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Titolo tesi: "Data harmonization in health care: integrating public health data for epidemiological purposes"

ABSTRACT

Open unified epidemiological data are of incredible esteem for crisis readiness and reaction, understanding illness movement through a general population, and building measurable and impulsive disease models that empower determining. However, obtaining and utilizing such data is a troublesome process. As in numerous cases of many countries, the epidemiological data are represented in different styles across numerous institutions. Therefore, the need for better data sharing mechanisms and data that can interact with one another is critical, especially in nations with weak health systems. When attempting to get credible and practical epidemiological data, there are a number of significant obstacles to overcome. The paper generally, proposes a solution for unifying and presenting epidemiolocal information of Kurdistan region of Iraq (KRI), by optimizing and implementing a unified web-based health information system of District Health Information Software 2 (DHIS2). KRI would be able to overcome several core problems of collecting health information across the region in various health institutes by deploying the DHIS2; including, 1) different data collection platforms (locally), 2) different type of data collected, 3) different reporting formats, and 4) inconsistent illness identification and classification. The main aim of the study is to present data in a unified structure and propose an effort saving method for cleansing, translating, mapping, and bulk importing locally collected and stored health data from different databases into the DHIS2 system using Pentaho Data Integration tool. Consequently, if the proposed system was to be implemented throughout the KRI region, public health analysis and epidemiological, and informatics work would be significantly advanced, resulting in improved public health decision-making skills.