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Record Linkage Project Process Model

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Objectives

In April 2015, a Working Group on Record Linkage was created at Statistics Canada with the objective of achieving a common understanding of the concepts and processes involved in record linkage projects at Statistics Canada.

Approach

A generic record linkage process model was mapped to reflect the general practices and activities involved in record linkage at Statistics Canada. The model was developed with a view for more general use by other statistical agencies involved in record linkage. It was built on the Generic Statistical Business Process Model v5.0 developed by the Joint UNECE/Eurostat/OECD Work Session on Statistical Metadata (METIS) for survey purposes. It also builds on international models of record linkage from Australia and the United States as well as record linkage methodology used at Statistics Canada. In addition, it was informed by the relevant legal and policy frameworks that govern all of Statistics Canada statistical activities. Over one hundred people involved in all aspects of record linkage at Statistics Canada were consulted during this process.

Results

An activity-oriented Record Linkage Project Process Model was drafted and proposed as a standard for the agency. It breaks down the record linkage process into three meta-phases: project planning, record linkage, post-linkage activities. Each meta-phase is further divided into phases and sub-phases that describe the activities of the record linkage project from specification of needs to project close-out and evaluation. An additional feature of the model is a description of the outcome of each phase that can be used as a milestone marker or as a gateway to the next phase.

Conclusion

As a descriptive model, the Record Linkage Project Process Model will inform management on the range of activities related to a record linkage project that go well beyond the function of matching records between two data files. It can also be used as a prescriptive model that will provide guidance to individuals engaging in a record linkage project.

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