

QUADAS-2 (adapted for validation of AECOPD recording in healthcare databases review)

Domain 1: Patient selection

A. Risk of bias

- Was a consecutive or random sample of patients enrolled?
- Was a case-control design avoided?
- Did the study avoid inappropriate exclusions?

B. Concerns regarding applicability

- Were patients from a single EHR database that comprised patients from one specific setting (e.g. primary or secondary care only patients)?
- Were patients aged 35 years or more (COPD population)?

Domain 2: Index test(s)

A. Risk of bias

- Was the AECOPD detection algorithm designed without knowledge of the result of the reference standard (in the final validated population)?

B. Concerns regarding applicability

- Were specific clinical codes used to identify patients (i.e. a free text search wasn't used as part of patient identification)?

Domain 3: Reference standard

A. Risk of bias

- Is the reference standard likely to correctly classify the target condition?
- Were the reference standard results interpreted without knowledge of the index test?

B. Concerns regarding applicability

- Was there confirmation of airways obstruction using spirometry?
- Was diagnosis confirmed by a physician reviewing the patient's medical record?
- Did more than one physician review the medical record to confirm diagnosis and was there strong agreement between the reviewing physicians?

Domain 4: Flow and timing

A. Risk of bias

- Did all patients receive a reference standard?
- Did patients receive the same reference standard?
- Were all patients included in the analysis?