

# The preliminary development and testing of a global trigger tool to detect error and patient harm in primary-care records

## ABSTRACT

Background: A multi-method strategy has been proposed to understand and improve the safety of primary care. The trigger tool is a relatively new method that has shown promise in American and secondary healthcare settings. It involves the focused review of a random sample of patient records using a series of “triggers” that alert reviewers to potential errors and previously undetected adverse events. Aim: To develop and test a global trigger tool to detect errors and adverse events in primary-care records. Method: Trigger tool development was informed by previous research and content validated by expert opinion. The tool was applied by trained reviewers who worked in pairs to conduct focused audits of 100 randomly selected electronic patient records in each of five urban general practices in central Scotland. Results: Review of 500 records revealed 2251 consultations and 730 triggers. An adverse event was found in 47 records (9.4%), indicating that harm occurred at a rate of one event per 48 consultations. Of these, 27 were judged to be preventable (42%). A further 17 records (3.4%) contained evidence of a potential adverse event. Harm severity was low to moderate for most patients (82.9%). Error and harm rates were higher in those aged >60 years, and most were medication-related (59%). Conclusions: The trigger tool was successful in identifying undetected patient harm in primary-care records and may be the most reliable method for achieving this. However, the feasibility of its routine application is open to question. The tool may have greater utility as a research rather than an audit technique. Further testing in larger, representative study samples is required.