



Nordic cooperation for better and sustainable access to antibiotics

Increased cooperation in the Nordic region can enhance access to antibiotics. Therefore, we have explored common ways forward and proposed eight measures, including mutual recognition of approvals for older antibiotics and new reimbursement models with income guarantees.

The Swedish government has commissioned the Public Health Agency of Sweden to prepare a report for the Nordic Council of Ministers on Nordic cooperation discussing measures to improve access to antibiotics. In this fact sheet, we describe the situation and propose measures to prioritise.

Antibiotics are needed in the Nordic countries

The World Health Organization (WHO) considers antimicrobial resistance (AMR) to be one of the greatest global health threats and a barrier to sustainable development. All use of antibiotics drives the development of resistance, and it is therefore of utmost importance that antibiotics are used only when necessary and as responsibly as possible—for both humans and animals. However, to provide modern and patient-centered healthcare, antibiotics must be available when needed.

The Nordic market for antibiotics is small compared to many other EU countries. Additionally, several narrow-spectrum antibiotics are widely used within the Nordic region that are not as common outside of the Nordic countries.

Insufficient access is a concern

The Nordic market is vulnerable, and it is therefore important to identify and implement measures that can ensure access to antibiotics. Insufficient access to antibiotics is currently a reality in the Nordic countries.

Causes of insufficient access to antibiotics in the Nordic countries

- Products are not registered in the markets of the Nordic countries. Of the 36 antibiotics examined and approved in at least one country, less than 20 were registered in Sweden, Norway, Denmark, Finland and Iceland.
- Products are deregistered due to lack of profitability if they do not have sufficiently high sales.
- Products are subject to recurring shortages. This can be related to global production capacity.

Harmonisation can contribute to a larger market

A general problem in the Nordic countries is that treatment recommendations for the same infections and conditions can differ between countries. This means there is a plethora of package sizes, strengths, and variants in different countries, each requiring package leaflets in the respective language. Harmonising the Nordic antibiotic market based on common needs and treatment recommendations could therefore be a long-term way to strengthen access to antibiotics in the Nordic countries, at least for common infections in outpatient care.

Various measures and increased cooperation in the Nordic region can strengthen access to antibiotics

We have identified various proposals for measures to strengthen access to antibiotics at a Nordic level. These measures have been developed based on a literature review encompassing nine reports. Some of these measures are already underway and have been included to emphasise the importance of continuing these initiatives.

The basis for these proposals was developed in collaboration with researchers at Uppsala University and Nordic experts. According to a predefined methodology, the suggested measures were ranked based on their expected impact, feasibility, timeline for potential implementation and estimated costs. Ongoing measures are also included

in the prioritisation, highlighting the importance of their continuation in enhancing antibiotic access.

Initially, the literature review identified 30 potential measures, which were then narrowed down to ten by the experts based on the selection criteria.

The experts' 10 prioritised measures to strengthen access to antibiotics at a Nordic level:

Step 1:

- Improved information on drug shortages and improved transparency in the supply chains
- Common packaging and electronic package leaflets
- Mapping and enhanced production capacity tailored for the Nordic region

Step 2:

- Mutual recognition of approvals for older antibiotics, when approved in at least one Nordic country
- Good procurement practice

Step 3:

- Joint procurement
- New reimbursement models with revenue guarantees
- Multinational stockpiling

Step 4:

- Expanded production capacity near the Nordic region

Step 5:

- ... and within the Nordic countries.

The experts assess that these measures have the potential to strengthen access to antibiotics in the Nordic countries. Most of these measures are untested, and their impact on access can only be theoretically assessed. However, the measure involving new reimbursement models with revenue guarantees for prioritised novel antibiotics has been piloted in Sweden with positive results.

The Public Health Agency of Sweden proposes eight of these measures to be prioritised for Nordic collaboration, based on input from national and Nordic experts as well as authorities.

We propose an implementation sequence in various steps. The steps begin with easier and less resource-intensive measures and progress towards more extensive and complex measures. We have considered interdependencies and synergies so that related efforts are implemented in the correct order.

Prioritised measures by the Public Health Agency of Sweden:

1. Improved information on drug shortages and improved transparency in the supply chains
2. Common packaging and electronic package leaflets
3. Mutual recognition of Nordic approvals for older antibiotics
4. Good procurement practice
5. Joint procurement
6. New reimbursement models with income guarantees
7. Multinational stockpiling
8. Mapping and enhanced production capacity tailored for the Nordic region

Examples of similar ongoing initiatives

There are several ongoing international initiatives aimed at improving access to essential medicines, including antibiotics. Mapping production capacity for narrow-spectrum antibiotics in the Nordic region has been initiated within the Nordic Council's working group for the exchange of information and experiences in the pharmaceutical sector.

[Nordisk HTA-konferens \(WGEMA\) – Swedish only](#)

Another example is Work Package 9 in the EU-JAMRAI-2 project (Joint Action Antimicrobial Resistance and Healthcare-Associated Infections), which focuses on access to antibiotics. This work package is led by Sweden (via the Public Health Agency of Sweden) and Norway and encompasses opportunities to work on joint Nordic measures to strengthen antibiotic access. An example is mutual recognition of approvals for older antibiotics, but several other Nordic collaborative measures could also be relevant within the project.

[EU-JAMRAI-2](#)

Within another project, CHESSMEN (Joint Action to mitigate medicine shortages), we can likely identify synergies for Nordic implementation of the measure concerning improved information on drug shortages and transparency in the supply chain.

[EU-CHESSMEN](#)

The Nordic Council of Ministers wants to strengthen access to antibiotics.

The Nordic Council of Ministers, with representatives from Finland, Denmark, Norway, Iceland, Sweden, the Faroe Islands and Åland, met on April 18, 2024, to

discuss access to antibiotics and the various measures identified in the literature review. All participants agreed on the importance of continuing to strengthen Nordic cooperation on AMR (Antimicrobial Resistance) and supported the priorities outlined in the proposed first step.

A Nordic concerted effort to enhance access to new advanced antibiotics as well as to older, primarily narrow-spectrum antibiotics, was welcomed, and the ministers decided to proceed with actions in Step 1, prioritising the measure on new reimbursement models with income guarantees.

Conclusions from the Public Health Agency of Sweden

The Nordic countries are in a highly advantageous position globally regarding their efforts in antimicrobial resistance (AMR) and access to antibiotics. It is crucial to continue sharing our experiences and further improve innovative approaches and incentives.

The Public Health Agency of Sweden recommends several measures to strengthen antibiotic access that are suitable for testing through Nordic cooperation. Collaborative efforts at a Nordic level would likely have a greater impact on access than individual country actions. However, it is important to recognise that this is a global challenge, and ongoing initiatives at the EU level, for instance, must be considered.

We believe that a country with experience in a particular measure could be proposed to host preliminary studies and implement specific actions or a package of measures.

It is also essential that interdependent measures are implemented together or in the correct sequence.

Some measures may be more suitable for antibiotics procured by hospitals rather than those used in outpatient settings, where different national systems and regulations occur, at least from a Swedish perspective. Therefore, different strategies are needed to enhance access to hospital and outpatient antibiotics.

The prioritised measures need further development in terms of feasibility at the Nordic level before potential pilot testing of implementation.

While similar within the Nordic region, there are differences in treatment recommendations between countries, which can complicate access. Finding ways to make these recommendations more uniform could enhance access.