Global Outbreak Alert and Response Network (GOARN)

strategy 2022-2026





INQ000187472_0001

Global Outbreak Alert and Response Network (GOARN) strategy 2022-2026



Global Outbreak Alert and Response Network (GOARN) strategy 2022-2026 ISBN 978-92-4-006702-8 (electronic version) ISBN 978-92-4-006703-5 (print version)

© World Health Organization 2023

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <u>https://creativecommons.org/licenses/by-nc-sa/3.0/igo</u>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (<u>http://www.wipo.int/amc/en/mediation/rules/</u>).

Suggested citation. Global Outbreak Alert and Response Network (GOARN) strategy 2022-2026. Geneva: World Health Organization; 2023. Licence: <u>CC BY-NC-SA 3.0 IGO</u>.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Sales, rights and licensing. To purchase WHO publications, see <u>http://apps.who.int/bookorders</u>. To submit requests for commercial use and queries on rights and licensing, see <u>https://www.who.int/copyright</u>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Photo credits:

© WHO / Victor Ariscain - Dominican Republic (p. 4) © WHO / Blink Media - Nadège Mazars - Guainía, Colombia (p. 6) © WHO / Hery Razafindralambo - Madagascar (p. 7) © WHO / Mark Nieuwenhof - Pediatric hospital at Dondo, Mozambique (p. 9) © WHO / Rob Holden - DRC (p. 11) © WHO / Christopher Black - DRC (p. 12) © WHO / Christopher Black - DRC (p. 12) © WHO / Dalia Lourenco - Mozambique (p. 15) © WHO / Henitsoa Rafalia - Madagascar (p. 16) © WHO / Henitsoa Rafalia - Madagascar (p. 16) © WHO / G. Ritlewski - South Sudan (p. 19) © WHO / Hery Razafindralambo - Madagascar (p. 22) © WHO / Mark Nieuwenhof - Mozambique (p. 27) © WHO / Quinn Mattingly - Vietnam (p. 28) © WHO / Blink Media - Natalie Naccache - Dubai (p. 31) © WHO / Dermot Tatlow - indonesia (p. 39)

Contents

Foreword	
Acknowledgements	vi
Abbreviations	ix
What is GOARN? What does it do, and how does it do it?	1
What is GOARN? What does it do, and how does it do it?	2
GOARN's purpose	2
GOARN's vision	2
GOARN's mission	2
GOARN's guiding principles	3
GOARN's values	4
The GOARN 2022-2026 Strategy	6
Themes and objectives	8
Advancing the strategic objectives	14
Building capacity and capturing impact: learning from one another	14
Operational research	15
Monitoring, evaluation and learning	16
GOARN Steering Committee	16
	17
Annexes	21
Annex 1: Operational research strategy	22
Annex 2: Scenario workshops used as part of the Strategy development process	26

• Foreword

iv

Act before disease becomes persistent through long delays. OVID, a very long time ago.

> his strategy document for the Global Outbreak Alert and Response Network (GOARN) is the result of 9 months of engagement across the Network amid the ongoing COVID-19 pandemic, other infectious disease emergencies and unprecedented humanitarian emergencies. The GOARN Steering Committee decided to embark on the process of developing this document in 2021 to ensure that GOARN remains strategically focused during the next 4 years despite the surrounding uncertainty within the global health ecosystem. The GOARN Strategy aims to create an outlook for the Network as a whole; however, partners can plan how to implement it in a coordinated way. Planning for implementation of the Strategy has already started and will aim to engage all partners and focal points.

> GOARN is one of the World Health Organization's (WHO's) essential networks, and WHO is a permanent member of its Steering Committee and hosts its Operational Support Team.

One major foundation of the global health ecosystem is WHO's initiative to strengthen the global architecture for health emergency preparedness, response and resilience; GOARN's capabilities, gained through its technical expert partners, enable it to act as one of the implementing partners for the Initiative. This aligns with the new GOARN Strategy that aims to partner at a local level throughout the spectrum of preparedness and response activities. The main thematic areas of the Initiative are collaborative surveillance, clinical care, access to countermeasures, coordination and community protection, all areas in which GOARN's partners are already actively involved.

As we embark on the implementation of the GOARN Strategy, we look forward to listening and working with you all.

GOARN Steering Committee GOARN Operational Support Team

V

Acknowledgements



Acknowledgements

GOARN Steering Committee Members 2018-2022

Mohannad Al-Nsour, Eastern Mediterranean Public Health Network Simon Antara, African Field Epidemiology Network Ray Arthur, Centers for Disease Control and Prevention Gail Carson, International Severe Acute Respiratory and emerging Infection Consortium Paul Effler, PathWest Ibrahima Socé Fall, World Health Organization Dale Fisher, National University of Singapore Ben Gannon, UK Public Health Rapid Support Team Daniela Garone, Médecins Sans Frontières International Office Myriam Henkens, Médecins Sans Frontières International Office Thomas Hofmann, European Centre for Disease Prevention and Control Andreas Jansen, Robert Koch Institut Ali Khan, University of Nebraska Medical Center Alejandra Morales, Instituto Nacional de Enfermedades Virales Humanas "Dr Julio Maiztegui" Lina Moses, Tulane University School of Public Health and Tropical Medicine Carlos Navarro Colorado, United Nations Children's Fund Janusz Paweska, National Institute for Communicable Diseases Panu Saaristo, International Federation of Red Cross and Red Crescent Societies Amadou Sall. Institut Pasteur de Dakar Lubaba Shahrin, International Centre for Diarrhoeal Disease Research, Bangladesh Scott Turbett, Public Health Agency of Canada Yangpig Zhang, Chinese Center for Disease Control and Prevention

GOARN Operational Support Team (OST)

Jean Christophe Aze Armand Bejtullahu Ramoncito Cayabyab Renee Christensen Pat Drury Sara Hollis Gianluca Loi Silvia Morreale Sameera Suri Khristeen Umali Cristina Valencia Tamar Zalk

WHO regional focal points

Sylvain Aldighieri, Regional Office for the Americas Evans Buliva, Regional Office for the Eastern Mediterranean Victor Del Rio Vilas, Regional Office for South-East Asia Partha Pratim Mandal, Regional Office for South-East Asia Jerry-Jonas Mbasha, Regional Office for Africa Sharon Salmon, Regional Office for the Western Pacific Oleg Storozhenko, Regional Office for Europe Andrea Vicari, Regional Office for the Americas

Strategy Research Team

Gail Carson, GOARN Steering Committee, Deputy Chair Jocelyn Herstein, University of Nebraska Medical Center Melina Michelen, City University, London Lina Moses, GOARN Research Lead, Tulane University Lauren Sauer, University of Nebraska Medical Center Sameera Suri, GOARN Operational Support Team (OST)

University of Oxford Saïd Business School Team

Matthew Finch Trudi Lang Rafael Ramirez

Stakeholder Interview Team

Sarah Karmin, UNICEF Raman Preet, Umeå University Akila Simon, UNICEF

The Team thanks all stakeholders who were interviewed.

Survey Team

Grace Brough, United Kingdom Health Security Agency **Meghan Cook**, United Kingdom Health Security Agency

Thank you to the Wellcome Trust and the United Kingdom Foreign, Commonwealth and Development Office for funding to the University of Oxford Saïd Business School to support the strategy development process.



Abbreviations

GOARN	Global Outbreak Alert and Response Network
MEL	monitoring, evaluation and learning
OST	GOARN Operational Support Team
WHO	World Health Organization

World Health Organization

What is GOARN? What does it do, and how does it do it?



What is GOARN? What does it do, and how does it do it?

GOARN's purpose

The Global Outbreak Alert and Response Network (GOARN) aims to improve global health security by coordinating and making available the resources of its partners to ensure preparedness for and appropriate responses to public health emergencies.

GOARN's vision

The Network's vision is that of institutions and stakeholders working together at national, regional and global levels to improve the detection of public health events; and to support preparedness and readiness, as well capacities for alerts and rapid responses; to strengthen international coordination and networking; and to provide access to multidisciplinary technical support and expert teams around the world that collaborate, can be deployed rapidly and can work effectively as part of an organized response.

GOARN's mission

GOARN's mission is to provide assistance to countries and communities in their disease control efforts by facilitating rapid alerts and coordination, and ensuring appropriate technical assistance is available to support affected populations. To support national outbreak preparedness, GOARN will help to contain epidemic threats by taking immediate action and learning lessons from its experiences.

GOARN's guiding principles

The following guiding principles describe how our partners and the people we are trying to help affect GOARN's processes, resulting in building capacities and responses (Fig. 1).

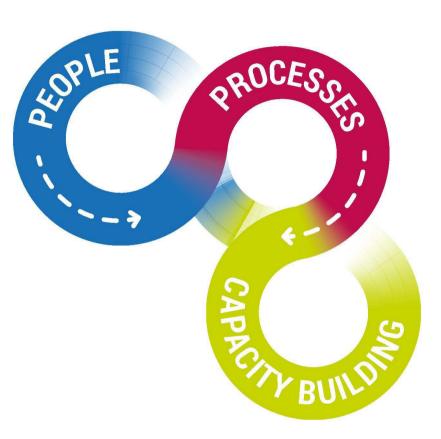


Figure 1 The Global Outbreak Alert and Response Network's Guiding principles **The Guiding principles** were developed through achieving consensus with our partners and are built on the clear and transparent principles written in 2000,¹ with recent minor changes that guide how the Network engages in preparedness activities, is activated and responds to outbreaks.

1. Mackenzie JS, Drury P, Arthur RR, Ryan MJ, Grein T, Stattery R, et al. The Global Outbreak Alert and Response Network. Glob Public Health. 2014;9(9):1023-39. doi:10.1080/ 17441692:2014.951870

- 1. WHO works with states that are party to the International Health Regulations (2005) to rapidly verify public health events that have the risk of spreading internationally and to rapidly share information with states that are party to the Regulations and, as needed, with GOARN.
- 2. Requests for assistance from affected states are rapidly coordinated by the GOARN Operational Support Team (OST).
- 3. The most appropriate experts should reach the country in the quickest possible time to support coordinated and effective outbreak control activities.
- 4. The international team of deployed experts integrates activities to support national efforts and public health infrastructure by providing strong technical leadership and coordination in country.
- 5. There is a fair and equitable process to ensure that Network partners participate in international responses.
- 6. Partners make every effort to ensure the effective coordination of their participation and support for outbreak response activities.
- 7. There is recognition of the unique role played by national and international nongovernmental organizations in public health and outbreak control, with these organizations often providing support that would not otherwise be available, particularly in reaching vulnerable populations. While striving for effective collaboration and coordination, the Network will respect the independence and objectivity of all partners.
- 8. Involving participants from field-based training programmes in applied epidemiology and public health practice (e.g. field epidemiology training programmes) in coordinated responses will contribute to building capacity for outbreak responses.
- 9. The Network commits to building national and regional capacities as a follow up to outbreak responses to improve preparedness and reduce future vulnerability to epidemic-prone diseases.
- 10. All Network responses will proceed with full respect for:
 - a. ethical standards
 - b. human rights
 - c. national and local laws
 - d. protection from sexual exploitation and abuse
 - e. cultural sensitivities and traditions.

GOARN's values

These values have been highlighted throughout the consultative strategy process.

GOARN is a collaboration among technical institutes that is diverse and inclusive, equitable in its approach, transparent in its processes and outcomes, and driven by excellence in science, public health and technical expertise (Fig. 2).

Figure 2 The values of the Global Outbreak Alert and Response Networks





The GOARN 2022–2026 Strategy

....

Strategic themes and objectives of the Network demonstrate a clear link between its identity and Strategy. Fig. 3 reflects who GOARN is and what we will do.



At the centre of this is our working relationship with WHO Geneva, regional and country offices, and stakeholders. The GOARN Strategy and its strategic goals will be underpinned by its Guiding Principles and by monitoring, evaluation and learning activities.

1. GOARN's areas of work include capacity building and training, alerts and risk assessments, rapid responses and operational research. Initiatives include Go.Data, Rapid Response Mobile Labs, risk communications and community engagement, and Integrated Outbreak Analytics. Source: Figure adapted from Lang T. Being and becoming: reconciling the temporal mismatch between organizational identity and strategy by providing identity with a future. Strateg Manag Rev. (in press).

7

GOARN's ethos is to collaborate and coordinate, and to share skills, experiences and resources to help communities around the world by working to support national authorities and country stakeholders so that they are better prepared to respond rapidly and effectively to public health emergencies. GOARN is committed to developing and strengthening national and international public health emergency workforces to respond to alerts by expanding their capacities to address specific disease threats: by facilitating the development of technical and operational standards for the public health emergency workforce; by assisting in coordinated multidisciplinary, multiagency responses; and by strengthening leadership during outbreaks and national and international deployment capacities.

2. Collective Service for a community-led response [website]. Geneva: Internationa Federation of Red Cross and Red Cress ocieties, United Nation's Children's und, World Health Organization Global Outbreak Alert and Response Network: 2022 (https://www rcce-collective.net/ the-collective-service/ accessed 22 October 2022)

GOARN aims to continually identify gaps in alert and response capacities, and the technical and operational barriers to implementing effective responses, and to work collaboratively to address and remove barriers. GOARN will continue to improve its governance, technical excellence, accountability and internal processes to develop a strong Network that delivers on the above.

Themes and objectives

Following the Global Meeting of Partners, held in December 2021, the Steering committee met at WHO headquarters in June 2022 and agreed the following strategic themes and objectives for 2022-2026.

Strategic Theme 1: Applying a community-centered approach

Communities must remain central to all that we do as GOARN, and community engagement must be integrated as a broad concept ensuring a community-centred approach to our work. GOARN will continually advocate for community engagement and for adequate funding to encourage this engagement. GOARN will implement this approach in close partnership with multiple stakeholders (e.g. the Collective Service)² to ensure that we build capacity for operational research in the social and behavioural sciences and use community engagement principles when preparing for and responding to outbreaks. In addition, GOARN will build response capacities among partners to support community leadership in health by offering training and supporting partners' capacities to work with communities.



A community-centred approach will focus on integrating community engagement as a broad-based foundational concept in all efforts and areas of work, including risk communications, by:

strengthening capacity by using operational research in the social and behavioural sciences to complement and be integrated into biomedical and epidemiological evidence;

using community engagement principles during outbreak response;

building capacities to support communities' capacities in public health and outbreak responses.





Strategic Theme 2: Renewing commitment to the global public health emergency workforce

GOARN renews its commitment to the global public health emergency workforce by expanding its ability to train the workforce and facilitate the growth of institutions that contribute to responding to public health emergencies; by supporting the coordination of multidisciplinary and multiagency responses; and by facilitating the development of technical and operational standards for leadership during public health emergencies and for a workforce that can be deployed rapidly, both nationally and internationally.

GOARN represents more than 22 years of collective experience and more than 270 partner institutions that can offer expertise and personnel to support networking and collaboration in preparedness and also operational and technical support to respond to public health emergencies. This collaboration includes supporting the development of the next generation of national leaders and teams that will take part in rapid outbreak responses; these responses will be achieved through collaboration among leaders and by implementing training programmes in rapid responses. GOARN will continue to develop and reinforce systems to protect the global public health emergency workforce and the communities it serves. GOARN stands for equity, protection from sexual exploitation and abuse, and for operational safety and security.

GOARN renews its commitment to the global public health emergency workforce by:

expanding its ability to facilitate the development of capacities of national institutions and national stakeholders, to strengthen operational and technical coordination with international institutions and other entities who prepare for and respond to public health emergencies, and to expand training in leadership and rapid responses;

 supporting national and international coordination of multidisciplinary, multiagency responses to acute events;

facilitating the development of technical and operational standards for the global public health emergency workforce;

continuing to develop and reinforce systems to protect the global public health emergency workforce and the communities it serves.



Strategic Theme 3: Creating solutions for better responses

GOARN will strengthen responses through applying the lessons learned to improve preparedness and develop tools and methods to address gaps identified during responses. This positions GOARN to provide expertise and intervene at various points on the continuum that determines what preparedness and response are to help control outbreaks, epidemics and pandemics. GOARN will also focus on expanding its pre-existing areas of work.³ This includes expanding capacity-building activities, including expanding the GOARN training portfolio and rapid response capabilities, in tandem with adding resources (i.e. funding and personnel).

3. GOARN's areas of work include capacity building and training, alerts and risk assessments, rapid response and operational research, Initiatives and projects include Gc. Data, Rapid Response Mobile Labs, risk communications and community engagement, and Integrated Outbreak Analytics.

The expertise of the GOARN partners in the One Health arena will be leveraged to incorporate One Health capacities (e.g. animal and vector surveillance and control) into responses to public health emergencies.

GOARN will strengthen its operational research efforts alongside those of national colleagues (see Annex 1) and seek opportunities to support responses to public health emergencies and humanitarian crises; how to respond more effectively to humanitarian crises will be discussed as part of the implementation process. GOARN will create solutions for better responses by:



strengthening responses through lessons learned for preparedness;

strengthening its focus on the current areas of work – alert and risk assessments, rapid response capacity, operational research and training;

3c developing further innovations in tools (e.g. Go.Data), networking and methodologies (e.g. integrated outbreak analytics, risk communications and community engagement, Rapid Response Mobile Laboratories) to close technical and operational gaps in responses;

3d expanding capacity-building activities;

3e continuing and strengthening outbreak-related operational research;

Ieveraging the expertise of partners to integrate a One Health approach into responses to public health emergencies and operational research;

39 seeking ways to provide additional support during public health emergencies and humanitarian crises.





Strategic Theme 4: Promoting collaborative response

GOARN will invest effort into more effectively leveraging the Network's resources and promoting collaboration among technical agencies and partners for preparedness and response activities. Areas of focus will include mapping partners' capacities, improving internal and external Network communications, adapting our deployment operations to new challenges and opportunities, enhancing engagement activities for partners and addressing barriers to engagement (e.g. length of deployment, reimbursement for technical experts' time) to improve the functioning of the Network by utilizing all of its capabilities. Central to improving processes is building a mechanism for monitoring, evaluation (of impact) and learning (MEL). A robust MEL system will aid GOARN in documenting the value it adds, ensuring that it constantly improves, and in advocating for the Network in the future.

GOARN will leverage the Network's resources and more effectively promote collaborative responses among technical agencies by:

- mapping partners' capacities and the functioning of the Network;
- 4b improving internal and external Network communications;
- enhancing engagement activities for partners and addressing common barriers to engagement;
- 4d developing innovative deployment mechanisms and operations strategies;
- building a mechanism for MEL.

GOARN will achieve these strategic objectives by maintaining a strong relationship with WHO and aligning to achieve shared goals in the development of more equitable, inclusive global health security. GOARN will advocate for and increase opportunities for partners to engage in delivering key activities for the priorities of this strategy, including collaboration and co-ownership of projects at national, regional, and global levels.

Advancing the strategic objectives

GOARN will achieve these strategic objectives by maintaining a strong relationship and aligning with WHO to achieve shared goals to develop more equitable and inclusive global health security. GOARN will advocate for and increase opportunities for partners to engage in delivering the key activities prioritized by this Strategy, including collaboration and co-ownership of projects at the national, regional and global levels.

Building capacity and capturing impact: learning from one another



The strategic discussions highlighted the need for national- and local-level operating models for the GOARN partners that are already present in-country, the need to strengthen the capacities of regional focal points and the need to improve networking to prepare for and respond to outbreaks. Ensuring these needs are met will strengthen multidisciplinary and multiagency collaboration and coordination of rapid responses at the most appropriate – that is, localized – level and reinforce learning from international networking within GOARN; thus, capacity will be built for more effective responses at all levels (Fig. 4). At the same time, GOARN can encourage local-to-local information-sharing and support.

Figure 4 The Global Outbreak Alert and Response Network facilitates local-to-local, local-to-global and global-to-local learning, networking and technical support to improve preparedness, alerts and responses to global public health emergencies

4. Capacity-building [website]. New York

United Nations; 2022 (https://www.un.org/

en/academic-impact/ capacity-building,

accessed 4 August

The United Nations defines capacity-building as "the process of developing and strengthening the skills, instincts, abilities, processes and resources that organizations and communities need to survive, adapt and thrive in a fast-changing world".⁴ To support this and with relevance to the initiative for global architecture for health emergency preparedness, response and resilience, GOARN will play a role to help institutions, organizations and communities to develop the skills and processes needed to ensure better responses to public health emergencies.

The MEL programme will facilitate capturing local lessons learned, which can be shared internationally, as well as increase the emphasis on our ways of working and communicating to improve local-to-local responses (e.g. by twinning institutions in the same region, each with differing strengths).

The Integrated Outbreak Analytics network is a good example of dynamic collaboration between local and global entities that GOARN will support. The Integrated Outbreak Analytics approach is to capture and integrate a diversity of information so their findings can support coordinated efforts by local actors during country-led responses to outbreaks.

Operational research

Investment and expansion of operational research capacity was repeatedly highlighted throughout the strategy consultation. This area of work is an integral part of all health programs as it lies at the core of improved, evidence informed response. GOARN is uniquely positioned to deliver robust operational research through the network's diverse institutions with research and implementation expertise. Increased capacity for operational research across the network could tap into these underutilized GOARN resources to improve response through improving operational processes and through operationalization of research findings into action. The ultimate goal is to build a robust community of practice of GOARN partners dedicated to identifying and implementing the most effective and engaged evidence-based response. See Annex 1 A for the full Operational research strategy.

Monitoring, evaluation and learning

This Strategy document and pending implementation plan represent the first phase of an iterative, ongoing process and a means to ensure reflective governance in the years to come. Critical to this is integrating the Strategy into the MEL programme. The strategy and implementation plans should act as a framework to guide the careful monitoring of activities and ensure our efforts continue to align with and represent GOARN's priorities and opportunities to deliver high-impact outcomes as a Network. Reinvigorating a robust MEL component is critical to the success of the Strategy and will enable GOARN to stay responsive to the ever-changing environment of health emergencies and to remain relevant to the global community.

GOARN Steering Committee

The GOARN Steering Committee is a representative body of 21 partner institutions that oversees the planning, implementation and evaluation of the Network's activities and strategic goals. The Committee approves and monitors the implementation of the Network's work plan, approves the terms of reference, monitors the activities of technical working groups and standing subcommittees, approves the addition of new institutions and organizations to the Network, advocates for the Network and represents the Network at key public health events. The Committee had a core role in developing the Strategy for GOARN and will continue to advise on and monitor its implementation. Moreover, the Committee, along with the GOARN partners, will regularly review the Strategy and the Network's approaches to ensure that the objectives and themes align with the growth and changing landscapes of global preparedness and response.

The GOARN strategy development process: one of inclusivity

Norld Health Organization 

The GOARN strategy development process: one of inclusivity

GOARN marked its 20th anniversary in 2020, amid the largest global response to the greatest public health challenge the international community has faced in the 21st century: the COVID-19 pandemic. As a result of the global uncertainty and reviews of the global health emergency ecosystem, the GOARN Steering Committee initiated the process of developing a 4-year Strategy with increased rigor to enable a more detailed and considered view of how the Network could better strengthen coordination of responses to and preparedness for outbreaks and other health emergencies.

Launched in October 2021, the development of the GOARN 2022-2026 Strategy was an 8-month consultative, multipronged process involving internal and external stakeholders and the GOARN partners, including regional focal points, representatives from the GOARN Operational Support Team and funders (Fig. 5). This process included (1) a survey sent to all GOARN focal points; (2) strategic workshops with partners to explore options and strategies around four possible future scenarios that GOARN might face in the year 2030 (see Annex 2); (3) semistructured interviews with 28 internal and external stakeholders, funders and thought leaders; (4) a series of strategy sessions with Steering Committee members to draft items for consideration, based on data from the survey, interviews and strategic workshops; (5) development of short-term working groups to focus on GOARN's role in preparedness, processes to improve the Network's functioning, and scoping for financing innovations; (6) regional consultations with partners; (7) finalization of strategic themes and objectives at the June 2022 Steering Committee meeting; and (8) engagement with GOARN focal points and regional partners to encourage their participation in developing the strategic themes and objectives and announcing the 2022-2026 GOARN Strategy.

STRATEGY ROAD MAP

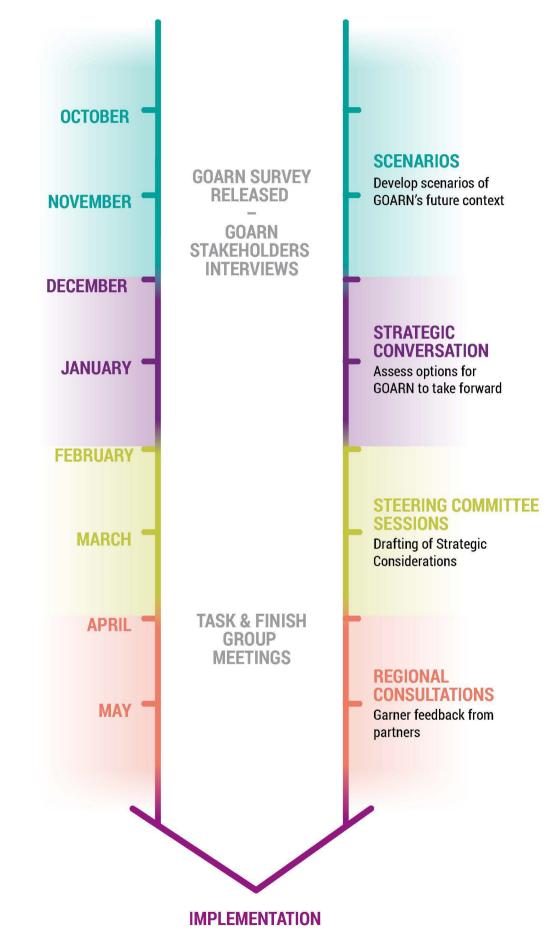


Figure 5 Roadmap of the process for developing the Global Outbreak Alert and Response Network's 2022–2026 Strategy

Limitations

Countries' opinions were not specifically sought during the consultative process, which is a limitation; as such, analysing their needs and priorities in relation to GOARN's strengths will be important as we develop implementation plans. In addition, there were key geographical gaps in the responses to the survey and in whom was interviewed; however, these were addressed as well as possible within the time frame through regional consultations and targeted engagement focusing on the draft strategy considerations.

Next steps: moving from the what and why to the how

The strategy development process defined the "what" of GOARN's priorities and its direction for the next 4 years. An accompanying implementation plan and documentation of the resources required will define "how" tasks will be prioritized and accomplished. The implementation plan and documentation of the resources required will support and guide partners, stakeholders, the GOARN Operational Support Team (OST) and the Steering Committee in operations, development and oversight of the Network. The implementation plan will be co-created with community, national, regional and global partners and stakeholders.

Financial investment in the GOARN partners will be needed to deliver the Strategy, and it will also be needed within the Network for development and operations, including for responding to emergencies and acute events. Various avenues for financial investment are being explored, including the new World Bank financial mechanism, the Financial Intermediary Fund for Pandemic Prevention, Preparedness and Response, to ensure more inclusive and equitable global health security.

The GOARN Strategy is dynamic and regularly reviewed. As the implementation of the Strategy approaches, it will be critical for the Steering Committee and the GOARN partners to routinely revisit the Strategy and its embedded priorities to ensure that the processes are aligned with the growing and changing landscape of preparedness and response activities. The MEL component will be fundamental to revising the Strategy and ensuring it continues to align with and represent GOARN's priorities and opportunities in order to continue to deliver high-impact outcomes as a Network.

For further information or questions on the Strategy, please contact: goarn@who.int



ANNEX 1: OPERATIONAL RESEARCH STRATEGY

The role and basic principles of research within GOARN were articulated during the May 2018 Workshop on Integrating Research into Response. These principles include ensuring the implementation of country-driven interdisciplinary research, with findings being fed back to countries and communities and quickly integrated into response activities. The goals of GOARN Research are to facilitate applied operational research by matching appropriate partners with countries in which the need for research has emerged from preparedness and response activities.

Operational research was discussed frequently during the development of the 2022-2026 Strategy. In the survey sent to focal points, 33% of 76 respondents stated that operational research is an area within GOARN that needs improvement. When asked about immediate priorities for GOARN in the areas of learning and research. respondents frequently mentioned that evaluations of GOARN's COVID-19 response, in particular, and operational research, in general, were important. Regarding GOARN's priorities after the COVID-19 pandemic, field research and operational research were also themes that emerged. Operational research was discussed in three of four scenarios focusing on the question, What is the key value of being a GOARN member in a 2030 scenario? Respondents said that the value of GOARN membership included having access to research and development opportunities, coordination of a collaborative research agenda, increased access to data analytics, and more robust connections between emergency responders, academia and research institutions. In regional feedback, too, operational research was frequently mentioned as an area of need and interest.

During planning for the Strategy, the GOARN partners frequently mentioned research, but it was rarely mentioned during interviews with key stakeholders. This highlights a disconnect between the interests, needs and capacities of the GOARN partners and the view from stakeholders in terms of how GOARN adds value in developing a global health architecture. In order for GOARN's potential to contribute to this global health architecture to be recognized, clear mechanisms must be developed through which partners can contribute to operational research. GOARN's support for research-generated, evidence-based preparedness and responses to health emergencies remains true to its original mission while also creating new ways for partners to engage. Documenting and communicating about research outputs associated with GOARN's support – including publications, reports, technical guidance and the development of interventions – will improve recognition of this capacity within GOARN among stakeholders.

During the development of GOARN Research, discipline-specific workstreams were created, and they have provided support to ad hoc requests for help with research from the GOARN partners and countrylevel actors. Much of this work was individually driven by workstream leads, with limited Network engagement. Based on feedback from the strategic planning activities, lessons learned from previous years and the demand for specific services, workstreams for GOARN-Research have been revised into the following areas:

- research mobilization for health emergencies
- evidence to action
- evidence gap analysis and prioritization
- research on GOARN's operations

The new workstreams will be applied, interdisciplinary, co-created with emergency responders and designed to leverage the full capacity of the Network.

GOARN research mobilization for health emergencies

This workstream is designed to mobilize the full capacity of GOARN to support operational research needs during preparedness activities and responses to health emergencies. This workstream will broker collaboration between the GOARN partners and country, regional and global actors involved in emergency responses to support their operational research needs. Activities will include addressing issues related to identifying problems in preparedness and response activities that require systematic investigation; identifying any lack of evidence for adoption of specific interventions within specific contexts; identifying key drivers of an intervention's success or failure; and assessing the transfer or scalability of successful interventions to different contexts.

In order to make this workstream operational GOARN Research will need to:

- identify existing and evolving operational research capacities among the Network's partners;
- develop mechanisms to identify operational research questions at the country, regional and global levels, including perspectives from those deployed through GOARN;
- develop a mechanism to match specific research expertise within the Network to specific research needs;
- establish standard procedures for developing research partnerships, including standards for ethics clearance, data sharing, dissemination of findings and publication, and the operationalization of research findings;
- continually monitor and evaluate the effectiveness of GOARN Research's activities.

23

Evidence to action

In order for research to be relevant and have an impact, the operationalization of research findings to ensure more robust, evidence-based responses is an essential, yet sometimes overlooked, activity. Capturing evidence from peer-reviewed journals, reports, the media and briefs can quickly overwhelm technical and operational responses. This workstream will support the management and curation of this evidence for specific health emergencies and events to ensure the most relevant research findings that have the most impact are used to develop technical guidance, standard operating procedures, and new and improved interventions. Researchers and emergency responders will collaborate in this workstream to ensure that these evidence-based ways of responding are feasible on the ground and relevant to the context and for impact. Partnerships must be developed to ensure this work is grounded in country and community needs; these partnerships will include close collaborations with those implementing response activities, such as the Integrated Outbreak Analytics group, WHO Health Emergencies technical working groups, and regional and country-level health clusters.

Evidence gap analysis and prioritization

In every health emergency there are gaps in the evidence used to support operations, whether these are the unknowns about a particular disease or about perennial events, such as cholera outbreaks. This workstream will use an operational focus to bring emergency responders and researchers together to identify gaps in the evidence for specific health emergencies. This workstream will not focus on research and developing medical countermeasures, but it may identify areas in which there is a lack of evidence for implementing already developed medical countermeasures. The gap analysis and prioritization must balance the greatest need for evidence with the most feasible and least obstructive research. Gap analysis and prioritization should be done iteratively during all phases of an outbreak, from preparedness to response to recovery, with a focus on the local research capacity, the local context and national priorities. It is essential to develop close links with funding agencies that can readily support the research activities generated by this workstream. This workstream will not duplicate efforts by WHO's R&D Blueprint strategy and the Science Division, but it will seek to identify evidence gaps for specific events, bounded by their location and context. A mechanism to track research projects and the evidence produced should be part of the iterative cycle of this workstream.

Research on GOARN's operations

In addition to developing a robust MEL component for GOARN, opportunities exist to innovate and improve the Network's operations. GOARN Research will support these opportunities by working in close collaboration with the GOARN Operational Support Team (OST) to identify areas that need systematic evaluation. GOARN Research will then co-design studies with the Team and ensure there are processes for ethics approval, data collection, findings dissemination and implementation of improvements.

Resources needed to support this new strategy

A number of areas within the new GOARN Research workstreams feed into or cut across other workstreams. Thus, coordination and effective communication will be required to avoid duplication of efforts. It is critical to ensure there is continued support for a GOARN Operational Support Team Research Focal Point. In addition, a multidisciplinary core group will be needed to fully execute this operational research strategy.

ANNEX 2: SCENARIO WORKSHOPS USED AS PART OF THE STRATEGY DEVELOPMENT PROCESS

The GOARN Steering Committee collaborated with Oxford University's Saïd Business School in a network strategy lab. This process, which has previously been adopted to develop strategies for complex organizations,⁵ allowed the Network to explore plausible future scenarios in the disease outbreak and preparedness ecosystem, and it centred strategic conversations around possible futures heading towards 2030. During October and November 2021, the Steering Committee, with assistance from facilitators at the Saïd Business School, defined four scenarios that the Network might face in the year 2030. The network strategy lab allowed Steering Committee members, partners and other stakeholders to explore future scenarios of disease outbreaks and preparedness; discuss how the Network might be configured to ensure future success, given these scenarios and the evolving ecosystem; consider innovative options for GOARN's Strategy; and integrate GOARN's research strategy to



Y AXIS: FOUR POSSIBLE NATURE OF INTERNATIONAL COLLABORATION 2030 FUTURES FOR GOARN HARMONISED Countries that suffered from A private sector "pandemic industry" has international COVID inequity have built developed; public health response has been monetarised. Information is power. local capacity. Governments "look after their own" and collaboration is mostly Splits between West + non-West, global North + South. New networks have subnational. Health systems seen through a national security lens. emerged working in moderate SOMEWHAT COLLABORATIVE SCOPE OF PUBLIC HEALTH EMERGENCIES The multilateral system collaboration. GLOBAL experiences greater NOLOCAL scrutiny & critique. X AXIS: **INCREMENTAL** Figure 6 NARROW 1 **ENLARGED** BROAD WIDENING The four plausible future scenarios discussed by 2 BROAD BILATER NOT VERY COLLABORATIVE the Global Outbreak Alert Populist nationalism Climate change has led to and Response ORK has led to global mass displacement, Network fragmentation, and lack of friction, conflict. Steering sharing COVID resources Committee Governments struggle to during a collaborate multilaterally, drawing globally. Populations didn't strategy lab imagine "emergencies could happen instead on bilateral arrangements with held with Oxford here". Regulatory standards have been other nations. Professionals have formed University's Saïd abandoned. Surveillance & preparedness DISCORDANT networks to collaborate. National public **Business School**

is national or bilateral, and transactional. Anti-science agendas have risen.

during 2021

health agencies have expanded remits & use

public-private partnerships. Private sector actors cherry-pick services to offer. A less regulated media is more powerful and

influential than ever.

optimize operational research to inform its responses. As part of these workshops, partners were engaged in discussions around key questions for GOARN at the virtual GOARN Global Meeting of Partners in December 2021.

The four scenarios are described in Fig. A2.1.

The scenarios are not a crystal ball showing the future: they simply provide a framework to allow for exploration of strategy and mitigation measures relevant to the focus of the scenarios, in this instance for GOARN. The scenarios were one part of the strategy development process. Some of these scenarios may be playing out at the time of publication or prior to 2030, but by thinking them through ahead of time, GOARN is in a position of readiness to remain responsive and resilient no matter what the future holds.

Briefly, the scenarios are:

- Global to Local countries that have suffered from international COVID-19 inequity have built local capacity; collaboration is mostly subnational, and multilateralism is further scrutinized and critiqued;
- Pay As You Go a private sector pandemic industry has developed; public health responses have been monetized; and splits exist between the west and non-west, and the global north and south; new networks have emerged that work in moderate collaboration;
- Broad and Bilateral climate change has led to mass displacement and conflict; governments primarily collaborate through bilateral arrangements; professionals have formed networks to collaborate; national public health agencies have expanded remits; media is less regulated and more influential;
- 4. Political patchwork populist nationalism has led to global fragmentation and a lack of globally shared resources; regulatory standards have been abandoned and anti-science agendas have arisen; surveillance and preparedness are national or bilateral.

As part of the scenario planning process, the working group discussed the implications of each scenario for GOARN and what the possible value-creating system might be for each. The final step involved identifying which strategic themes ran across all or most scenarios and which could be particularly damaging if ignored, despite occurring in only one scenario. These themes were then further refined as part of widening the source material and during consultation with regional focal points and partners.

For any questions about the scenario-building process and how it was used to inform the GOARN 2022-2026 Strategy, please contact Dr. Gail Carson, GOARN Steering Committee Chair at: gail.carson@ndm.ox.ac.uk

