Risk Assessment (HIM) Unit

PAHO Health Emergencies Department

Background: Epidemic intelligence in the Americas

Epidemic and pandemic-prone diseases remain a significant public health threat in the Region of the Americas, and new threats pose continued challenges

Efficient and robust early warning and response systems are needed, but implementation of epidemic intelligence in countries varies in the Region

A need for a common understanding of concepts, approaches, definitions

A need for sharing and mapping current practices and lessons learnt

A need for strengthening epidemic intelligence in the Region

Regional Meeting on the Use of Epidemic Intelligence for Early Warning and Response
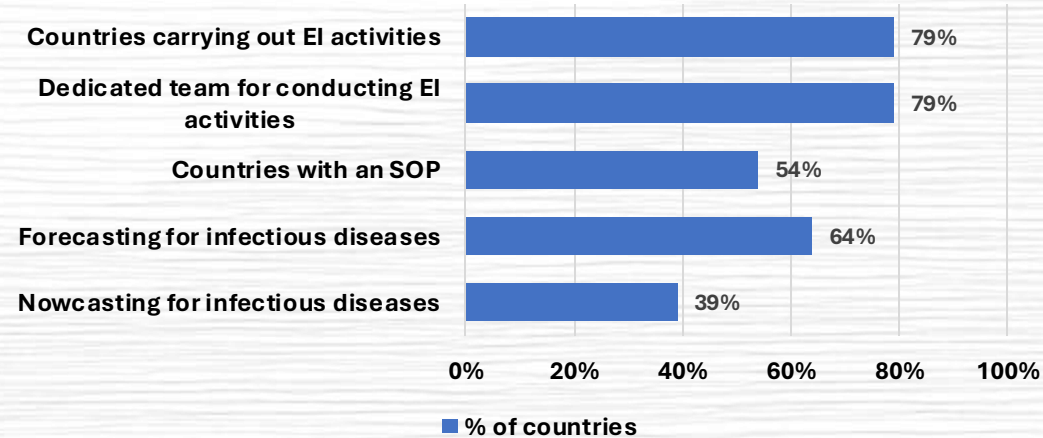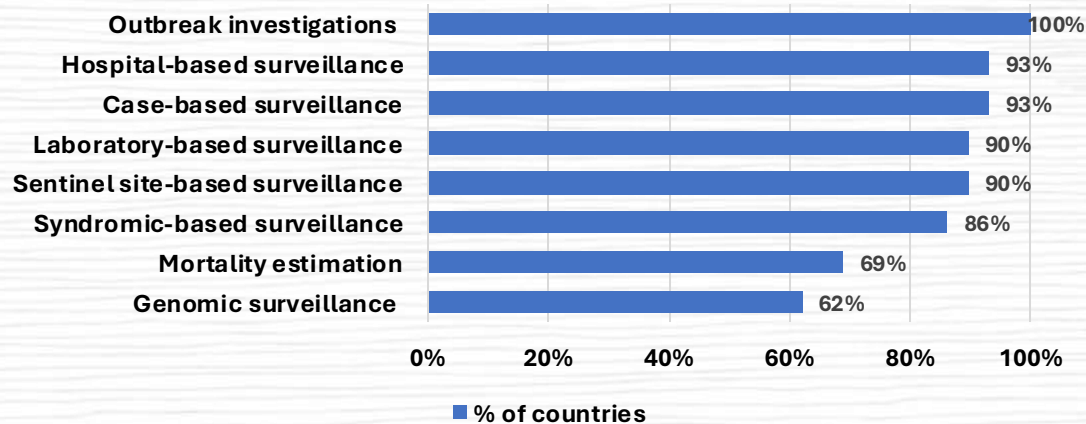
December 11-13, 2023, in Brasilia, Brazil

- To review the implementation of the Epidemic intelligence among countries participants (AMRO and Portuguese speaking countries);

- To facilitate the exchange of experiences and best practices among the participating countries;

- To identify key strategic priorities at national, sub regional and regional level; and

- To develop a roadmap for strengthening epidemic intelligence in the Region and among Portuguese speaking countries.

31 Member States, **28** from the Region of the Americas and **3** belonging to the Community of Portuguese-speaking Countries (CPLP)

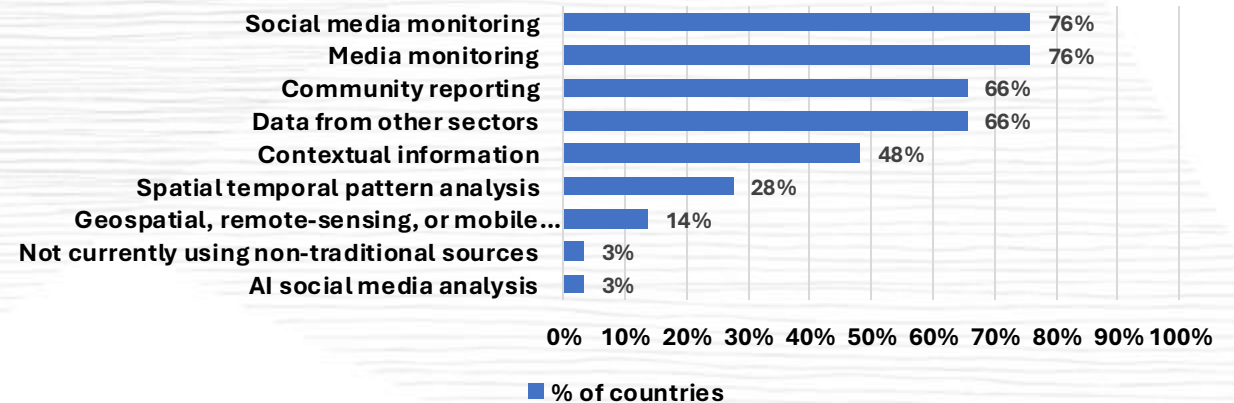# Regional Meeting on the Use of Epidemic Intelligence for Early Warning and Response: Existing Capacities

Existing epidemic intelligence capacities

Category	% of countries
Countries carrying out EI activities	79%
Dedicated team for conducting EI activities	79%
Countries with an SOP	54%
Forecasting for infectious diseases	64%
Nowcasting for infectious diseases	39%

Traditional type(s) of data sources for infectious disease surveillance

Category	% of countries
Outbreak investigations	100%
Hospital-based surveillance	93%
Case-based surveillance	93%
Laboratory-based surveillance	90%
Sentinel site-based surveillance	90%
Syndromic-based surveillance	86%
Mortality estimation	69%
Genomic surveillance	62%

Non-Traditional type(s) of data sources for infectious disease surveillance

Category	% of countries
Social media monitoring	76%
Media monitoring	76%
Community reporting	66%
Data from other sectors	66%
Contextual information	48%
Spatial temporal pattern analysis	28%
Geospatial, remote-sensing, or mobile...	14%
Not currently using non-traditional sources	3%
AI social media analysis	3%

Regional Meeting on the Use of Epidemic Intelligence for Early Warning and Response: Short-Term Prioritization Results
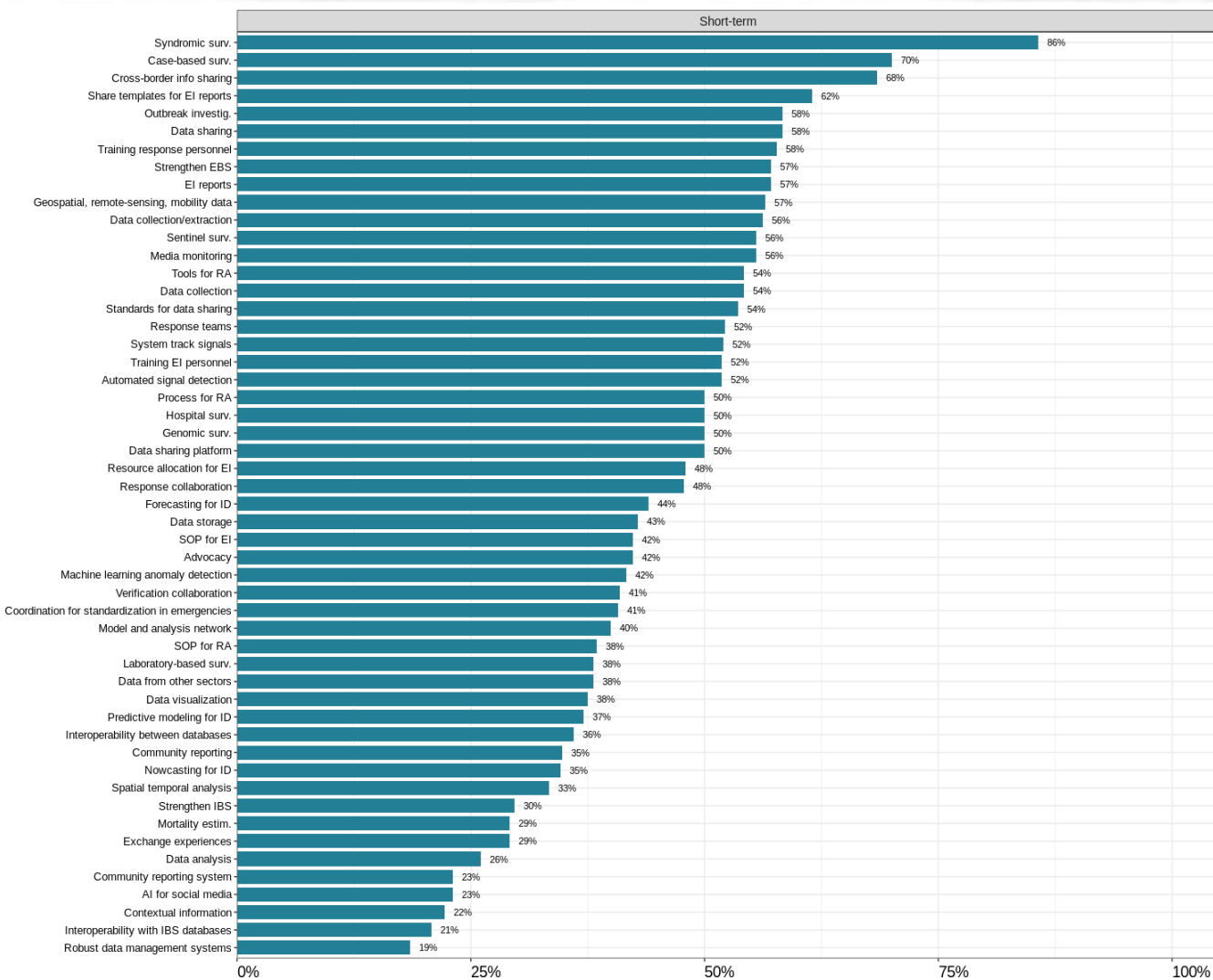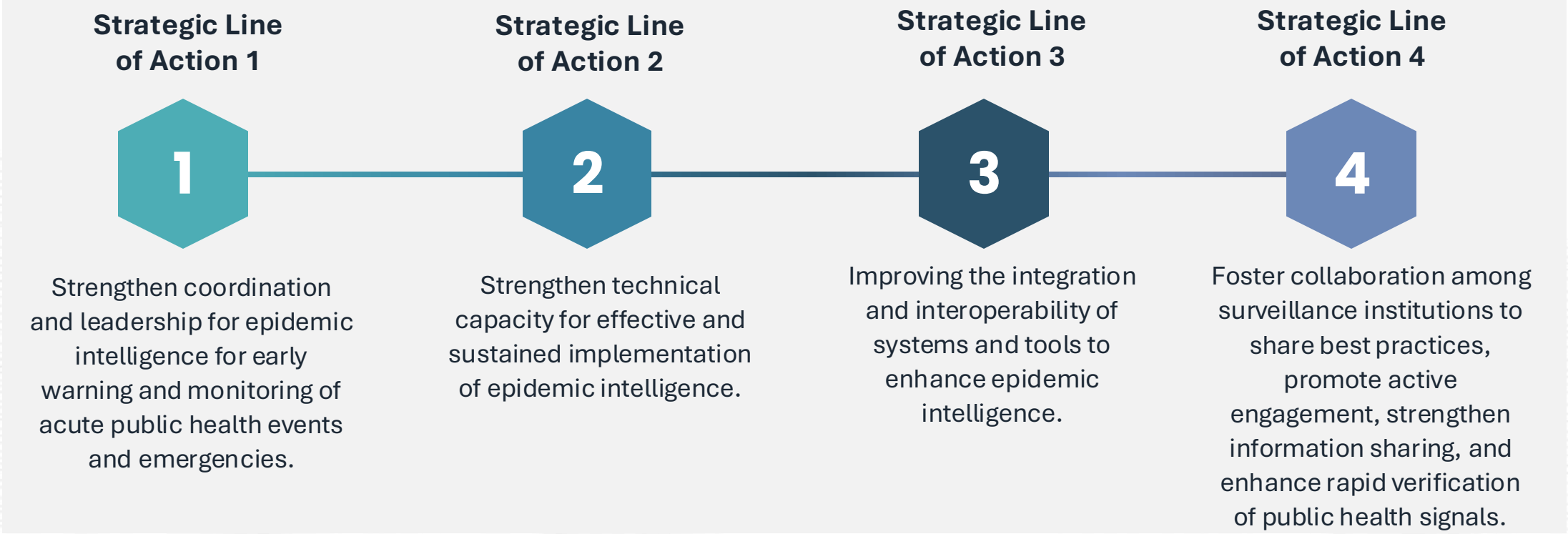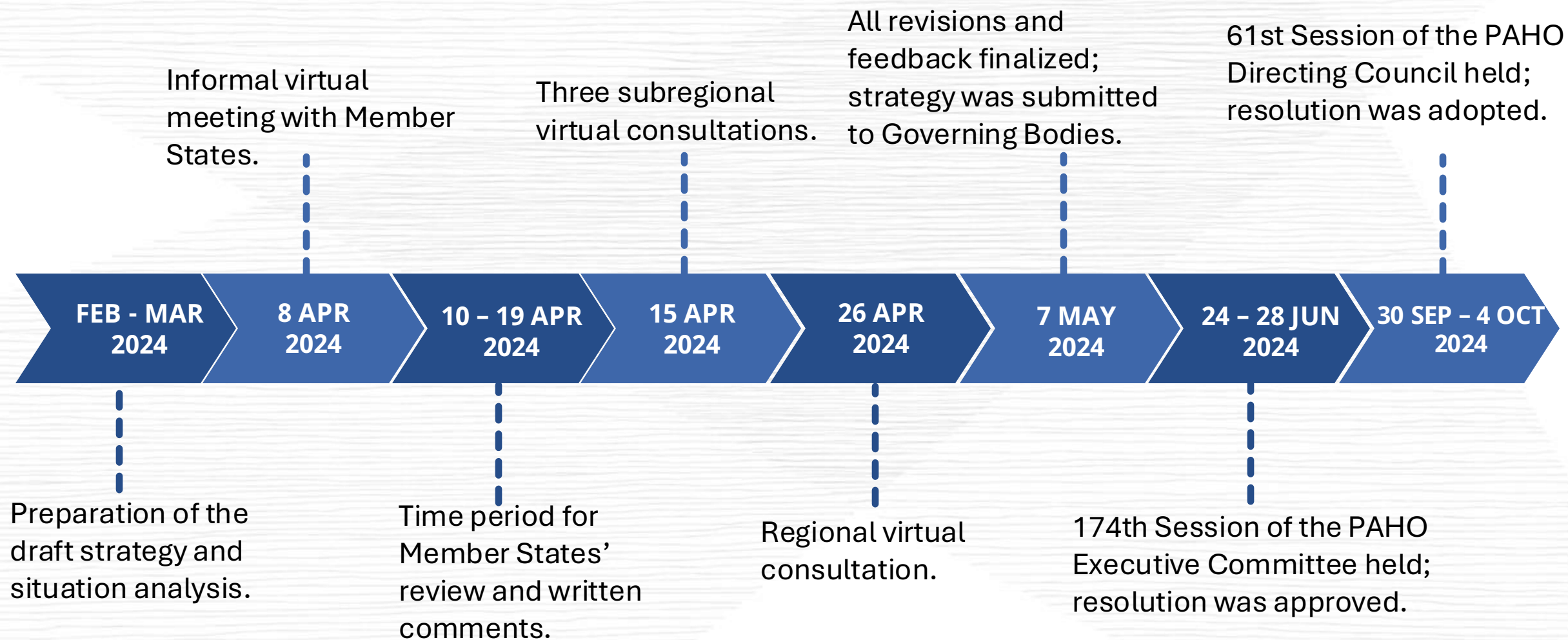

Top 10 priorities:
1. Syndromic surveillance (86%)
2. Case-based surveillance (70%)
3. Cross-border info sharing (68%)
4. Share templates for epidemic intelligence reports (62%)
5. Outbreak investigations (58%)
6. Data sharing (58%)
7. Training response personnel (57%)
8. Strengthen EBS (57%)
9. Epidemic intelligence reports (57%)
10. Geospatial, remote-sensing, mobility data (56%)

Resolution: Strategy on Epidemic Intelligence for Strengthening Early Warning of Health Emergencies 2024-2029
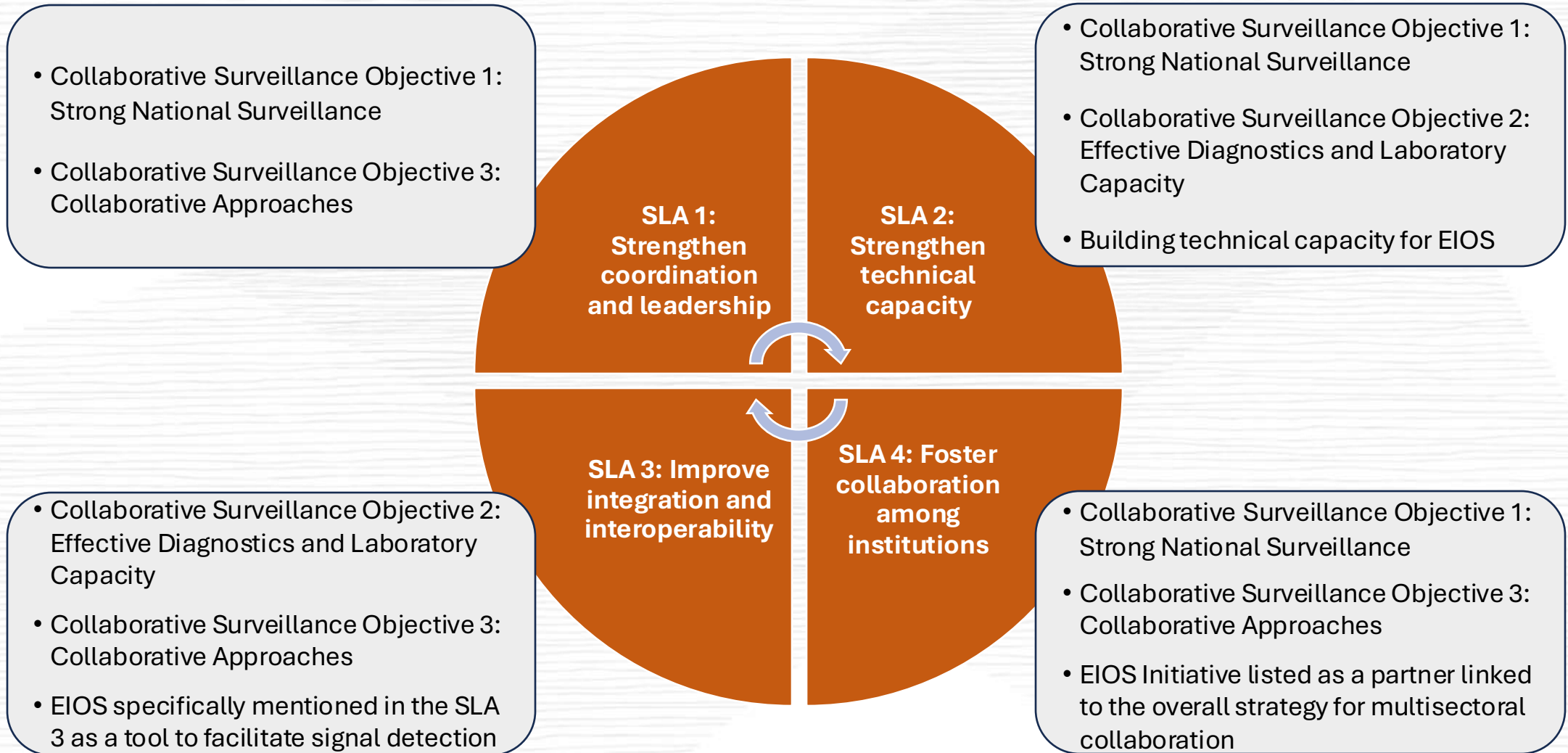
- In February 2024, following the Regional Meeting, Brazil proposed the inclusion of a strategy on epidemic intelligence as an agenda item for the 174th Session of the PAHO Executive Committee held in June 2024.

- PAHO/WHO supported the development of the draft Strategy, leveraging the information and priorities identified during the Regional Meeting.

Strategic Line of Action 1	Strategic Line of Action 2	Strategic Line of Action 3	Strategic Line of Action 4
1	**2**	**3**	**4**
Strengthen coordination and leadership for epidemic intelligence for early warning and monitoring of acute public health events and emergencies.	Strengthen technical capacity for effective and sustained implementation of epidemic intelligence.	Improving the integration and interoperability of systems and tools to enhance epidemic intelligence.	Foster collaboration among surveillance institutions to share best practices, promote active engagement, strengthen information sharing, and enhance rapid verification of public health signals.

How does the Strategy support Collaborative Surveillance and link with the EIOS Initiative?

- Collaborative Surveillance Objective 1: Strong National Surveillance
- Collaborative Surveillance Objective 3: Collaborative Approaches

- Collaborative Surveillance Objective 1: Strong National Surveillance
- Collaborative Surveillance Objective 2: Effective Diagnostics and Laboratory Capacity
- Building technical capacity for EIOS

SLA 1: Strengthen coordination and leadership

SLA 2: Strengthen technical capacity

SLA 3: Improve integration and interoperability

SLA 4: Foster collaboration among institutions

- Collaborative Surveillance Objective 2: Effective Diagnostics and Laboratory Capacity
- Collaborative Surveillance Objective 3: Collaborative Approaches
- EIOS specifically mentioned in the SLA 3 as a tool to facilitate signal detection

- Collaborative Surveillance Objective 1: Strong National Surveillance
- Collaborative Surveillance Objective 3: Collaborative Approaches
- EIOS Initiative listed as a partner linked to the overall strategy for multisectoral collaboration

Next Steps for Epidemic Intelligence in the Americas

➢ Complete the consultation process with Member States to finalize the Action Plan.

➢ Convene for the second Regional Meeting on Epidemic Intelligence in early 2025.

➢ Epidemic intelligence will be a priority for the PAHO/WHO and the Americas for 2024-2029, and will require:

Leveraging existing initiatives, tools, trainings, and resources through collaborative approaches (e.g., EIOS, Risk Assessment for Member States, Public Health Intelligence Core Competencies, amongst others).

Integrating innovative technologies, artificial intelligence, and software to support Member States.

Establishing best practices, procedures, concepts, definitions, performance indicators, etc.

Developing and strengthening national and regional capacity-building initiatives, including trainings and fostering multilateral collaboration.