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THE JOURNEY SINCE THE EBOLA CRISIS

Lessons learned and setting the
stage for the next phase of
public health emergency
operations centers

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THE 2013-2016 EBOLA OUTBREAK BROUGHT THE NEED FOR URGENT TRANSFORMATION OF EXISTING CRISIS MANAGEMENT SYSTEMS...

Situation

- 1 Public health risks pose a significant threat to economies
- 2 The increase in population density, travel, and systemic complexity will contribute to making biological hazards more costly, more frequent, and more dangerous

Impact of the 2013-2016 Ebola crisis

- 1 **OVER 11,000 DEATHS**
primarily in Guinea, Liberia and Sierra Leone
- 2 **OVER USD 2.2 BILLION**
in GDP losses across the three countries
- 3 **SEVERE SOCIO ECONOMIC LOSSES**
doctors, nurses, midwives, health workers, travel bans, etc.

...IN ADDITION, THE MAGNITUDE AND DIVERSITY OF SEVERAL RECENT OUTBREAKS AROUND THE WORLD REINFORCE THIS ARGUMENT



Snapshot of recent outbreaks around the world

EBOLA

2018-2020 Ebola outbreak in the Democratic Republic of Congo (DRC) leading to more than 2000 deaths

LASSA FEVER

2019 Lassa fever outbreak in Nigeria leading to more than 500 cases and 120 deaths

MENINGITIS

Recurring meningitis outbreaks with more than 15,000 cases in 2019 across Africa (from Senegal to Ethiopia)

MEASLES

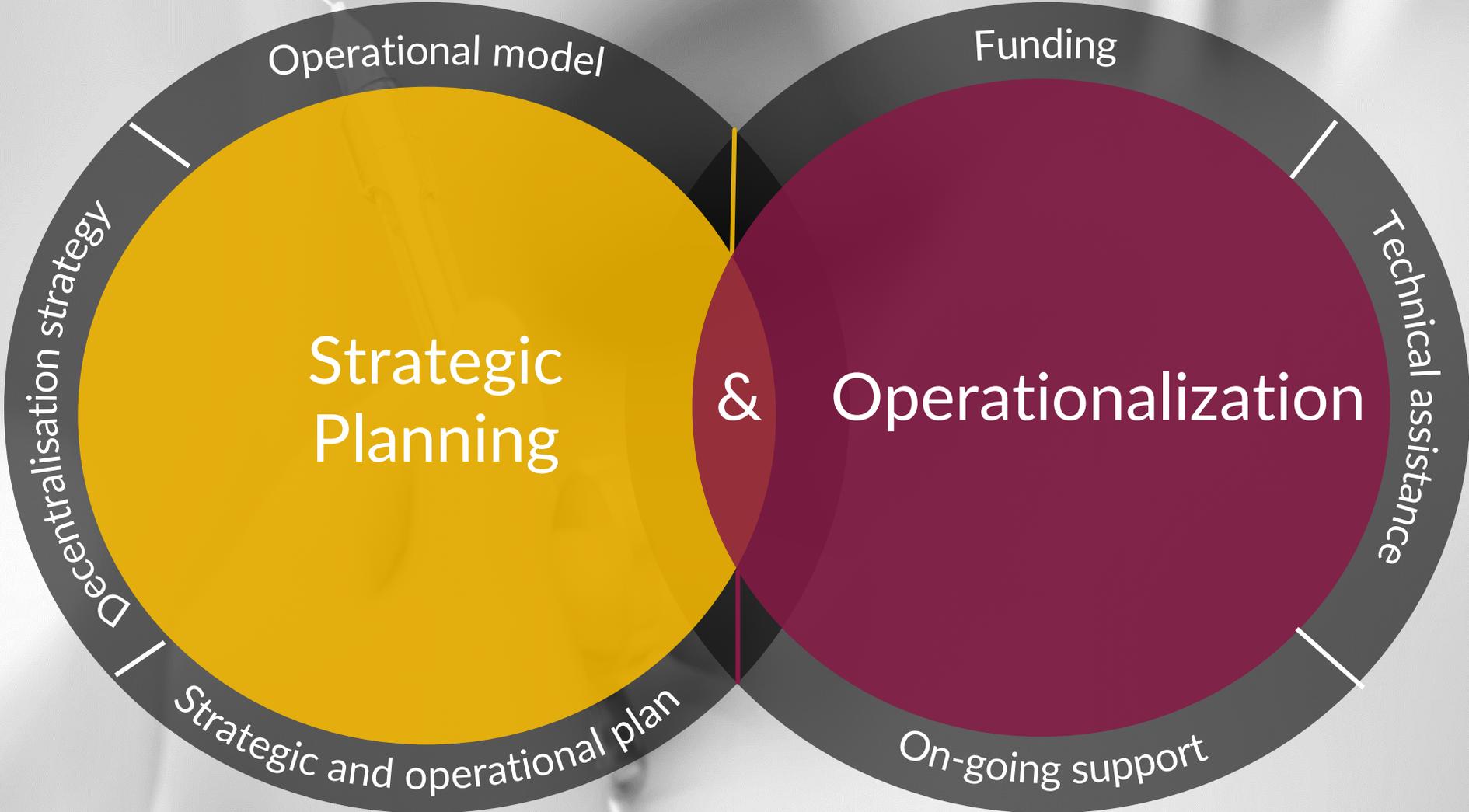
2019 global measles crisis with 182 countries reporting 364,808 cases (300% increase from 2018)

And counting ...



PUBLIC HEALTH EMERGENCY
OPERATIONS CENTERS EMERGED AS
A CRITICAL COMPONENT OF PUBLIC
HEALTH CRISIS MANAGEMENT

SINCE THE EBOLA OUTBREAK, BMGF HAS BEEN ENGAGED IN THE STRATEGIC PLANNING AND OPERATIONALIZATION OF EOCs



SOME RECENT INTERVENTIONS OF EOCs IN AFRICA

| | | | |
|---|---------------|-------|---|
|  | BURKINA FASO | ————— | Activation during the meningitis outbreak (2019) and emergency health support to refugees from ongoing conflict |
|  | CAMEROON | ————— | Activation during the Cholera outbreak (2018) |
|  | GUINEA BISSAU | ————— | Emergency health support following the severe storm that hit the country in 2018 causing deaths and injury |
|  | MALI | ————— | Emergency health support to refugees from ongoing conflict |
|  | MAURITANIA | ————— | Emergency health support during the recent Rift Valley fever outbreak (2019) |
|  | NIGERIA | ————— | Activation during the meningitis, Lassa fever, yellow fever (2019) and Monkeypox (2018) outbreaks |
|  | SENEGAL | ————— | Activation during the Dengue fever outbreak (2018), and the Mecca mass stampede (2016) |
|  | ZIMBABWE | ————— | Activation during the Cholera Outbreak (2018), and Cyclone Idai (2019) |

HOW DO EOCs OPERATE?

Health emergencies require fast and effective responses to save lives and minimize socio-economic losses

| | |
|---|--|
|  | Public Health Emergencies (PHEs) are increasingly complex and can occur quickly given the globalized flows of people, vectors, and goods |
|  | Management of PHEs requires international and national systems focusing on preparedness, prevention, mitigation, detection, response, and recovery |



Public Health EOCs lead the management of PHEs, before and after they arise

| | |
|---|--|
|  | Public Health EOCs differ greatly from usual administrative institutions as they are based on a 'command and control' approach and must cut across regular hierarchies and procedures when necessary |
|  | Effective Public Health EOCs require from their staff specific technical knowledge and behaviors, as well as strong leadership |



Public Health EOCs create a paradigm shift for both countries and development partners.

As such design and implementation require significant efforts to build capacity.

WHAT HAS BEEN THE JOURNEY THUS FAR?

1. Decision to create an EOC

- While all countries have pledged to implement an EOC, the majority are dealing with (i) reorganization challenges within existing structures, (ii) competing priorities, and (iii) difficult power distribution
- It is critical for the EOC to engage with government and other actors to identify the gaps it can fill and its value-add

2. Authority and lines of accountability

- Only a minority of countries have issued an official decree establishing an EOC
- Anchoring is often creating de facto duplication as mandates of existing institutions aren't revised
- Existing institutions tend to focus on power shift instead of overall capacity strengthening

3. Staffing and organization

- Capacity gaps do not always allow effective surveillance and 'power projection'
- Multi-hazard coordination is nascent, with health sector usually most advanced in implementing IMS

4. Strategy, scope of work and procedures

- Scope is often too large given available capacity
- Drafted Standard Operating Procedures (SOPs) are often designed top-down as 'ideal' procedures and not always workable
- Some countries (e.g., Nigeria, Senegal) contribute to regional integration by making their SOPs publicly available
- A readjustment of strategies during the implementation phase is often required

WHAT HAS BEEN THE JOURNEY THUS FAR?

5. Integration of subnational levels

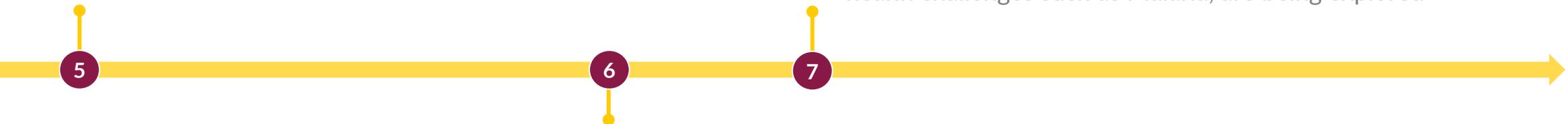
- Capacity gaps (skills including basic Incident Management Systems (IMS) and staffing) at subnational levels do not allow effective surveillance and 'power projection'
- Subnational authorities (e.g., prefects, governors) are not always empowered and held accountable for implementation of Public Health EOC policies

7. Cross-country learning and EOC 3.0

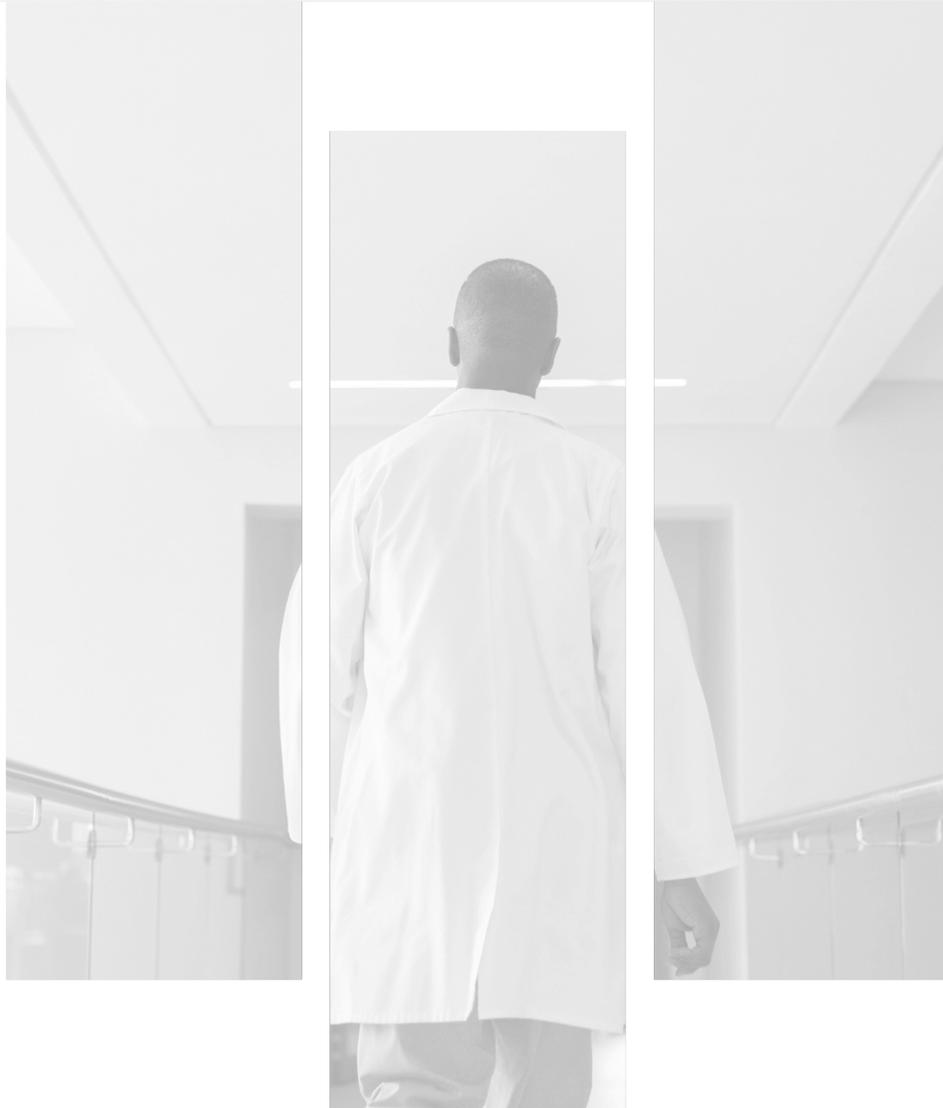
- Existing EOCs have been supporting other countries in setting up new EOCs, helping to strengthen existing ones, and sharing lessons learned. Nigeria and Senegal, for example, continue to host other countries on learning trips
- More efforts are still needed to fully explain the EOC concept
- Opportunities to broaden the mandate of the EOC to include other health challenges such as Malaria, are being explored

6. Coordination with partners

- Technical assistance is provided by multiple partners to strengthen core functions (e.g., field epidemiology, early warning procedures, risk assessment, risk communication) and overall system (e.g., Joint External Evaluations)
- Coordination between partners should be strengthened
- Stronger coordination mechanisms are needed when PHE of International Concern is declared by WHO



WHAT ARE THE MAIN LESSONS LEARNED THUS FAR?



1

Some key learnings from our assessment of EOCs in West Africa

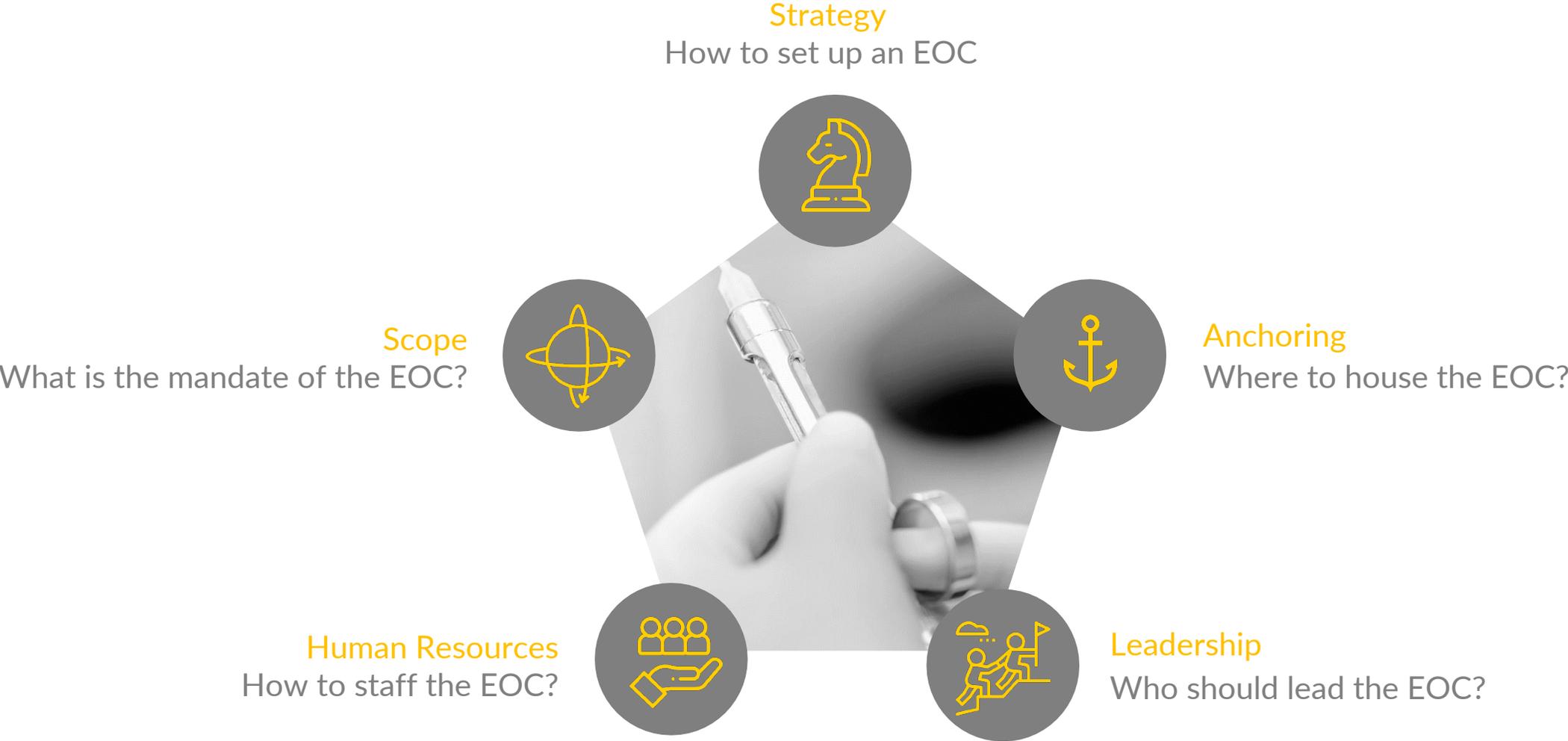
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Essential features that an EOC needs in order to carry out its mission effectively

3

Critical tools to ensure the EOC's effectiveness

KEY LEARNINGS IN FIVE TOPICS HAVE EMERGED FROM OUR ASSESSMENT OF EOCs IN WEST AFRICA



AN EFFECTIVE EOC REQUIRES A STRATEGY FOCUSED ON PEOPLE, RESOURCES AND INFORMATION

1. STRATEGY

A CLEAR EOC STRATEGY SHOULD INCLUDE: ITS MISSION, SCOPE, OBJECTIVES, SPECIFIC ROLES AND RESPONSIBILITIES, AND MECHANISMS TO FOSTER COLLABORATION AND COORDINATION

Challenges in setting up an EOC

- Shift in mindset to adopt the Incident Management System
- Changes to deep-seated management practices and hierarchy structures
- EOCs are often launched in times of crises out of necessity and with little planning
- Difficulties in advocating for EOCs in countries that have not experienced public health crises recently



Key factors to support the creation of an EOC

- Identify a champion whose voice is respected and has authority
- Leverage the presence of an authority figure within the ministry of health who understands the EOC added value
- Incorporate key stakeholders from within the ministry of health, and beyond in developing the EOC strategy through participatory workshops

LIMITING THE SCOPE OF AN EOC HELPS ESTABLISH A SUSTAINABLE AND EFFECTIVE EMERGENCY MANAGEMENT SYSTEM

2. SCOPE

THE EOC MANDATE SHOULD MATCH THE COUNTRY CONTEXT AND RESOURCES, AND BUILD ON EXISTING STRUCTURES, FOCUSING ON PUBLIC HEALTH CRISES

Complexities of defining scope of an EOC

- The IMS approach involves a reallocation of roles, responsibilities, chains of command, and budgets
- An all hazards EOC can be over ambitious and very difficult to implement in WA
- Need for alignment of EOC mandate with existing institutions and national security agenda



Key guiding principles to decide on the scope of the EOC

- Identify a champion whose voice is respected and has authority
- Leverage the presence of an authority figure within the ministry of health who understands the EOC added value
- Incorporate key stakeholders from within the ministry of health, and beyond in developing the EOC strategy through participatory workshops

ANCHORING THE EOC IN THE MINISTRY OF HEALTH ALLOWS FOR STRENGTHENING OF EXISTING STRUCTURES AND STRONGER LEGITIMACY

3. ANCHORING

THE EOC ANCHORING SHOULD GRANT IT LEGITIMACY, AUTHORITY, AND INDEPENDENCE TO SUPPORT EFFECTIVE DECISION-MAKING DURING CRISIS MANAGEMENT

Key challenges related to the anchoring of an EOC

- Competition for resources, authority and status between ministries and agencies performing overlapping activities
- Lack of willingness to collaborate across sectors if feeling of loss of legitimacy from existing institutions



Key recommendations to foster acceptance of the EOC

- Highlight the EOC added value describing its role in supporting existing institutions
- Do not create parallel structures
- House the EOC within the ministry of health, or public health institute or equivalent – depends on country-context
- Organize participatory workshops to decide on EOC's thresholds of activation

THE LACK OF WELL-TRAINED HUMAN RESOURCES HAS INHIBITED EOCs, AND NEEDS TO BE PRIORITIZED

4. HUMAN RESOURCES

EMERGENCY RESPONSE REQUIRES STAFF WITH EXPERIENCE MANAGING PUBLIC HEALTH CRISES AND PROFICIENCY IN EPIDEMIOLOGY, LABORATORY SURVEILLANCE, LOGISTICS, DATA MANAGEMENT AND COORDINATION

Challenges in gathering competent professionals

- Limited availability of professionals with a diverse set of skills required
- Difficulties in attracting personnel to the EOC
- Over-reliance on medical professionals
- Acute scarcity of professionals with logistics or Incident Management training



Suggestions to remedy the lack of human resources

- Conduct a gap analysis to identify the skills needed for emergency response
- Create a database of skilled staff in the country, region, etc., and engage regional institutions
- Recruit staff to join the EOC 'stand-by' team and enlist them in training programs and simulation exercises

LEADING AN EOC REQUIRES A WELL-ROUNDED PERSON WHO POSSESSES TECHNICAL AND MANAGERIAL SKILLS

5. LEADERSHIP

THE EOC COORDINATOR ROLE REQUIRES A WELL-ROUNDED LEADER WITH EXPERIENCE MANAGING PUBLIC HEALTH CRISES AND A BALANCE OF HARD AND SOFT SKILLS

Challenges in finding the right profile to lead an EOC

- Selection primarily based on seniority and clinical expertise
- Challenge of finding a professional with expertise in both epidemiology, management and political savviness in countries with limited skilled workforce



Optimal set of experiences and skills required to lead an EOC

- Strong expertise in epidemiology
- Grounded understanding of government institutions
- Political savviness and ability to gain political support from key stakeholders
- Ability to put in place, and execute processes
- Ability to deal with conflict

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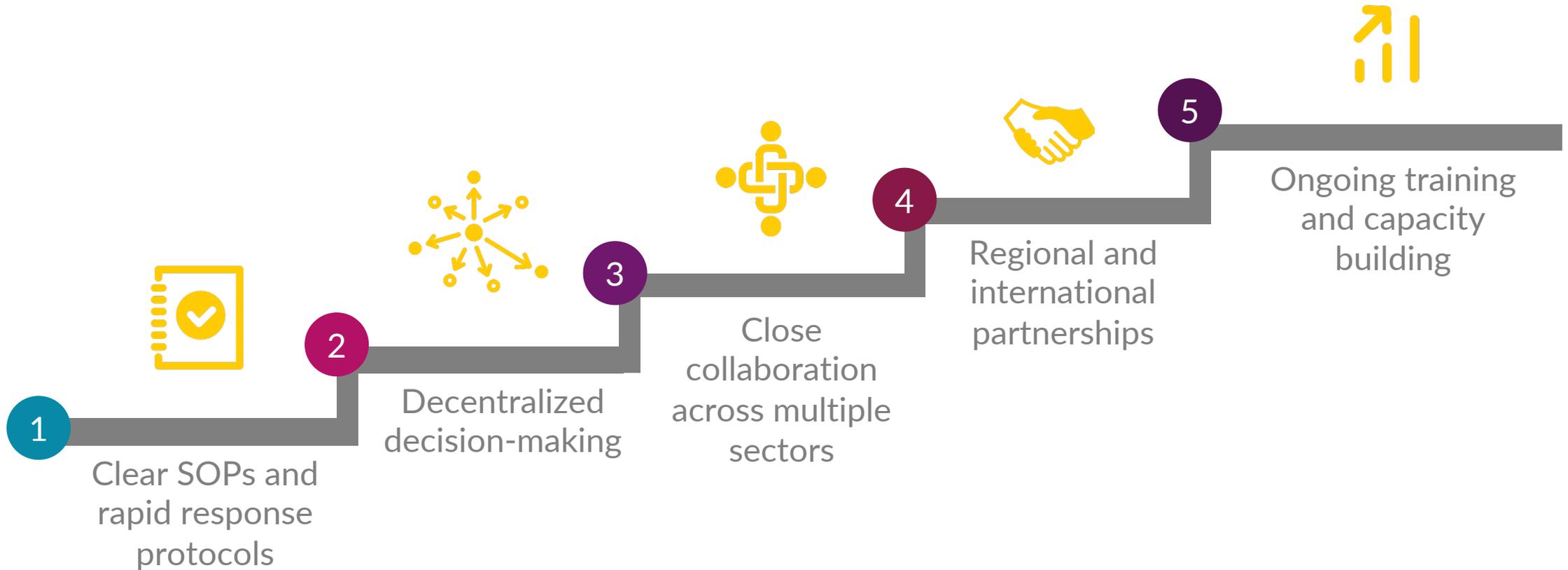
2

Essential features that an EOC needs in order to carry out its mission effectively

3

Critical tools to ensure the EOC's effectiveness

FIVE ESSENTIAL FEATURES FOR AN EOC TO CARRY OUT ITS MISSION EFFECTIVELY



WHAT ARE THE MAIN LESSONS LEARNED THUS FAR?



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TOOL 1: STRATEGIC AND OPERATIONAL PLAN

CONTENT

- Missions
- Objectives
- Risk mapping
- Intervention areas
- Detailed activities
- Resource mobilization strategy
- Implementation road map

LESSONS LEARNED

A strategic plan should rely on clear strategic objectives that support an operational focus

ILLUSTRATION



TOOL 2: SUBNATIONAL ASSESSMENT TOOL

CONTENT

Evaluates each sub-national system following five parameters:

- Institutional capacity
- Technical capacity
- Human resources capacity
- Partnerships
- Regional needs

LESSONS LEARNED

A strategic plan should rely on clear strategic objectives that support an operational focus

| ILLUSTRATION | | | | | |
|--------------|--|--|---|---|--|
| DOMAIN | INSTITUTIONAL CAPACITY | TECHNICAL CAPACITY | HUMAN RESOURCES CAPACITY | PARTENRSHIPS | REGIONAL NEEDS |
| Primary lens | EOC has an established governance structure, mandate, and processes in place | EOC has the tools required to effectively manage all emergency risks | Regional EOC has the required staff, with necessary skills and expertise, to conduct a high-quality emergency program | Regional EOC is able to create, manage, and support all required internal and external partnerships to manage risks | EOC makes strategic decisions based on a data-based understanding of population dynamics and emergency risks |
| Sub-themes | Governance | Fixed structures | Coordinator | Community buy-in | Population traits |
| | Scope of existing functions | Detection capacity | Staffing levels | Public coordination | Health risks |
| | Processes | Response capacity | Staff skills | TFPs/NGOs | Non-health risks |
| | Budget | Supplies and procurement | Training | Alignment | Data |

TOOL 3: CHALLENGES PRIORITIZATION TOOL

CONTENT

Ranks the EOC’s challenges following three criteria:

- Frequency of occurrence of the challenge
- Magnitude and impact on current and potential future emergencies
- Capacity of the existing emergency management system to deal with emergencies or to mitigate consequences

LESSONS LEARNED

A frequent evaluation of the EOC’s challenges is important to take corrective actions

ILLUSTRATION

| Theme | Challenge | Frequency | Impact | System Capacity | Total |
|--------------------|---|-----------|--------|-----------------|-------|
| Partnerships | Community health relays lack training in surveillance and public health risk monitoring | 10 | 10 | 10 | 10 |
| HR capacity | CERPLEs staff have not been enough trained for new epidemic risks (please describe in Comments column) | 9 | 10 | 9 | 9.3 |
| Technical capacity | CERPLEs have not considered means to operate in degraded situations | 10 | 7.5 | 10 | 9.2 |
| Technical capacity | CERPLEs do not have sufficient vehicles and other organizational equipment to conduct operations in the event of an emergency | 10 | 7.5 | 10 | 9.2 |
| Partnerships | CERPLEs has not mapped active programs by Technical and Financial Partners (TFP) in region | 10 | 8.5 | 8.5 | 9.0 |
| HR capacity | CERPLEs staff lack training or experience in logistics | 9 | 8.5 | 7.5 | 8.3 |
| HR capacity | CERPLEs staff lack training or experience in organizational management | 9 | 8.5 | 7.5 | 8.3 |
| HR capacity | CERPLEs staff lack training or experience in planning | 9 | 8.5 | 7.5 | 8.3 |
| Partnerships | Local health authorities lack training in emergency response coordination | 9 | 8.5 | 7.5 | 8.3 |
| Regional needs | There are no drills organized by CERPLEs for regional risk preparation | 9 | 8.5 | 7.5 | 8.3 |
| Regional needs | CERPLEs does not provide customized trainings for local health authorities about regional risks | 8 | 8 | 9 | 8.3 |
| HR capacity | CERPLEs staff lacks training for non-epidemic risk contingencies | 8 | 8.5 | 7.5 | 8.0 |
| Partnerships | Local health authorities lack training in non-epidemic risk management | 8 | 8.5 | 7.5 | 8.0 |
| Partnerships | Local health authorities lack training in epidemic risk management | 8 | 8.5 | 7.5 | 8.0 |
| Technical capacity | CERPLEs have not fully transitioned to DHIS2 data requirements | 8.5 | 7 | 8.5 | 8.0 |
| Partnerships | TFPs act independently without consulting CERPLEs leadership | 7.5 | 7.5 | 7.5 | 7.5 |

IN SUMMARY



1

Countries are facing increasingly complex challenges (conflicts, emerging diseases, etc.)

2

Emergency models need to be adaptable/flexible to the evolving environment

3

Emergency systems need to be continuously strengthened and empowered

SO, WHAT'S NEXT?

SELECTED CHALLENGES



Insufficient capacity



Multi-sectoral crises



Evolving needs

EMERGING SOLUTIONS



Implement a capacity building program



Strengthen sector and multi-hazard EOC



Transition to the EOC 3.0 model



STAY SAFE!

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