

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

Neil Anand (neilp.anand@nhs.scot), Evan Campbell (evan.campbell@nhs.scot), Tracey Macgann, Karen Macpherson and Tomas Muniz

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

Ros Wade (ros.wade@york.ac.uk), Matthew Walton, Melissa Harden, Robert Hodgson, Alison Eastwood, James Storey, Taj Hassan, Marc Randall, Abu Hassan and John Williams

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

Ros Wade (ros.wade@york.ac.uk), Matthew Walton, Melissa Harden, Robert Hodgson, Alison Eastwood, James Storey, Taj Hassan, Marc Randall, Abu Hassan and John Williams

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

six hours of headache onset were pooled; sensitivity was 98.7 percent, specificity was 100 percent. CT sensitivity beyond six hours was considerably lower ($\leq 90\%$; 2 studies). Three studies assessing LP following negative CT were pooled; sensitivity was 100 percent, specificity was 95.2 percent. LP-related adverse events were reported in 5.3–9.5 percent of patients.

Conclusions. The evidence suggests that the Ottawa SAH Rule is not sufficiently accurate for ruling out SAH and does little to aid clinical decision making. Modern CT within six hours of headache onset (with images assessed by a neuroradiologist) is highly accurate, but sensitivity reduces considerably over time. The CT-LP pathway is highly sensitive for detecting SAH, although LP resulted in some false-positives and adverse events.

PP298 Scottish Health Technologies Group (SHTG) Adaptations: Utilizing Other Agencies' HTAs In Scotland

Neil Anand (neilp.anand@nhs.scot), Evan Campbell, Tracey Macgann, Joanna Kelly and Julie Calvert

Introduction. Health Technology Assessment (HTA) is an important but time-consuming process to inform decision-making. Following requests from stakeholders in Scotland to provide advice on technologies that had recently undergone HTA in other jurisdictions, SHTG recognized a gap in their 'product menu'. Colleagues within the SHTG team devised a mechanism through which an original HTA could be adapted for Scotland, taking into account local contextual factors.

Methods. SHTG Adaptations comprise the following: i) assessment of the original HTA using the EUnetHTA HTA Adaptation Toolkit and checklist; ii) draft Adaptation using the outcome of the assessment and contextual information for Scotland; iii) consultation group of relevant Scottish clinicians is provided with the original HTA and draft SHTG Adaptation; iv) modified Delphi approach (max. three rounds of questioning) is used to ascertain the relevance of the original HTA to Scotland; v) the Adaptation is submitted to SHTG Council for endorsement.

Results. SHTG Adaptations have a timeline of 2–3 months, three have been published since this product was launched. The process has run smoothly with excellent clinical engagement from across NHS Scotland. Key learning focusses on the role of the SHTG Council (i.e. appraisal committee) in this process and in handling of expert opinion of evidence which has already been appraised by another agency.

Conclusions. The SHTG Adaptation is a new product which offers a timely assessment and utilization of an HTA from another agency.

PP299 A Framework And Analysis Assessing The Impact Of Patient-Centered Outcome Evidence In HTA Appraisals

Kate Halsby (kate.halsby@pfizer.com), Bryony Langford, Anna Pagotto, Harriet Tuson, Shuk-Li Collings, Daniela Goncalves-Bradley, Najeeda Yasmeen and Jessica Burton

Introduction. The importance of patient-centered outcome (PCO) evidence is increasingly recognized, but its inclusion in Health Technology Assessment (HTA) submissions remains inconsistent. We explored the impact of PCO evidence on HTA decision-making.

Methods. A framework was developed to assess the impact of PCO evidence (excluding EQ-5D) on HTA appraisals. An impact rating was determined by reviewing company, committee and Evidence Review Group (ERG) opinion. This was applied to publicly available appraisal documents (National Institute for Health and Care Excellence [NICE]: 8; Scottish Medicines Consortium [SMC]: 2) in a pilot study. The framework was then refined and applied to a larger dataset.

Results. PCO evidence had 'substantial impact' in 3/8 NICE and 1/2 SMC appraisals, and 'some impact' in those remaining. PCO evidence informed the cost-effectiveness model in 2/8 NICE and 1/2 SMC submissions, and was considered superior to EQ-5D evidence in one NICE and one SMC submission. The ERG considered PCO evidence relevant to decision-making in 5/8 NICE appraisals. PCO evidence was mentioned in guidance for 7/10 appraisals (deemed relevant in 5/10). In one assessment, committee comments were notably more favorable than ERG comments. Larger dataset analysis results provided further insights to the pilot study.

Conclusions. The framework allows a systematic approach to evaluating the impact of PCO evidence on HTA appraisals.

BL, AP, DGB and NY are employees of Symmetron Ltd, which received funding from Pfizer UK in connection with the development of this manuscript. KH, HT, SLC and JB are employees of Pfizer UK. This study was sponsored by Pfizer UK.

PP353 Patient-Reported Outcomes: What Matters For Brazilian Breast Cancer Patients?

Aline Silveira Silva (aline.silveira@saude.gov.br), Ana França, Matheus Piccin Padilla, Luana Schroeder Macedo, Carlos Magliano and Marisa Santos

Introduction. Patient-Reported Outcomes (PRO) are directly reported by the patient without interpretation of the patient's response by a clinician or anyone else and pertains to the patient's health, quality of life, or functional status associated with health care or treatment. It can provide patients' perspectives regarding treatment benefit and harm, directly measure treatment benefit and harm beyond survival, and are often the outcomes of most importance to patients. This study aims to analyze outcomes reported by Brazilian women diagnosed with breast cancer and rank the most important attributes for these patients.

Methods. Observational study composed of interviews and questionnaires applied to a convenience sample of women diagnosed with breast cancer. The instruments were developed taking into account the literature on the topic and the expertise of specialists. The questionnaire was built with close-ended questions using multiple-choice and a Likert scale, in order to rank the attributes and outcomes found in the interviews.

Results. The total sample was composed of 65 women diagnosed with breast cancer. Twelve women were interviewed, in September