ABSTRACT: Use of Databases for Health Resource Utilisation (HRU) And Cost Analyses in EU-5: Results From a Focused Literature Review

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Objectives:

Databases are essential tools for pharmacoeconomic research. North America has large administrative claims, hospital, and electronic medical record (EMR) databases. Databases in Europe are scarcer, integrated primary and secondary care data are rare, and claims with corresponding cost values are largely non-existent. Our objective was to explore the use of databases for HRU and cost analyses in EU-5 during the past 5 years.

Methods:

PubMed/MEDLINE and Embase were searched using controlled vocabulary and keywords: secondary care, health resources/utilisation, databases, and EU-5 (Great-Britain (GB), France, Germany, Italy, and Spain) between 01/01/2011 and 31/12/2015. Abstracts were then limited to studies that included secondary care HRU outcomes. Data abstracted included objective, type of data source, cost analysis performed, design, and detailed HRU categories.

Results:

A total of 146 abstracts were initially retrieved, of which 48 (33%) met inclusion criteria. Twenty-one studies were conducted in GB, 12 in Italy, 8 in Germany, 5 in France, and one in Spain. The type of database was country-dependent. GB studies predominantly used EMR: CPRD (11), CPRD+HES (2) and THIN (3). Italian studies mainly used local/regional authority databases (7). Sources in Germany were widespread including EMR (2), claims (1), and insurance databases (2). The most frequent source in France was the PMSI national hospital database (3). 21% of studies performed linkage with other database(s), 67% transferred HRU to cost, and 48% compared outcomes in different cohorts. The most
frequently listed HRU categories were inpatient stays (79%), specialist visits (54%), and pharmacotherapy (46%).

**Conclusions:**

This sample of studies across EU-5 provides insight into how the use of databases depends on each country’s health system, and the existence of initiatives to make data available for research. In the absence of insurance claims, a particular challenge in European health care research remains the generation of reliable cost estimates.
**List of Articles Reviewed**


