Drug supply/logistics

A PHARMACOECONOMIC COMPARISON BETWEEN A COUNTY HOSPITAL IN CHANIA AND A CENTRAL HOSPITAL IN ATHENS, GREECE

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Background ‘Agios Georgios’ Chania General Hospital (CGH) on the island of Crete has 460 beds and Sismanoglio General Hospital (SGH), in the capital of Greece, Athens, has 459 beds. In the Greek National Health System the uninsured poor patients receive their drugs free of charge from the hospital pharmacies.

Purpose To compare the pharmacoeconomic profiles of the two hospitals.

Materials and Methods We examined the pharmacoeconomic data for the first half of 2011. Data were extracted from the Hospital Information Systems.

Results 14,996 patients were hospitalised in CGH and 15,520 patients in SGH with a mean number of nursing days 3.99 vs. 3.55.

The total cost of drugs was €6,705,297 vs. €4,933,028 (P < 0.05) respectively.

The drugs cost for the inpatients was €5,034,701 vs. €3,965,127 and the mean cost per inpatient per nursing day was €77.67 vs. €67.23.

The drugs cost for the insured outpatients was €1,452,668 vs. €718,203 (1,595 prescriptions vs. 1,152, P < 0.05), and the mean cost per prescription was €909.42 vs. €619.10 (P < 0.05).

For the uninsured outpatients the drugs bill was €217,928 vs. €254,694 (3,506 prescriptions vs. 2,016 P < 0.05) and the mean prescription cost was €62.16 vs. €126.34 (P < 0.05).

The percentage cost for the main categories of drugs were: cytostatics 16.50% vs. 10.65%, antibiotics 21.65% vs. 24.51%, antirheumatics 7.54% vs. 4.55%, cardiovascular 5.57% vs. 3.98% and erythropoietins 11.45% vs. 3.11% (P < 0.05).

The ratio of generics to patented medicines was 40.32%:59.68% and 39.14%:60.86%

Conclusions We found statistical differences among the pharmacoeconomic data of the two hospitals. In SGH, HIV+ patients are served (27.47% of uninsured and 47.35% of insured outpatients) and this is reflected in the increased cost of the outpatients while this is not the case in CGH.

The increased cost of the outpatients while served (27.47% of uninsured and 47.35% of insured outpatients) is reflected in the increased cost of the outpatients while served (27.47% of uninsured and 47.35% of insured outpatients) in the market there are various automation systems, all of which are costly.

Purpose To analyse two storage and dispensing automation systems in order to make a decision to improve the safety, efficiency and quality of medicines use in our hospital.

Materials and Methods Review of two systems: A) fully automated robotic automation (fully enclosed storage modules that automatically generate individual dosage units (DUs) grouped into racks per patient), and B) system with different components (semi-automatic storage and cart-filling system, plus storage tanks filling, automatic dispensing systems (DAS) in inpatient units, plus outpatient medicines automation and repackaging). We analysed the resources currently available and the benefits of the two systems.

Results 16,213,352 DUs were dispensed in 2011 in connexion with 2971 drugs (40% could be dispensed to outpatients). Advantages and disadvantages of the two systems are listed in the Table.

Conclusions The integrated robotics system (system A) appears to be a safer, more versatile and more efficient system providing more information than system B, which provides greater accessibility for nursing. The cost analysis is slightly favours system A. One
limitation of the study is that the costs of maintenance and the human resources reengineering required need to be further explored.

Abstract DSL-004 Table 1

<table>
<thead>
<tr>
<th>Advantages and disadvantages of the two systems</th>
<th>System A</th>
<th>System B</th>
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</thead>
<tbody>
<tr>
<td>SAFETY</td>
<td>All DUs can be unequivocally identified with batch expiry date</td>
<td>Partial identification with batch barcode and expiry date</td>
</tr>
<tr>
<td></td>
<td>Complete record, including batch, administration by scanner</td>
<td>Record drug administration with barcode and expiry date</td>
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<td></td>
<td>Closed system</td>
<td>Partially open systems, error risks</td>
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<tr>
<td>EFFICIENCY</td>
<td>Entire integrated system including outpatients and elderly residences</td>
<td>Immediate availability of nursery doses needed to the patient</td>
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<td></td>
<td>Full return of unmanaged DUs</td>
<td>Full expiry date control is difficult</td>
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<tr>
<td></td>
<td>Allows automatic checking of expiry dates</td>
<td>High cost</td>
</tr>
<tr>
<td>QUALITY</td>
<td>Complete record of all movements of both drugs and users</td>
<td>High cost</td>
</tr>
<tr>
<td></td>
<td>Partial recording of users, batches, drugs in drug use chain</td>
<td></td>
</tr>
<tr>
<td>Additional cost per DU (euros)</td>
<td>0.19</td>
<td>0.20</td>
</tr>
</tbody>
</table>

No conflict of interest.

DSL-006 COMPARATIVE STUDY OF THE COST OF ERYTHROPOIETIC FACTORS, ORIGINAL MEDICINES AND BIOSIMILARS IN FRENCH CARE FACILITIES

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Background The patent expires of leading biological products and the development of biosimilars create opportunities for cost savings. No studies have been carried out in the French hospital market.

Purpose To perform a cost-saving modelling analysis and investigate the potential factors that could affect the price of drugs.

Materials and Methods We carried out a comparative study in French healthcare facilities, representing about 65% of national hospital beds, of the price of erythropoietic factors. The data were collected on procurement procedures operative as of 1 January 2012.

Results 25 care facilities agreed to participate in the study. The overall sales turnover reached €15M. Biosimilars represent less than 1% market share. All the establishments granted a discount of between 5% and 69% on the prices fixed by negotiation between the Comité Économique des Produits de Santé and the manufacturers, depending on the category (drugs, biosimilars or original biopharmaceuticals). The average discounts ranged from 11% to 75%. Binocrit, the main biosimilar represented was 25.6% less expensive than its original medicine Eprex. Based on French hospital financing, we show a 24.7% cost saving if a high interchangeability rate is reached.

Conclusions The potential factors that could affect the price of drugs are high interchangeability rate and high discounts.

No conflict of interest.

DSL-007 DOES PHARMACY CONTRIBUTE TO DELAYS IN HOSPITAL DISCHARGE?

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Background Efficient management of patient flow including timely discharge from hospitals is vital. Patients in UK hospitals are commonly given individually labelled medicines to take home (TTOs). It is perceived by the multidisciplinary team at our hospital that waiting for these medicines is a significant rate-limiting step in the discharge process.

Purpose We examined the timeframes around TTO prescribing, dispensing and patient discharge in order to identify delays and any negative impact of the pharmacy processes involved.

Materials and Methods All TTO prescriptions entered into the pharmacy electronic log on one day in May 2012 were examined