Early implementation of the WHO Global Antimicrobial Resistance Surveillance System GLASS

Finland, Germany, Latvia, Lithuania, Norway, Poland, Russian Federation and Sweden collaborated within the framework of the Northern Dimension Partnership in Public Health and Social Well-being (NDPHS) to share lessons from the early implementation of GLASS.

Background
At the World Health Assembly 2015, the WHO Member States adopted a resolution on a Global Action Plan to contain antimicrobial resistance (AMR). Among the five strategic objectives in the plan, one is to increase knowledge and evidence through surveillance. For this purpose a harmonized global antimicrobial resistance surveillance system (GLASS) was developed by the WHO and launched for enrollment in 2016.

The project NorthernGLASS
The aim of NorthernGLASS was to collect feedback on the supportive material for early implementation of GLASS developed by the WHO, and on the countries’ process during 2016 of the early implementation of the surveillance system as such.

Feedback on supportive material from WHO
The participants perceived the available documents to be clearly written although they thought that there were too many of them.

The documents focus on countries with limited capacity for national surveillance, while there is less guidance for countries which already have national surveillance. This means there is little focus on how such countries should move towards alignment with GLASS.

Lessons learned during the project
Despite challenges, countries could see an added value both locally and nationally with implementation of GLASS thereby improving and expanding existing surveillance.

The supportive documents from WHO are clear and well written. However, the large number of documents makes it difficult to know where to start.

The documents target countries with limited capacity for AMR surveillance. Countries with existing surveillance find it difficult to use the documents and to understand how to align with GLASS at a reasonable cost.

More resources will be needed to expand present surveillance according to EARS-Net and CAESAR methodology to include other specimen types and pathogens as proposed in GLASS.

Aspects on GLASS methodology
Specific challenges with the GLASS methodology as such were:

- the concept of a surveillance site (as most existing surveillance is laboratory based),
- IT-related issues, e.g. to extract data from a laboratory information system and merge with core patient data from a hospital information system,
- to obtain denominator data.

It was also suggested that the WHO better define what information is wanted in GLASS at local, national and global level, respectively, as well as what is needed to achieve this.

**Main encountered obstacles**

Several participating countries reported shortage of human resources and financing in order to be able to expand present surveillance according to EARS-Net and CAESAR methodology to include other specimen types and pathogens as proposed in GLASS. Some countries reported problems with extracting data from existing laboratory IT-systems, but it turned out that these could be solved by adjusting compatibility with the software WHONET/BacLink.

**General remarks**

Despite some challenges, several countries pointed at opportunities for an added value with implementing GLASS, both at local and national levels, thereby improving and expanding existing surveillance.

The need to synchronize data calls between GLASS and the pre-existing networks EARS-Net and CAESAR to avoid duplicate work was emphasised. Participants agreed that the purpose of, and need for, the global data collection should be further elaborated in coming updates of the WHO manuals and future GLASS documentation. This is to increase awareness and understanding of the system and its goals to further inform allocation of adequate resources for improvement of national surveillance.

All eight countries have now registered at the WHO website to participate in GLASS. Five of these submitted AMR-data to the WHO's first GLASS report on early implementation.

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**Project focal points in participating countries**

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Lithuania: Rolanda Valinteliene, Institute of Hygiene

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The project was coordinated at the Public Health Agency of Sweden by Johan Struve, Sonja Löfmark, Sanja Cabric and Emily Sällström and received financial support from the Swedish Institute.