Medicines management in hospitals is very important, both for patients as well as financially. The starting treatment in hospitals has a major impact on outpatient care since this influences the further choice of medicines prescribed after the patient has been discharged. Hospital medicines are often difficult to manage and are used in complex clinical situations. New hospital medicines tend to have high prices and contribute significantly to the pharmaceutical bill.

Management of inpatient medicines: a neglected policy area

The expenditure on medicines in hospitals over the years has been fairly constant and relatively low (usually between 5–10% of a nation’s medicines budget) and thus not a priority for policymakers. With the introduction of expensive new medicines and orphan medicines this has changed, the hospital medicines budget is currently increasing disproportionally. As a result it has attracted the interest of policymakers.

Despite its importance, the transparency of medicines procurement management in hospitals varies considerably between countries. This issue was therefore addressed in the Pharmaceutical Health Information System (PHIS) project, commissioned by the European Commission, European Agency for Health and Consumers and co-funded by the Austrian Federal Ministry of Health, by conducting a European survey on pricing and purchasing strategies, financing policies and pharmaceutical prices.

The main survey was conducted using country profiles written by PHIS network country representatives [1], supplemented by further surveys with experts, painting a picture of the 25 EU Member States plus Norway and Turkey. In fact, in our analysis [2] we came to the same conclusion as previous cross-country studies, e.g. the Pharmaceutical Pricing and Reimbursement Information report [3], of the outpatient sector. Overall we found the same mix of policies and instruments being used, but a more in-depth investigation revealed sometimes significant differences in how medicines are managed across the countries.

Country-specific characteristics

For instance, take the number of hospital pharmacies. Each hospital in Europe does not necessarily have a hospital pharmacy. While indeed in several countries, e.g. France, Italy, Portugal, Romania, Sweden, nearly all (public) hospitals have a hospital pharmacy; the percentage of hospitals with a pharmacy is between 30–40% in Cyprus, Estonia, Lithuania and Norway. Finland (2%), Austria (17%) and Germany (22%) rank the lowest in this comparison. The differing relevance of hospital pharmacies across countries is attributable to historical developments and/or the national regulatory framework. In a hospital without a pharmacy, medicines have to be managed differently. For instance, in Austria such hospitals have a so-called ‘pharmaceutical depot’ which may only purchase medicines from a licensed pharmacy in the European Economic Area. Legally, the members of staff running the pharmaceutical depot have to be consulted and supervised by a pharmacist from a nearby community pharmacy or hospital pharmacy, in practice often from the same organisation that owns the hospital [4].

While the primary task of a hospital pharmacy is to serve inpatients, hospital pharmacies may, under certain conditions, also dispense to outpatients, thus acting as a community pharmacy. In a few countries, e.g. The Netherlands, Poland, a second pharmacy for outpatients is run by the hospital pharmacy on
the hospital premises. Outpatient activities in hospital pharmacies may be limited to providing specific medicines, e.g. France, to specific patient groups, e.g. Portugal, or to providing medicines for administration to outpatients in day clinics, e.g. Belgium, or to serving outpatient clinics, e.g. Germany, UK. In some countries only a few hospital pharmacies may serve outpatients, e.g. Austria. No conclusions were drawn on the advantages or disadvantages of the different systems.

**Tendering versus negotiations**

The survey confirms the crucial role that hospital pharmacists play in medicines management, in charge of activities such as ordering, distribution and production of medicines as well as quality control and clinical pharmacy. As (leading) members of the Pharmacy and Therapeutics Committees hospital pharmacists have an important say in which medicines are selected for hospital formularies.

While tendering, either open or restricted, competitive negotiations and direct procurement (negotiations) between the supplier and purchaser describe possible policies for procuring medicines in the inpatient sector; in practice variations in these strategies are also found.

Tendering and negotiations were identified in the survey as the most important procurement policies, whereas procurement by competitive negotiations is quite rare. For example, it is used in Slovakia via what is known as ‘market evaluation’ in which hospital pharmacists always ask three suppliers for a cost estimate.

In fact, many European countries apply a mix of purchasing policies. In some countries tendering is the sole or key policy for procuring medicines. In eight countries (Cyprus, Estonia, Italy, Latvia, Malta, Norway, Sweden and UK) all or the majority of medicines used in (public) hospitals are put out to tender, see Figure 1. Tendering may be done by the hospitals (individually or by the organisation owning the hospitals) or centrally, usually carried out by Ministries of Health, social health insurance institutions or procurement agencies. Well-known examples for the latter case are the national procurement agencies AMGROS and LIS in Denmark and Norway, in charge of procuring all medicines for public hospitals.

In a few countries, e.g. Romania and Slovakia, tendering is done centrally for some (mostly expensive) products or medicines, such as blood factors, while the other medicines are procured via direct negotiations between the hospitals and the pharmaceutical companies/wholesalers.

There is a trend for more acquisitions to be made by tendering. Several Western European countries reported tendering being used for most acquisitions, while direct negotiations by hospitals with suppliers, e.g. manufacturers or wholesalers, are the key purchasing policy in Austria, Germany and some countries in Central and Eastern Europe. Nonetheless, these countries reported an increased use of tendering.

**Impact on prices?**

In a few countries, e.g. in Portugal, direct negotiations take place as a second step following (centralised) tenders. This allows hospitals to negotiate lower prices compared to the centrally procured prices.

Across Europe, the actual prices that hospital pharmacists achieve in negotiations are not made public. Only the official hospital list prices and the tendered prices are published. Therefore, we decided to supplement the European survey with an investigation of prices for twelve active ingredients in 25 hospitals in six countries.

**Authors**

Sabine Vogler, PhD  
Head of Pharma Team  
Head of WHO Collaborating Centre for Pharmaceutical Pricing and Reimbursement Policies, Department of Health Economics

Nina Zimmermann, MA  
Researcher, Department of Health Economics

Gesundheit Österreich GmbH  
6 Stubenring  
AT-1010 Vienna, Austria

Jan Mazag, PharmDr  
Director, State Institute for Drug Control (ŠUKL)  
11 Kvetna  
SK-82508 Bratislava 26, Slovakia

**References**