

SUPPLEMENTAL MATERIAL

Search strategy

Ovid (Embase, MEDLINE, Global Health)

((risk stratification) OR (stratification) OR (risk prediction) OR (predicting) OR (risk score) OR (risk index) OR (risk model) OR (algorithm) OR (predictive model) OR (adjusted clinical groups) OR (hierarchical condition categories) OR (charlson comorbidity index) OR (rxrisk) OR (case management) OR (care coordination) OR (guided care) OR (anticipatory care) OR (telemonitoring))

AND

((primary care) OR (general practice) OR (family practice) OR (primary health care) OR (GP) OR (FP) OR (family doctor) OR (health centre) OR (public healthcare) OR (healthplan) OR (medicaid) OR (medicare))

AND

((mortality) OR (death) OR (admission) OR (hospital admission) OR (hospitalisation) OR (hospitalization) OR (emergency admission) OR (unscheduled admission) OR (unplanned admission) OR (unplanned hospitalisation) OR (re-admission) OR (readmission) OR (utilization) OR (utilisation) OR (costs))

NOT

((cancer) OR (sepsis) OR (cardiovascular) OR (heart failure) OR (myocardial infarction) OR (atrial fibrillation) OR (gastrointestinal) OR (hepatobiliary) OR (pulmonary) OR (asthma) OR (covid) OR (dementia) OR (alzheimers) OR (parkinsons) OR (delirium) OR (migraine) OR (fracture) OR (arthroplasty) OR (hiv) OR (liver disease) OR (cirrhosis) OR (back pain) OR (acute kidney injury) OR (kidney failure) OR (AKI) OR (obesity) OR (mental health) OR (depression) OR (anxiety) OR (psychosis) OR (suicide) OR (genetic) OR (in-hospital) OR (inpatient) OR (surgical) OR (perioperative) OR (peri-operative) OR (systematic review) OR (meta analysis) OR (meta-analysis) OR (protocol))

Discovered: 5648, 18/7/23

After duplicates removed: 3897

Fields: title, original title, synonyms, subject headings

Language and date restrictions: None

Risk of bias

Seventeen publications were identified as being at high risk of bias in at least one domain. Only 3 publications fulfilled the criteria for an overall low risk of bias. The risk of bias in the remainder was unclear due to inconsistent reporting particularly in the analysis domain.

All studies displayed a low risk of bias in the participant and outcome domains - in part due to inclusion criteria for our review. Concerns regarding applicability of the study outcome measures were identified for 6. These were each appraising the ability of a model to predict healthcare costs in the US, a nation that exists as a statistical outlier for healthcare costs as a proportion of gross domestic product. Forty-eight of the 51 included studies were classed as low risk of covariate bias, with the remaining 3 providing too little information to grade. Risk of bias in the analysis domain was unclear for 45 of the included studies due to a lack of transparency regarding handling of missing data, overfitting and weighting.