

Folder eCC_00021098 is in stage Annual_Report_Due

Name of the University, Hospital, Research Institute, Academy or Ministry

National Center for Global health and Medicine

Name of the Division, Department, Unit, Section or Area

AMR Clinical Reference Center

City Shinjuku-ku **Reference Number** JPN-98

Title WHO Collaborating Center for prevention, preparedness and response to Antimicrobial Resistance

Report Year 02-2021 to 02-2022

1. Annual report on the agreed workplan

Describe progress made on the agreed workplan. For each activity, detail (1) the actions taken, (2) the outputs delivered, as well as (3) any difficulties that may have been encountered. Three responses are expected. [maximum 200 words per activity]. Indicate, if an activity has been completed previously, has not yet started or has been placed on hold.

Activity 1

Title: 1. To provide support to WHO in developing and conducting training and mentoring activities for planning, development and implementation of antimicrobial stewardship and infection prevention and control activities, based on the request of WHO

Description: Member States have expressed their interest in receiving the technical support required to create capacities at national, subnational and facility level, in order to strengthen IPC and antimicrobial stewardship. The deliverables will support WHO's work with Member States towards strengthening their capacity for IPC and antimicrobial stewardship

Status: ongoing

Dr. Norio OHMAGARI, Dr. Nobuaki MATSUNAGA, Dr. Haruhiko ISHIOKA, and Dr. Akane ONO attended the Tokyo Antimicrobial Resistance (AMR) One Health Conference and introduced some of the initiatives and achievements of Japan's National Action Plan on AMR to countries of the World Health Organization (WHO) Western Pacific Region Office (WPRO) (conducted by Japan's Ministry of Health, Labor, and Welfare on February 17, 2022). We presented a manual of antimicrobial stewardship and the activities of the antimicrobial stewardship team in hospitals with examples and appealed to the WPRO countries to support their wish to introduce the plan in accordance with their circumstances. We intend to support the introduction of the initiative as an important measure against AMR and to investigate its effectiveness before and after its introduction, according to the wishes of the WPRO countries.

Ms. Mikiyo SAKAGUCHI attended the "Train the Trainer in hand hygiene, a Hand Hygiene Instructor Training Seminar based on the WHO Multifaceted Strategy for Hand Hygiene" and delivered a lecture on the disease burden secondary to healthcare-associated infections and infection control in Japan based on Japan's National Action Plan on AMR (held on December 4, 2021).

Activity 2

Title: 2. To inform WHO's work as a core member of the AMR consortium through the provision of technical inputs

Description: In order to support WHO's work as a leading participant of the AMR consortium, technical inputs in specific areas of work related to AMR are required from other institutions, which may inform the technical work conducted by WHO in such context

Status: ongoing

Dr. Shinya TSZUKI provided technical advice to interpret the Global Burden of Disease Project (The Lancet, DOI:[https://doi.org/10.1016/S0140-6736\(21\)02724-0](https://doi.org/10.1016/S0140-6736(21)02724-0)) results through discussions with Dr. Takeshi NISHIJIMA at the World Health Organization (WHO) Western Pacific Region Office (WPRO). He highlighted the challenges associated with estimation of the antimicrobial resistance (AMR) disease burden in the WPR and that limited data in low and middle income and small countries, such as the Pacific Island countries, constitutes an important bottleneck.

Dr. Norio OHMAGARI, Dr. Nobuaki MATSUNAGA, Dr. Haruhiko ISHIOKA, and Dr. Akane ONO attended the Tokyo AMR One Health Conference and discussed initiatives and achievements of Japan's National Action Plan on AMR (conducted by Japan's Ministry of Health, Labor, and Welfare [MHLW] on February 17, 2022) to WPRO countries. We led the Working Group 3 on behalf of Japan's MHLW and intend to initiate the following activities.

Dr. Norio OHMAGARI and Dr. Nobuaki MATSUNAGA attended the "One Health" International Forum 2022 in Fukuoka, which included a presentation by the WHO on "AMR: A One Health Challenge" on February 13, 2022. At the meeting, he made a presentation on the impending silent antimicrobial-resistant bacteria pandemic, chaired the session and led the discussion.

Activity 3

Title: 3. To provide technical inputs to inform WHO's work towards the development of AMR advocacy and awareness strategies and tools, to help champion AMR beyond the health sector in WPR Member States (particularly priority LMICs)

Description: The Framework for Accelerating Action to Fight Antimicrobial Resistance in the Western Pacific Region advances the formation of a movement to fight AMR as an overarching principle to mobilize mass action, underpinned by value formation – of protecting self, society and future generations. The aim is to support WHO's efforts in order to recast AMR as a political and social issue and ingrain collective behavior change through incremental, yet sustained, awareness-raising and adoption of good practices to reach a level whereby acting responsibly to combat AMR will become a societal norm and a way of life. WHO will use the technical support from the institution in order to inform its work towards the design of awareness raising strategies and strategic communication tools, to enable communities to combat AMR

Status: ongoing

Dr. Norio OHMAGARI made presentations to inform NCGM's activities to AMR focal point of the member states to showcase how you with WHO can support the member states on WHO-CC panel discussion on 30 Nov 2021

Dr. Norio OHMAGARI, Dr. Nobuaki MATSUNAGA, Dr. Haruhiko ISHIOKA, and Dr. Akane ONO attended the Tokyo AMR One Health Conference and discussed initiatives and achievements of Japan's National Action Plan on AMR (conducted by Japan's Ministry of Health, Labor, and Welfare on February 17, 2022). We explained the review of access to and regulation of antimicrobial agents. We implemented a desktop review of access to and regulation of antimicrobial agents in the Asia-Pacific region, Europe, and the United States from the perspective of One Health.

Activity 4

Title: 4. Provision of technical support to assist WHO's work in the response to infectious disease outbreak including AMR pathogens, as requested

Description: Technical support provided by the institution will assist WHO's activities to deal with outbreak response, in particular AMR pathogens in the Western-Pacific Region

Status: ongoing

Dr. Norio OHMAGARI contributed to WPRO's COVID response with given his presentation and discussion on 22 November 2021 with Mongolia, Lao PDR, Viet Nam, Philippines, and Cambodia (Planning for endemic COVID-19 – emerging lessons on clinical management and care pathway in the Region), as well as discussion on Japan's response to Omicron outbreak which took place in January 2022 (Learning from Japan's response during Omicron outbreak).

Under the Global Outbreak Alert and Response Network project, Dr. Shinya TSUZUKI and Dr. Yusuke ASAI were deployed to the WPRO as data management officers between November 2021 to February 2022 and December 2021 to March 2022, respectively. These researchers were involved with the management of epidemiological data associated with coronavirus disease (COVID-19). They prepared daily reports of the epidemiological situation of COVID-19 in the WPR and forwarded this information to the World Health Organization Health Emergency Team Lead and Information and Planning Pillar. They also provided current information regarding the epidemic and public health countermeasures in Japan through regular meetings, discussions, and presentations. Deployment of these researchers led to appropriate maintenance and improvement in the data aggregation system.

Activity 5

Title: 5. To assist WHO's work in the provision of technical assistance to support preparedness for outbreak due to AMR pathogens, including technical assistance for IPC, AMS, diagnostic stewardship and clinical management

Description: Technical support provided by the institution will assist WHO's efforts towards building capacities in the Western-Pacific Region on outbreak preparedness due to AMR pathogens

Status: ongoing

Dr. Norio OHMAGARI, Dr. Nobuaki MATSUNAGA, Dr. Haruhiko ISHIOKA, and Dr. Akane ONO attended the Tokyo Antimicrobial Resistance (AMR) One Health Conference and described the initiatives and achievements of Japan's National Action Plan on AMR (conducted by Japan's Ministry of Health, Labor, and Welfare on February 17, 2022) to the WPRO countries. We also described the role of the antimicrobial stewardship team (AST) in hospitals across Japan. We discussed the importance of the AST and the systems implemented to support the appropriate use of antimicrobials.

Activity 6

Title: 6. To assist WHO's work in the provision of technical assistance to support antimicrobial consumption monitoring, through capacity building for WPR Member States and by providing technical support to WHO's activities in the contents of WPRACCS

Description: Technical expertise provided by the institution will assist WHO's efforts towards advancing antimicrobial consumption monitoring in the WPR region to improve antimicrobial stewardship

Status: ongoing

The Antimicrobial Resistance Clinical Reference Center members advised the WPRO on the methodology adopted by the Japanese antimicrobial use surveillance system, the provision of information, and management of data regarding the methodology of the Western Pacific Regional Antimicrobial Consumption Surveillance System (WPRACSS), which the WPRO plans to establish, in view of the fact that Japan is a member of the WPRO. We also provided advice on the online dashboard, which is being developed by WPRO as an important monitoring component of the WPRACSS. In the near future, we will provide data on antimicrobial use in Japan, including import/export, sales, and consumption of antimicrobials, to the extent possible, if requested by WPRO.

2. Annual report on other activities requested

Should WHO have requested activities in addition to the agreed workplan, please describe related actions taken by your institution [maximum 200 words]. Please do not include in this report any activity done by your institution that was not requested by and agreed with WHO.

Based on a request from the World Health Organization (October 12, 2021), Dr. Norio OHMAGARI and Dr. Akane ONO provided data regarding the new annual antimicrobial pipeline. We purchased, summarized, and provided the Japanese preclinical and clinical pipeline data.

At the WPRO's request, Dr. Norio OHMAGARI delivered a lecture on the 3rd High Level Technical Consultation and Meeting on Surveillance of Antimicrobial Resistance and Use for Concerted Actions (April 26, 2021).

3. Resources

Indicate staff time spent on the implementation of activities agreed with WHO (i.e. those mentioned in questions no. 1 and no. 2 above). Do not include any data related to other activities done by your institution without the agreement of WHO. Please indicate staff time using the number of "full-day equivalents" – a day of work comprising 8 hours (e.g. 4 hours work per day for 7 days should be recorded as 3.5 full-day equivalents).

Number of staff involved (either partially or fully)

Senior staff	Mid-career staff	Junior staff, PhD students
7	0	0

Number of full-day equivalents, total for all staff involved

Senior staff	Mid-career staff	Junior staff, PhD students
200	0	0

Implementation of the agreed workplan activities (i.e. those mentioned in questions no. 1 and no. 2 above) normally require resources beyond staff-time, such as the use of laboratory facilities, purchasing of materials, travel, etc. Please estimate the costs of these other resources as a percentage of the total costs incurred (e.g. if you incurred costs of USD 100 and the value of your staff time was USD 50 which makes the total of USD 150, please report 33.3% and 66.7%).

Percentage of costs associated with staff time	Percentage of costs associated with other resources	Total
0.00	0.00	0.00

4. Networking

Describe any interactions or collaboration with other WHO Collaborating Centres in the context of the implementation of the agreed activities. If you are part of a network of WHO Collaborating Centres, please also mention the name of the network and describe your involvement in that network [maximum 200 words].

Dr. Shinya TSUZUKI reviewed the antimicrobial resistance (AMR) burden in WPR conducted by a WHO Collaborating Center (CC) (The University of Hong Kong, China; CHN-120) and agreed on its contents and methodology, notwithstanding the risk of over/underestimation owing to limited data in some countries, as indicated by the authors.

Mr. Ryuji KOIZUMI and Ms. Chika TANAKA reviewed and submitted applications for antimicrobials that are currently unregistered in the Anatomical Therapeutic Chemical/Defined Daily Dose system for drug statistics conducted by a WHO CC (The Norwegian Institute of Public Health, Norway, NOR-11). We responded for approximately 2 days in January and August. Thirteen antimicrobials were registered for antimicrobial consumption surveillance and five are under application.

The AMCRC performs surveys on the current coronavirus disease (COVID-19) status in Japan, particularly with regard to AMR and antimicrobial usage associated with COVID-19, in collaboration with another WHO CC (Disease Control and Prevention Center, the National Center for Global Health and Medicine [NCGM], JPN-94).

At the request of a WHO CC (Bureau of International Health Cooperation, NCGM, JPN-45), we will participate in the 4th WHO CC Conference in Japan in April 2022, which will be attended by Dr. Takeshi KASAI, Regional Director of the WPRO.