THE IMPACT OF EMERGING MARKETS ON THE PHARMACEUTICAL INDUSTRY

M. Tannoury; and Z. Attieh
American University of Science and Technology, Beirut, Lebanon

Emerging markets are considered nowadays the “Promised Land” for pharmaceutical industries. Although a clear-cut definition of these markets is not yet available, *Forbes* magazine along with other economists define them as developing prosperous countries. In these countries, an investment is expected to result in higher income despite the high risks. Qualifying a market as emerging is not solely based on the country’s economic status but rather on a series of criteria making the definition relative to each. Jim O’Neill, retired chairman of Goldman Sachs Asset Management, coined the names of the 2 leading economies of emerging markets into 2 acronyms. BRICS countries (Brazil, Russia, India, China, and later South Africa) emerged first and were followed years later by MIST countries (Mexico, Indonesia, South Korea, and Turkey) as the second wave of tiers countries joining emerging markets. In the last 5 years, sales of pharmaceuticals in BRICS and MIST markets doubled, reaching a share of ~20% globally. This shift stems from the huge populations of the concerned societies, an increasing prosperity, and life expectancy. In addition, companies are suffering from a flattened growth rate in developed markets, the expiration of >40% of patents leading to the up-selling of cheaper generic drugs, and the existing tight regulations. However, Big Pharma needs to be cautioned regarding these emerging markets. Pharmaceutical companies wanting to expand in these emerging opportunities have to tailor their strategies according to the developing pace of each country. These communities are in need of drugs against infectious and communicable diseases such as sexually transmitted diseases. They are ready-to-exploit territories for the innovative products of pharmaceuticals. However, with the increase in weight and longevity, a change of lifestyle is slowly taking place accompanied by a shift in the disease trends. A disproportionately fast rise in the incidence of noncommunicable diseases such as cardiovascular illnesses, diabetes, and cancers is noticed in emerging markets, mimicking the pattern of their Western counterparts. The incidence of diabetes and oncologic diseases is expected to grow by ≥20% in the next 5 years. This could be viewed as a mixed blessing, as pharmaceutical industries will be able to sell their global products in these new markets as well. Industries face challenges to conquer emerging markets grouped into 3 categories: infrastructure development, cost-containment policies, and value-driven drug evaluation. To overcome these hurdles, new strategies need to be adopted by pharmaceutical companies. Adequate tailoring and gain in market are among the top strategies to be considered.
Abstract

Conclusions: Essentially, we found it possible to use Archetypes and Templates to integrate a test set of intensive care data from 2 systems. By applying the openEHR approach for data modeling and integration, detailed clinical models can be used for tasks such as automated constraint checking, error reporting, data persistence, and querying. Although medical scores such as the Glasgow Coma Scale were a good fit for openEHR, voluminous data such as vital signs and ventilation data needed some workarounds to work properly. Especially, the demand of archetypes to be explicit about the meaning of each data element might be problematic in some data integration scenarios. On the one hand, this might be considered an advantage, as it forces EDW developers and system analysts to work thoroughly. On the other hand, this constraint might prevent pragmatic solutions when a fast integration cannot be achieved or interpretation of data can be conducted by the end-users. Although this work illustrates some of the strengths and restrictions of the openEHR approach for data integration tasks, our methodology is limited by the number of used clinical concepts. A possible next step is the investigation of the implications of openEHR-based information retrieval and the semantic interpretation of data.

Key words: clinical information systems, data warehousing, detailed clinical models, health care analytics, openEHR, secondary use.

Disclosure of Interest: None declared.

References


QUALITY MANAGEMENT—NEW PERSPECTIVES FOR MEDICAL DATA MANAGER

A. Haendel and G. Michelson
University of Erlangen–Nuremberg, Erlangen, Germany

Increasingly, hospitals and other players in the health care sector will inevitably compete in terms of quality. Interinstitutional and cross-sectoral quality assurance has been pushed forward during recent years. Institution-related outcomes are published and accessible to the public. Due to new health laws, in the near future, quality results of hospitals will not only be decisive for reimbursement increases or price reductions of the remuneration but will also be a crucial factor for a hospital’s survival. Hospitals that are not able to get quality deficiencies under control may lose their public supply mandate. Thus, the outcome of hospitals should be measured on the basis of predefined quality indicators to reach the objectives described earlier. Key indicators are, on the one hand, measures of medical performance. In particular, these include, for example, the type and numbers of surgical procedures as well as surgical complications in a certain time period. Also included are structural statistics about continuous medical education such as number of passed training courses for medical doctors and nurses. Moreover, information about patient safety are key indicators for quality assurance. Patient safety indicators, for example, are the number of patient falls and side effects of medication. These parameters have to be registered in a structured form and in a fixed frequency. The method to provide these indicators is a continuous comprehensive quality management, including capturing and monitoring of all relevant data. This requires the establishment of a professional operating system gaining all necessary figures in daily clinical routine. Health information management