GLG member participants: Dr Ahmed Bin Mohammed Bin Obaid Al Saidi (of Oman); Ms Beatrice Atim Odwong Anywar (of Uganda); Prof António Correia de Campos (of Portugal); Prof C.O. Onyebuchi Chukwu (of Nigeria; virtual); Prof Dame Sally Davies (of United Kingdom); Mr Jakob Forssmed (of Sweden); Dr Jamie Jonker (of USA); Ms Sunita Narain (of India); Mr Yasuhisa Shiozaki (of Japan); Dr Jeffrey Scott Weese (of Canada); and Ms Jennifer Zachary (of USA).

GLG ex-officio member participants: Ms Inger Andersen (UNEP); Dr Monique Eloit (WOAH); and Dr Tedros Adhanom Ghebreyesus (WHO).

GLG member apologies: Dr Maggie De Block (of Belgium), Mr Mohammed Mousa Alameeri (of United Arab Emirates); Ms Grace Fu (of Singapore); Dr Guilherme Antônio da Costa Júnior (of Brazil); Hon Chris Fearne (of Malta); Dr Ernst Kuipers (of The Netherlands); Ms Dechen Wangmo (of Bhutan); and Prof Lothar H. Wieler (of Germany).

GLG ex-officio member apologies: Dr QU Dongyu (FAO)

Invited speakers: Dr Javier Yugueros-Marcos; Prof Arshnee Moodley; Professor Johanna Fink-Gemme; Dr Armando Heriazon; Dr Ir Nursullah; Mr François Jackman; Ms Vanessa Frazier; Mr Werner Obermeyer; Prof Otto Cars; and Dr Montserrat Arroyo Kuribreña.

Process of the meeting: The ninth official meeting of the Global Leaders Group (GLG) on Antimicrobial Resistance (AMR) was held in person at the Sigtunahöjden Hotel and Conference Centre in Sigtuna, Sweden on May 6 and 7, 2024. The meeting was hosted and chaired by GLG member H.E. Mr Jakob Forssmed, Minister of Health and Social Affairs of Sweden.

The official agenda for the two-day meeting included: (1) A strategy discussion on the GLG’s achievements, ongoing challenges and considerations for the future; (2) Launch of the 8th WOAH ANIMUSE report, featuring new data on antimicrobial consumption and use in animals; (3) Presentations and discussion on addressing AMR through the strengthening of animal health systems for sustainable food production; (4) Presentations and discussion on the UNGA High-level Meeting on AMR in September 2024; and (5) Presentations and discussion on financing for implementation of multisectoral action on AMR.

Opening of the meeting and welcoming remarks:
In his welcoming remarks, the Chair of this meeting, Minister Jakob Forssmed, welcomed GLG members and their teams, noting that the United Nations General Assembly (UNGA) High-level Meeting (HLM) in 2024 provides a major opportunity to advance the AMR agenda. He emphasized that a successful HLM requires more stakeholders to be aware of the threats posed by AMR and that the HLM needs to deliver action-oriented commitments. In a video message, the GLG Chair, H.E Prime Minister Mottley, expressed
her regret at being unable to attend the meeting in person and agreed that it is a critical time for the AMR response. She thanked GLG members for their recent work, including the 2024 GLG report with recommendations for the HLM, as well as everyone working to make the HLM a success, and looks forward to the work of the GLG continuing apace up to September and beyond.

Opening remarks by the Quadripartite principals: Ms Inger Andersen of UNEP noted that the GLG is playing an important role in building political momentum and moving the AMR response forward. She emphasized that the environmental dimensions of AMR cannot be an afterthought as they are so closely linked to the triple planetary crisis. Ms Andersen highlighted the importance of scaling up action on antimicrobial discharges into the environment, the need for better data on the environmental dimensions of AMR, and financing the response, including through the financial and investment sector. Dr Tedros Adhanom Ghebreyesus of WHO expressed his support for the GLG’s recommendations and proposed targets for the HLM, recognized the important new economic data in the GLG report, and highlighted the need to maintain momentum after the HLM, particularly on financing and sustaining the Quadripartite collaboration. He noted that the upcoming World Health Assembly will discuss operational priorities for addressing AMR in human health. Dr Monique Eloit of WOAH agreed that this is a time for action and acceleration in the response to AMR, while also cautioning that some countries are reluctant to view AMR as a global crisis requiring a One Health approach. Ms Maria Helena Semedo, Deputy Director General of FAO on behalf of Dr QU Dongyu, said that 2024 could be a historic year for the AMR response. She noted the recent launch of RENOFA RM, a 10-year FAO initiative to reduce antimicrobial use) in livestock production, and expressed her hope that the 2024 political declaration reaffirms the One Health approach across sectors.

Session 1: The GLG after four years: Achievements, challenges and the future

The GLG reviewed the Secretariat report on GLG achievements since its inception and committed to step up its action in the lead-up to UNGA HLM and beyond

1.1. Good progress on GLG priorities with more work to do: Jean-Pierre Nyemazi, acting director of the Quadripartite Joint Secretariat on AMR, introduced the session with a presentation on GLG achievements, challenges and considerations for the future. He noted that the GLG was given a clear mandate in 2020 to work with the Quadripartite organizations to help mobilize political action on AMR. The rolling GLG action plan has provided a solid basis for prioritizing activities, with good contributions made by the GLG across all the six priorities. GLG members agreed that the GLG has helped to raise awareness of AMR globally and in some regions and has worked well with the Quadripartite organizations. It has also contributed to understanding of issues related to the research and development pipeline, the need for systems transformation with a focus on prevention, and the One Health approach. It has also published new economic data and recommendations for the HLM. A SWOT analysis by the Secretariat highlighted strengths in that the GLG’s work is recognized and the GLG has been mandated to support the HLM; potential weaknesses in terms of impact at country level and limited Secretariat capacity; opportunities for the GLG to influence key, forthcoming meetings and build new coalitions of stakeholders; and risks related to sustaining momentum after the HLM.

1.2. Urgent GLG advocacy actions required in the lead up to UNGA HLM: GLG members agreed that more effort is needed to engage heads of state/government as AMR champions, especially those from LMICs. Sustained attention is also needed to advocacy and engagement with global and regional political blocs including the G77 and the African Union, as well as development banks on financing (including R&D pull incentives) and scaling up prevention across sectors. More capacity is needed for GLG communications to
reach media (e.g. public broadcasters) and use social media, including for the engagement of youth and civil society, and for strengthening communication among GLG members.

1.3. Looking beyond the HLM, the GLG focus should shift towards action and problem-solving, with greater attention to convening stakeholders, partnerships and coalition building. Specific considerations include: (i) making strong linkages with the climate agenda (e.g. on the issue of sustainability) and with other governance initiatives, including the Independent Panel on Evidence for Action against AMR; (ii) building on and further leveraging the current partnership with ESCMID, pharmaceutical and agri-food industries, the financial sector and institutional investors; (iii) showcasing evidence of best practices (“amplify the wins”, “build a narrative for success”, “make countries more visible”) because much of the AMR agenda needs to be implemented at the national level; (iv) awareness raising and socio-behavioural science; (v) Supporting ongoing negotiation efforts and the inclusion of AMR in the WHO pandemic instrument and considering an alternative course if there is a need for a separate instrument; (vi) reviewing the GLG’s composition after the HLM to ensure that it has balanced representation and complements the work of the independent panel and other governance structures for AMR; (vii) Strengthening and resourcing the GLG Secretariat and optimizing the relationship between the GLG and the Quadripartite organizations.

Session 2: Presentation of 8th ANIMUSE report

New ANIMUSE data presented by WOAH show that the recent trend in declining antimicrobial consumption in animals globally is slowing down

Dr Javier Yugueros-Marcos, Head of Antimicrobial Resistance & Veterinary Products at WOAH, presented new ANIMUSE data from WOAH’s eighth report on antimicrobial consumption and use in animals. The ANIMUSE database now covers 129 countries that have surveillance systems and report data, providing a solid baseline for target setting.

2.1. The recent global trend towards reduced antimicrobial consumption in animals appears to be slowing down: Since the first ANIMUSE report ten years ago, antimicrobial consumption in animals has fallen 35% in the original 41 reporting countries, 28 of which are in Europe. However, in the last three years, there has been a 2% increase in antimicrobial consumption in 81 reporting countries, with a significant increase of 179% in Africa – which accounts for 20% of the global animal biomass and 2% of global antimicrobial use – largely due to improved reporting. Dr Marcos noted that in 2021 around 16% of antimicrobials used in animals were critical for human health. The use of antimicrobials for growth promotion is still reported in about 20% of WOAH member countries, with 78% of these not performing any preliminary risk assessment.

2.2. GLG members to advocate for countries to strengthen surveillance systems and report antimicrobial resistance and use data across. The presentation highlighted the encouraging progress made over the last decade in putting a global monitoring system with a standard methodology in place and the availability of data now available online. Gaps in the current system include lack of capacity in many countries; lack of validated data, cross-sectoral collaboration and coordination mechanisms in some countries and regions; and suboptimal reporting to global surveillance systems.
Session 3: Addressing AMR through strengthening animal health systems for sustainable food production

GLG members and guest speakers explored and discussed key priorities for addressing AMR in the context of animal health, with a focus on disease prevention and alternatives to antimicrobials.

3.1. Professor Arshnee Moodley from the International Livestock Research Institute presented on barriers and opportunities to improving livestock production and food security. She noted that livestock farming is critical for livelihoods in many LMICs, and that production systems are diverse depending on climate conditions and cultural and economic factors. She emphasized that mixed livestock farmers in many settings are women, and that interventions to reduce antimicrobial use must benefit and empower them. Prof. Moodley noted that a key challenge is to make antibiotics less attractive to farmers, but barriers to doing so include cost/affordability, the effort involved, lack of knowledge and poor awareness of alternative strategies.

3.2. Mr Carel du Marchie Sarvaas, Executive Director of Health for Animals, presented the perspective of manufacturers of veterinary pharmaceuticals, vaccines and other animal health products. He noted that revenue for manufacturers of animal vaccines is increasing, while revenue from antibiotics is falling. The shift from production of antibiotics to vaccines for animals is due to a range of factors, including the smaller market for animal antimicrobials, affordability, the evolution of CODEX consumer safety and environmental impact standards, internal and external product competition among companies, a more predictable vaccine market, and the fact that new antibiotics are reserved for human use. In addition, nutritional products, which have a different regulatory and approval process, are a viable alternative to antimicrobials.

3.3. Professor Johanna Fink-Gemmels from Utrecht University, The Netherlands, presented on alternative feeding practices to promote the responsible use of antimicrobials in animals. She noted that animals are vulnerable to disease at key moments such as hatching, weaning and rumen development, with 60-80% of antibiotics administered to animals at such times. Prof. Fink-Gemmels discussed the benefits of advanced feeding practices, with a focus on nutrition and gut health, which are part of the toolbox available to increase animal resilience to disease, support the phase out antimicrobial use for growth promotion, and reduce the need for antibiotics. Uptake of these tools requires behavioural adaptation by farmers.

3.4. Dr Armando Heriazon from the International Development Research Centre presented an industry perspective on research into alternatives to antimicrobials. He noted that nutrition greatly influences animal health and susceptibility to disease, and that alternatives to antimicrobials need to replicate what antimicrobials do and be as affordable or cheaper. Animal vaccination rates are increasing, but vaccination remains relatively limited in LMICs where there is limited interest from global pharmaceutical companies in expanding access, more fragmented markets than in developed countries, and logistical challenges related to cold chain and distribution.

3.5. Dr Ir Nursullah, Director-General of Livestock and Animal Health Services in the Republic of Indonesia shared the Indonesian experience of working to control AMR in livestock through strengthened animal health services. He noted that there is national political commitment to this issue in the agriculture, health, maritime and fisheries sectors, and Indonesian leadership in the G20. The country’s activities to combat AMR have been guided by successive national AMR action plans, multisectoral coordination, and a range of regulations and guidelines based on a One Health approach,
including guidelines on antimicrobial stewardship and use and on biosecurity and good farming practices. Indonesia is participating in FAO’s RENOFARM initiative. The use of antimicrobials as growth promoters was banned in 2018. Engagement of professional associations, the private sector, the livestock industry and academia has contributed to progress in the national AMR response.

3.6. The GLG agreed to strongly promote and support the strengthening of animal health services. Members noted encouraging developments in prevention to support moving beyond the prophylactic use of antimicrobials. They emphasized that the key actions needed in animal health are to reduce the need for antimicrobial use through prevention (starting with husbandry, vaccination and nutrition) and increased financial support and veterinary capacity for animal health services in LMICs. Farmer education and support, and better oversight and enforcement of antimicrobial use in animals, are also important. Eliminating the use of medically important antimicrobials is both feasible and urgent, including through the adoption of alternatives, such as improved nutrition. Engagement of youth and women is also important and more attention is needed to the promotion of best practices in countries. However, the affordability of alternatives to antimicrobials - including vaccines, diagnostics and biosecurity measures - remains a major challenge if producers are to move on from antibiotics as the intervention of first choice. Several GLG members emphasized that prevention will look different in the global north and south depending on local conditions, involving a package of interventions based on what is available and affordable. It was noted that cheap, point-of-care diagnostics remain a significant unmet need, that more animal health paraprofessionals are essential, and that the GLG could advocate for strengthening of regulatory systems for alternatives to antimicrobials. Overall, innovation, access and affordability, inclusion and behaviour change, as well as increased capacity, are all key to the transformation of animal health services. Moving forward, GLG advocacy will centre on building holistic animal health systems focused on animal welfare and prevention of disease to reduce the need for antimicrobials, as well as better access to veterinary services.

Session 4: Torsåker Farm visit

Meeting participants made an afternoon field visit to Torsåker Farm, a test farm for sustainable food systems undertaken in collaboration with researchers and the food industry. GLG members learned from this Swedish example of sustainable food systems, including agriculture and aquaculture, to inform their advocacy. Presenters highlighted the work of AxFoundation, a Swedish non-profit which runs Torsåker Farm, including its criteria and questionnaire for responsible use of antibiotics in food producing animals.

Session 5: UNGA High-level Meeting on AMR

Leading up to the 2024 UNGA High-level Meeting on AMR, GLG members reiterated their commitment to advocate for UNGA member states to deliver a bold, outcome-oriented political declaration.

5.1. Mr François Jackman, Permanent Representative of Barbados to the UN, noted that the GLG has a key role to play in the lead-up to the HLM, as it is recognized by member states as the inter-disciplinary, high-level, international group focused on AMR. He congratulated the GLG on its recent report and recommendations for the HLM, and suggested that the GLG should consider holding a briefing for member states in the lead-up to the HLM. He emphasized that it is vital that the needs and vulnerabilities of LMICs be addressed in the political declaration, particularly regarding financing and capacity building for the AMR response.
5.2. **Ms Vanessa Frazier, Permanent Representative of Malta to the UN** thanked the GLG for its report and recommendations. She noted that the multi-stakeholder hearing on May 15 will be important for the zero draft of the political declaration. The current goal is to produce a short, concise and action-oriented zero draft by May 20 and to conclude the drafting by August.

5.3. **Mr Werner Obermeyer, Director of the WHO Office at the UN in New York**, noted that the HLM in 2024 will be different from 2016 because the topic was then new to many member states and the response to AMR has since evolved, for example, with the creation of the GLG and the Quadripartite collaboration. Discussions among member states on modalities for the meeting indicated that there are significant unresolved issues, such as technology transfer, financial support, capacity building, trade, intellectual property, and targets. Some of these issues may need to be implemented incrementally depending on national context, as with the approach taken for universal health coverage. On a positive note, there has been significant consistency of inputs to the process so far, including the GLG report, a youth manifesto, and submissions from the AMR Industry Alliance and other stakeholders.

5.4. **GLG discussions recommended seeking further opportunities to make impact in advance of the HLM:**

GLG members appreciated the updates provided on the internal dynamics of the HLM process. They agreed that the GLG should continue to push for an ambitious, outcome-oriented political declaration. Engagement with member states collectively and individually is key, including to ensure broad mandates for negotiators and the engagement of leaders and foreign ministers. Several GLG members supported the idea of a checklist or other document to communicate GLG top priorities or red lines, without re-writing specific recommendations. These could include the environmental dimensions of AMR; key prevention approaches such as WASH, IPC, and vaccination across sectors; surveillance; the independent panel on evidence for action; a clear focus on LMICs; and financing incentives for research and development and access. Several GLG members supported the inclusion of targets, especially for the agri-food sector, with a clear statement on the need to reduce use in animals of antimicrobials that are critically important for human health. GLG members emphasized that the political declaration needs to include some form of periodic review to monitor progress on implementation.

Session 6: Financing for implementation of multisectoral action on AMR

*GLG members and guest speakers discussed approaches to financing the AMR response, particularly through broader development financing and domestic investments*

6.1. **Professor Otto Cars, founder and senior adviser for ReAct, presented on approaches to financing the AMR response.** He noted that while the 2016 political declaration included a commitment to financing national AMR action plans, little has happened on this front, and the lack of new financing commitments has given rise to a trust deficit among LMICs. He emphasized that financing should focus on systems strengthening in all sectors, which is a long journey requiring substantial investments. There is a need to make funding opportunities through existing sources more visible to and less fragmented for countries. Financing for access is also needed, considering models such as the TB Drug Facility, Medicines Patent Pool and SECURE. Key elements of financing for the political declaration include domestic funding based on national investment cases; increased financing through existing mechanisms; and innovation in financing through stronger links between AMR and the Sustainable Development Goals (SDGs). More funding is needed to support civil society engagement.

6.2. **Dr Montserrat Arroyo Kuribreña, Deputy Director-General at WOAH, presented on the Multi Partner Trust Fund (MPTF).** The MPTF currently provides catalytic funding for implementation of national AMR
action plans in 14 countries and to the Quadripartite, with contributions from the UK, The Netherlands, Sweden, Germany and the EU. She provided several examples of good catalytic activities supported by the MPTF in countries, while noting that domestic resources are needed for them to be sustainable. Overall, the proof-of-concept of the MPTF has been established, and the challenge is now to attract additional donors.

6.3. In their discussion, GLG members were closely aligned about financing as a key barrier for progress in the AMR response. It was noted that there may be significant opportunities in the financial sector and among institutional investors if AMR can be designated as a reportable risk. Solutions include expanding the scope of existing mechanisms; attracting additional donors to the MPTF; AMR-specific and AMR-sensitive financing across the development agenda; and increased domestic financing based on national investment cases. Some existing mechanisms, such as the Pandemic Fund, the Global Fund to Fight AIDS, TB and Malaria, have recently begun to fund some activities related to AMR, mainly for laboratory strengthening, and it was suggested that these funding agencies and other mechanisms should further consider what they can contribute, such as pooled procurement of antibiotics for LMICs. It was noted that national investment cases showing potential gains across SDG indicators and studies of the impact of AMR on GDP growth in high-burden countries would both strengthen the case to finance ministers for additional domestic investments. Overall, country ownership is important for long-term sustainability of any new investments. Positive messaging and use of evidence of the impact of AMR-related investments are also very important.

Session 6: Closing of the meeting

In closing, the meeting Chair, Minister Forssmed, thanked participants for their presentations and their active engagement and discussions, as well as the Secretariat and Swedish teams that helped to organize the meeting. He emphasized that now is the time for greater action on AMR and for the GLG to use the influence that it has acquired, particularly to engage member states in advance of the HLM.

/end