

Prices of Medicines, Including High-Cost Cancer Medicines, in a Hospital Setting Compared to Outpatient Use

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Abstract

Prices of Medicines, Including High-Cost Cancer Medicines, in a Hospital Setting Compared to Outpatient Use
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Problem statement: There is poor knowledge of pharmaceutical prices of medicines used in the outpatient sector. The treatment in the inpatient sector, however, has consequences for choice of medicines in the outpatient sector.
Objectives: To investigate the prices of medicines used in hospitals and to compare them to the outpatient sector.
Design: Price survey for a selected number of medicines (12 active ingredients), including four cancer medicines and one orphan medicine; original price collection in hospitals, accompanied by qualitative interviews with hospital pharmacists; access to official outpatient prices (countrywide) via the PPI (Pharma Price Information) service run by GÖG.
Setting and population: A total of 25 hospitals (all public hospitals—24 general hospitals and 1 specialised hospital) in five European countries (Austria, the Netherlands, Norway, Portugal, and Slovakia).
Intervention: The price survey and comparison was performed during the period from September 2009 to February 2010, asking for prices as of end of September 2009. A price template was developed for the collection of the prices. In hospitals, both the official hospital price as well as the actual hospital price (i.e., taking discounts and rebates into consideration) were gathered. The pharmacy retail prices were defined as reference in the outpatient sector.
Outcome measure(s): Availability of price data for the hospital setting and outpatient sector; cross-country comparison of actual hospital prices; differences between the average hospital list prices and actual hospital prices; comparisons between hospital prices (official and actual) and outpatient prices.
Results: For some of the selected products actual hospital prices were lower compared to the official hospital list prices and the outpatient prices. Discounts and rebates were observed to be granted, in some cases up to 100% (i.e., cost-free medicines). For the four oncology medicines selected, however, in all cases the actual hospital prices were equal to the official hospital list prices, which corresponded to the outpatient prices.
Conclusions: The price reduction granted to hospitals, which eventually leads to a lower price compared to the outpatient sector, depends on the therapeutic class. When only one on-patent product is available (such as for the cancer medicines of the survey), price reductions are less likely. Price reductions, including cost-free medicines, are granted for products that are of strategic relevance for manufacturers (i.e., medicines that are to be continued in the outpatient treatment, e.g., cardiovascular medicines).
Funding source(s): European Commission, Executive Agency for Health and Consumers (EAHC); Austrian Federal Ministry of Health

Background

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. The cost of medicines in hospitals over the years has been fairly constant and relatively low (usually between 5 and 10% of a nation's pharmaceutical budget) and thus not a priority for policy makers. With the introduction of expensive new medicines and orphan medicines this has changed: the hospital pharmaceutical budget is currently increasing disproportionately. As a result it has attracted the interest of policy makers. Despite its importance, knowledge of the prices of medicines used in the hospital setting is poor. Medicines procured for hospitals are assumed to be significantly less expensive than those used in the out-patient sector.

Objectives

- To investigate the prices of medicines used in hospitals,
- including surveying hospital official list prices and actual hospital prices and
- to compare the medicines prices to those of the out-patient sector

Methods

For the price survey twelve active ingredients were selected based on defined criteria. Medicines which account for high expenditure in hospitals, but also products with available generic alternatives were included. The price survey aimed at comparing actual hospital prices achieved in the purchasing process for the same products in different hospitals and compared to the official list prices, as well as showing possible differences in prices between the countries. The prices were collected in 25 hospitals in five countries (Austria, the Netherlands, Norway, Portugal, and Slovakia). All 25 hospitals were public hospitals; 24 were general hospital and 1 was a specialized hospital. We asked for prices as of 30 September 2009. A price template was prepared.

Methods/continued

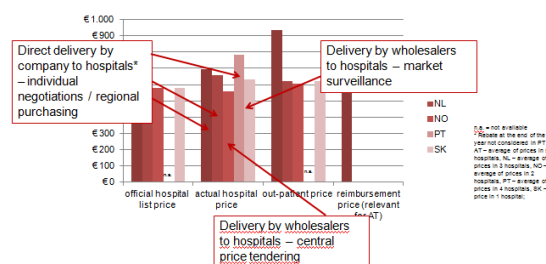
Access to out-patient prices was done via the Pharmaceutical Price Information (PPI) service run by the Austrian Health Institute (GÖG).

Active ingredient	ATC Code	Official price (index = 100)					Actual price (index = 100)				
		AT	NL	NO	PT	SK	AT	NL	NO	PT	SK
Trastuzumab	L01XC03	100	100	100	100	100	100	100	100	100	100
Doxorubicin	L01BC02	100	100	100	100	100	100	100	100	100	100
Idarubicin	L01BC02	100	100	100	100	100	100	100	100	100	100
Etoposide	L01BC01	100	100	100	100	100	100	100	100	100	100
Imatinib	L01XE01	100	100	100	100	100	100	100	100	100	100
Imatinib mesylate	J01BA02	100	100	100	100	100	100	100	100	100	100
Interferon	L03AD02	100	100	100	100	100	100	100	100	100	100
Interferon beta-1a	L03AB07	100	100	100	100	100	100	100	100	100	100
Arbidol	C05CA01	100	100	100	100	100	100	100	100	100	100
Simvastatin	C10AA01	100	100	100	100	100	100	100	100	100	100
Atorvastatin	C10AA05	100	100	100	100	100	100	100	100	100	100
Clopidogrel	B01AC04	100	100	100	100	100	100	100	100	100	100

Selected active ingredients

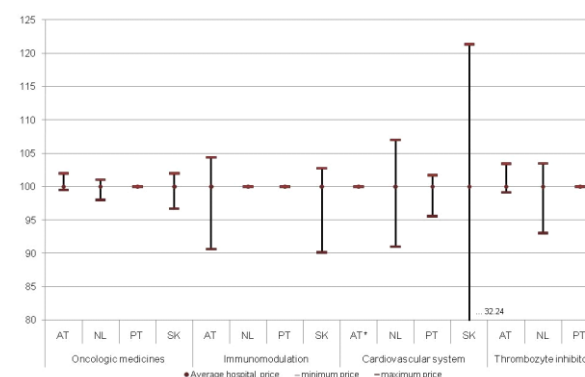
	Active ingredient	ATC Code
1	Trastuzumab	L01XC03
2	Doxorubicin	L01BC02
3	Idarubicin	L01BC02
4	Etoposide	L01BC01
5	Imatinib	L01XE01
6	Imatinib mesylate	J01BA02
7	Interferon	L03AD02
8	Interferon beta-1a	L03AB07
9	Arbidol	C05CA01
10	Simvastatin	C10AA01
11	Atorvastatin	C10AA05
12	Clopidogrel	B01AC04

Prices of an oncologic medicine (on-patent), per unit



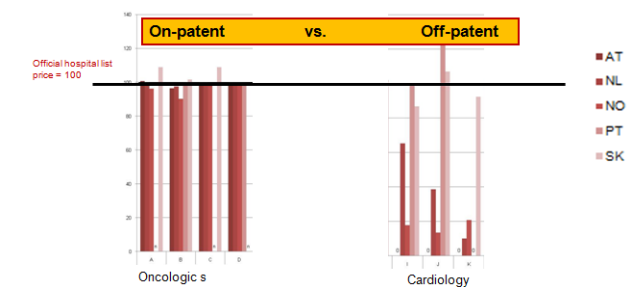
Source: PHIS survey

RANGE OF actual hospital prices for selected medicines (average price for country = 100) per unit in five European countries, 2009



Source: PHIS survey

Differences between average official hospital prices and the average actual hospital prices for selected medicines (index = 100 = average official hospital list price) of oncology medicines and cardiology medicines in five European countries, 2009



Source: PHIS survey

Results/1

The price survey showed that the actual hospital prices of some products were lower compared to the official hospital list prices. This was due to price reductions granted by the suppliers to the purchasers (procurement agency, purchasing group, individual hospital) in the procurement process. A commonly applied form of price reductions is discounts at the time of buying medicines which were observed in a range from 1 to 100% for the case study hospitals. In Austria and Portugal retrospective rebates are granted to hospitals e.g. at the end of the year. The practice of providing medicines cost-free to Austrian hospitals was reflected in prices of € 0.- for some products.

Results/2

The amount of price reductions considerably depends on the therapeutic class. In the case of just one on-patent product being available, price reductions are less likely. The survey showed, for instance, that for (mostly on-patent) oncologic medicines hospitals could not achieve any reductions and paid a price equivalent to the official list price. The availability of generics tended to result in lower price levels. Price reductions, including cost-free medicines, were observed for products which are of strategic relevance for manufacturers, i.e. medicines which are to be continued in the out-patient treatment. These are e.g. cardiovascular products for which price differences between the actual hospital prices and the official list prices were seen. The same pattern regarding the amount of price reductions depending on the therapeutic class was reflected in the comparison of the actual hospital prices to the prices in the out-patient sector. For some products, a price difference of up to 30-50% between the in-patient and out-patient sector could be observed.

Conclusions

The actual hospital prices are usually less than the maximum list prices although the amount varies by therapeutic class of medicines. The actual achieved prices are the relevant prices to be considered for analyses and comparisons. Suppliers might offer a wide range of price reductions, either as discounts, rebates or other forms like bundling. The majority of countries reporting on discounts stated discounts of 25% to 40%. But discounts might range from 1% to up to 100%, and in five countries medicines are provided cost-free to hospitals.

Conclusions

Discounts are less likely to be provided where there is only an on-patent product available. For these medicines the bargaining power of the hospitals is rather weak. These on-patent products (e.g. some oncology medicines, orphan medicines) where no competition is possible often account for an important portion of the hospital pharmaceutical budget. However, as soon as therapeutic alternatives are available considerable room for discounts may exist. For some "strategic" products prices in the hospital sector are considerably lower than in the out-patient sector. The actual hospital prices of the surveyed medicines are less than in the out-patient sector. For specific products (e.g. for chronic diseases) which are most likely to be followed up in the out-patient treatment and thus are economically very relevant for the pharmaceutical companies, the price range between in-patient and out-patient sector is considerable.

Policy implications

The study has shown a clear need for improving the transparency of medicines prices. Price distortions by discounts, rebates and price reduction were observed, and there is a need to address this issue in future. Price surveys and comparisons of medicines used in hospitals should consider not only the official list prices, but also the actual prices. The study has also displayed different marketing strategies applied with regard to different kind of medicines: For many high-cost medicines (with no alternatives) hospitals have to pay the same prices as the payers in the out-patient sector. With regard to high-cost medicines, payers of each sector (out-patient and in-patient sector) try to shift the treatment of the patient with such medication (and thus the funding) to the other sector) which is at the detriment of patients and the whole system. Measures to improve the cooperation between the in-patient and out-patient sector (e.g. interface management) are urgently needed.

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