

PP293 Tiered Rapid Response Products In The Evidence Directorate Of Healthcare Improvement Scotland

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Introduction. The Evidence Directorate produced eighteen rapid responses during the early stages of the COVID-19 pandemic. To address this need while retaining methodological integrity a three-tiered system for rapid responses was developed.

Methods. All rapid responses answer specific research questions rather than broad health system issues. The appropriate level varies depending on the time and resource available, and the requester's need:

- Level 1 – Reference List (turnaround 4–8hrs, delivered by an information scientist): a quick search for best available evidence, and results presented as a reference list.
- Level 2 – Summary of evidence (turnaround 1–2 days, delivered by an information scientist): a quick search and brief summary of the best available evidence.
- Level 3 – Synthesis of evidence (turnaround 3–7 days, delivered by a Health Services Researcher or Health Economist): a quick search and then a narrative summary and synthesis of the best available evidence, with a brief appraisal of validity, reliability and generalizability.

Results. Since the launch of the three-tiered model in September 2020 there have been five rapid responses. Two were Level 2 products and three were Level 3 products.

Conclusions. The Evidence Directorate of Healthcare Improvement Scotland now has an agile rapid response product which can be applied to a variety of settings and needs. This was borne out of a need for a rapid turnaround and evidence synthesis during the COVID-19 pandemic.

PP296 Patient Involvement In An Assessment Of The Management Of Sudden Onset Severe Headache Presenting To The Emergency Department

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Introduction. Sudden onset severe headache is usually caused by a primary headache disorder but may be secondary to a more serious problem, such as subarachnoid hemorrhage (SAH). Very few patients who present to hospital with headache have suffered a SAH, but early identification is important to improve patient outcomes. A systematic review was undertaken to assess the clinical effectiveness of different care pathways for the management of headache, suspicious for SAH,

in the Emergency Department. Capturing the perspective of patients was an important part of the research.

Methods. The project team included a patient collaborator with experience of presenting to the Emergency Department with sudden onset severe headache. Three additional patients were recruited to our advisory group. The patient's perspective was collected at various points through the project including at team meetings, during protocol development and when interpreting the results of the systematic review and drawing conclusions.

Results. Patients were reassured by the very high diagnostic accuracy of computed tomography (CT) for detecting SAH. Patients and clinicians emphasized the importance of shared decision making about whether to undergo additional tests to rule out SAH, after a negative CT result. When lumbar puncture was necessary, patients expressed a preference to have it on an ambulatory basis; further research on the safety and acceptability of ambulatory lumbar puncture was recommended.

Conclusions. Patient input at the protocol development stage helped researchers understand the patient experience and highlighted important outcomes for assessment. Patient involvement added context to the review findings and highlighted the preferences of patients regarding the management of headache.

PP297 Management Of Sudden Onset Severe Headache Presenting To The Emergency Department: A Systematic Review

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Introduction. Sudden onset severe headache is usually caused by a primary headache disorder but occasionally is secondary to a more serious problem, such as subarachnoid hemorrhage (SAH). Guidelines recommend non-contrast brain computed tomography (CT) followed by lumbar puncture (LP) to exclude SAH. However, guidelines pre-date the introduction of more sensitive modern CT scanners. A systematic review was undertaken to assess the clinical effectiveness of different care pathways for the management of headache in the Emergency Department.

Methods. Eighteen databases (including MEDLINE and Embase) were searched to February 2020. Studies were quality assessed using criteria relevant to the study design; most studies were assessed using the QUADAS-2 tool for diagnostic accuracy studies. Where sufficient information was reported, diagnostic accuracy data were extracted into 2 × 2 tables to calculate sensitivity, specificity, false-positive and false-negative rates. Where possible, hierarchical bivariate meta-analysis was used to synthesize results, otherwise studies were synthesized narratively.

Results. Fifty-one studies were included in the review. Eight studies assessing the accuracy of the Ottawa SAH clinical decision rule were pooled; sensitivity was 99.5 percent, specificity was 23.7 percent. The high false positive rate suggests that 76.3 percent SAH-negative patients would undergo further investigation unnecessarily. Four studies assessing the accuracy of CT within