

Clinical reviews

Our panel of GPs review recent research papers in their specialist areas that may influence the way you practise

Reviewers

Addiction

Dr Jez Thompson
GP Leeds and Clinical
Director Lifeline (North)
RCGP regional lead
substance misuse
RCGP/British Liver Trust
clinical champion for
liver disease

Cardiovascular disease

Dr Peter Savill
GP Watercress Medical,
Medstead
GPwSI Cardiology,
Southampton

Diabetes

Dr Matthew Lockyer
GP with an interest in
diabetes, Suffolk

Dr Peter Savill
GP Watercress Medical,
Medstead
GPwSI Cardiology,
Southampton

Mental health

Dr Phillip Bland
GP with an interest
in mental health,
Dalton-in-Furness

Obstetrics and gynaecology

Dr Chris Barclay
GP with an interest
in O&G, Suffolk

Paediatrics

Dr Chris Barclay
GP with an interest
in O&G, Suffolk

Sexual health

Dr Richard Ma
GP with an interest
in sexual health and
NIHR Research Fellow,
Imperial College,
London

Smoking cessation

Dr Jez Thompson
GP Leeds and Clinical
Director Lifeline (North)
RCGP regional lead
substance misuse
RCGP/British Liver Trust
clinical champion for
liver disease

Urology

Dr Jonathan Rees
GPwSI Urology, Bristol

Cardiovascular disease

New electronic screening tool aids detection of FH

TARB-Ex, a new electronic screening tool, appears to be an efficient and cost-effective method for detecting patients at risk of familial hypercholesterolaemia (FH), a study from Western Australia has found.

The medical records of 3,708 patients seen between 2012 and 2014 at a large general practice in Perth were retrospectively screened for potential FH risk using TARB-Ex. Patients had made at least three visits to the practice during the previous two years. TARB-Ex uses Structured Query Language to extract routine clinical information from electronic medical records to derive a Dutch Lipid Clinic Network Criteria (DLCNC) score. Patients with a DLCNC score ≥ 5 are deemed to be at potential risk of FH.

Electronic extracts of medical records for those patients identified as potentially at risk of FH through TARB-Ex were reviewed by a GP and a lipid specialist. High-risk patients were recalled for clinical assessment to determine phenotypic FH diagnosis. The performance of TARB-Ex was evaluated against a manual record

review by a GP in the subset of 360 patients with raised cholesterol (i.e. total cholesterol ≥ 7 mmol/L or LDL cholesterol ≥ 4.0 mmol/L).

Overall, 32 patients with a DLCNC score ≥ 5 were identified by electronic screening compared with 22 by GP manual review.

Ten of the 32 patients were considered at high risk of FH and recalled for clinical assessment. Six of seven patients who attended for clinical assessment were diagnosed with phenotypic FH.

TARB-Ex showed high sensitivity 95.5% (95% CI: 77.2-99.9%) and specificity 96.7% (95% CI: 94.3-98.3%). Although the negative predictive value was high 99.7% (95% CI: 98.3-100%), the positive predictive value was 65.6% (95% CI: 46.9-81.4%).

It took ten minutes to carry out electronic screening compared with 60 hours for manual review.

Patients with FH need to be identified and treated early as they are at significantly elevated risk of premature coronary artery disease. FH is relatively easy to detect and treat but only an estimated 10% of FH cases are currently detected. Primary care is ideally placed to screen for FH.

The authors concluded that: 'Routine electronic screening combined with clinical follow-up with a GP may offer a time-effective and cost-effective systematic approach to identifying new index cases based in primary care.'

They plan to evaluate TARB-Ex across multiple practices and electronic medical record platforms.

Such studies should inform the development of a similar tool for UK practice perhaps based on the Simon Broom criteria.

DR PETER SAVILL

Troeng L, Arnold-Reed D, Ping-Delfos W et al. A new electronic screening tool for identifying risk of familial hypercholesterolaemia in general practice. *Heart* 2016;102:855-861

