The role of data sources in Real World Evidence: claims database versus electronic health records

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Real World Evidence (RWE) is based on clinical information of patients as they access their routine medical care.

In Italy, data useful to this end are mainly available in the regional health information systems (HIS), which were established for administrative purposes, and specifically for reimbursement of health services to the providers. All medical services issued to the resident population are registered electronically and collected in regional claim databases, comprising hospital admissions, emergency room visits, specialist ambulatory care, and drugs claimed in public and private pharmacies and delivered by hospital pharmacies at discharge. Individual patient records are routinely anonymised and can be linked between them, drawing a complete picture of all health care issues referring to a single patient over time.

Electronic Health Records, another important data source for RWE, are not systematically collected in Italy to date. Yet, since 1998 the Italian College of General Practitioners has been creating a network of general practitioners (GPs) who gather the data referring to every-day medical services and health claims of their patients on a voluntary basis. To date over 900 GPs from all over Italy actively take part in the network and feed the system with their electronic health records. Similarly, clinical records referring to the paediatric population are being gathered in PEDIANET.

This presentation will give an overview of the main data sources, outline the pro's and con's of the two different types of data source and discuss their usefulness and limitations to the ends of RWE.