

Comparison of prioritisation algorithms for the selection of patients for medication reviews in the emergency department: a cross-sectional study

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The modified version of Assessment of Risk Tool used in the study

Patient Profile	
Item	Score
Age > 75 years	10
No registered general practitioner	5

Patient Encounter	
Item	Score
>4 emergency department admissions in the previous 12 months	8
>2 outpatient visits to different specialities in the previous 6 months	8
Admitted patient under care of haematology or renal service	6
Admitted patient with prior discharge in previous 7 days	4
Admitted patient with prior discharge in previous 30 days	2

Clinical Profile – Patients With Chronic Diseases	
Item	Score
Admitted patient with diabetes	4
Admitted patient with chronic obstructive pulmonary disease	4
Admitted patient with congestive heart failure	4
Admitted patient with cerebrovascular disease	4

High-Risk Medications	
Item	Score
>8 regular medications	10
≥1 antiepileptic medications	2
≥1 anticoagulant medications	2
>3 cardiovascular medications	2
≥1 antidiabetic medications	2
≥1 opioid medications	2
≥1 TDM medications (gentamicin, tobramycin, amikacin, vancomycin, phenytoin, and digoxin)	2

Laboratory Values	
Item	Score
White blood cell count of $< 3 \times 10^9$ /L in past 5 days or neutrophil count of $< 1.5 \times 10^9$ /L in past 5 days	4
Potassium concentration of < 3 or > 5 mmol/L in past 5 days	10
Sodium concentration of < 125 or > 155 mmol/L in past 5 days	10
eGFR < 30 mL/min or serum creatinine > 200 µmol/L in past 5 days	8
An INR of > 3.5 in past 5 days or aPPT of > 100 sec in past 5 days	10
TDM medication concentrations in past 3 days, gentamicin > 1.0 µg/mL, tobramycin > 1.0 mg/mL, amikacin > 1.0 mg/L, vancomycin > 25 mg/L, phenytoin > 80 µmol/L, or digoxin > 2.0 nmol/L	10
A positive Clostridium difficile toxin culture in past 5 days	2

TDM = therapeutic drug monitoring, eGFR = estimated glomerular filtration rate, INR = International Normalised Ratio, aPPT = activated partial thromboplastin time