

Consensus statements for best practices when using administrative data for rheumatic disease research and surveillance

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Aim

Administrative databases represent a viable resource for rheumatic disease surveillance and research; we aimed to develop best practice, consensus statements for their use in this regard.

Methods

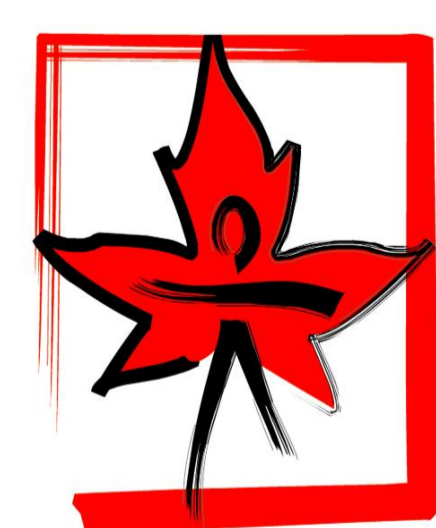
52 individuals with diverse expertise in the use of administrative data participated in a 2-day workshop. 8 months prior, participants were organized into 3 working groups and conducted literature reviews on the following: *case definitions*; *methods*; and *co-morbidity/outcomes*. At the workshop, consensus techniques were used to create endorsed statements.

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Results

13 consensus statements were endorsed.

Case definitions

Case definitions for rheumatic disease should be justified based on purpose, validity, and feasibility; validation studies should adhere to published guidelines on their conduct and reporting; and limitations of administrative data for case ascertainment should be acknowledged.

Methods

Confounding by indication must be addressed; appropriate methods to address other common sources of confounding and bias should be used; exposure risk windows should be clearly defined and justified; and limitations of administrative data should be acknowledged.

Co-morbidity/outcomes

•For osteoporosis, diagnostic codes should not be used alone because of low sensitivity. Hip fractures can be accurately identified using hospital discharge data, while fractures not requiring hospitalization can be identified by combining physician billing diagnoses and procedure codes.

•For vertebral fractures, additional research is needed.

•For cancer, exclusive of cancer registries, an algorithm with good sensitivity and excellent specificity should be chosen in a comparable population. Implications of an imperfect case definition should be discussed

Results Cont.

Co-morbidity/outcomes cont'd

•For infections, hospitalization diagnoses can be used to ascertain serious bacterial infections. Current data is not sufficient to recommend administrative data to identify opportunistic infections.

•For cardiovascular disease, hospitalization data can be used to ascertain acute myocardial infarction, but there are significant limitations for congestive heart failure.

•Administrative data can be used to identify kidney disease requiring dialysis. Current data do not support using hospitalization data to identify kidney disease as a co-morbidity or outcome.

Conclusions

Our recommendations are consistent with other guidelines (e.g. ISPOR report, EULAR Points paper). We have addressed additional issues, including Canada-specific details. Ongoing work involves the dissemination of these statements, whose usefulness and implications extend beyond Canada's borders.