# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (see an example) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

## **ARTICLE DETAILS**

TITLE (PROVISIONAL)	Clinical and imaging services for TIA and minor stroke– results of two surveys of practice across the UK
AUTHORS	Wardlaw, Joanna; Brazzelli, Miriam; Shuler, Kirsten; Quayyum, Zahidul; Hadley, Donald; Muir, Keith; McNamee, Paul; DeWilde, Janet; Dennis, Martin; Sandercock, Peter

## **VERSION 1 - REVIEW**

REVIEWER	Graham Venables Consultant Neurologist Sheffield Teaching Hospitals NHS FT
	UK
REVIEW RETURNED	16-Jun-2013

- The reviewer completed the checklist but made no further comments.

REVIEWER	James Burke
	Assistant Professor
	University of Michigan Department of Neurology
	United States
	No competing interests.
REVIEW RETURNED	02-Jul-2013

GENERAL COMMENTS	Brazzelli et al present the results of two surveys targeting the leads of clinical and radiologic leads of practices offering acute stroke outpatient care in the UK in 2011. It appears that the surveys were reasonably designed, reasonably targeted and obtained an acceptable response rate. They uncovered a number of interesting findings and the survey substantially clarified the nature of outpatient stroke provision in the UK.
	I do not see any major methodlogic or interpretation issues. Several small comments for the authors' consideration:
	background - A clarifying comment about the nature of the NHS tariffs, particularly in regards to MRI, would be helpful to readers unfamiliar with this policy.
	methods - For those unfamiliar with the structure of healthcare provision in the UK, a statement clarifying what proportion of stroke care-givers were targeted by the survey dissemination mailings would be helpful. I believe that the authors intended to target all clinical an radiologic

service leads in the UK, if so, it would be helpful to clarify that point — it isn't merely that service leads were "eligible" for the survey, but rather that the goal was to survey all of them. What, if any, stroke services may not have been targeted by the survey dissemination strategy?

### results

- Is is possible to crudely estimate the proportion of annual stroke visits in the UK that attended a clinic that responded to the survey by estimating the number of appointments per year per clinic, summing over all clinics and comparing to the national estimate? This may shed some light on the extent to which the survey achieved its goal of being nationally representative.

#### discussion

- The routine use of MRI a month after CT and carotid imaging is interesting and surprising. Were they any other survey questions that allow the authors to speculate about the perceived purpose of these MRIs? As the authors' point out, given that DWI signal has likely resolved in many such patients, the diagnostic sensitivity is likely limited. Similarly, it doesn't seem that MRI would have utility for clarifying the vascular territory if a CEA decision has already been made on the basis of CT + clinical evaluation + dopplers. So, if MRI is not being used for its increased sensitivity or to inform CEA decision-making, what is it being used for?

## **VERSION 1 – AUTHOR RESPONSE**

Reviewer: James Burke Assistant Professor University of Michigan Department of Neurology United States

No competing interests.

Brazzelli et al present the results of two surveys targeting the leads of clinical and radiologic leads of practices offering acute stroke outpatient care in the UK in 2011. It appears that the surveys were reasonably designed, reasonably targeted and obtained an acceptable response rate. They uncovered a number of interesting findings and the survey substantially clarified the nature of outpatient stroke provision in the UK.

I do not see any major methodlogic or interpretation issues. Several small comments for the authors' consideration:

### background

- A clarifying comment about the nature of the NHS tariffs, particularly in regards to MRI, would be helpful to readers unfamiliar with this policy.

Response: We have added details about tariffs on page 3. The additional payments are between £450 and £634 for triage of patients with ABCD2 score≥4 and initiation of treatment within 24 hours of referral, including scanning with MR DWI. This is equivalent to \$670-945 US.

### methods

For those unfamiliar with the structure of healthcare provision in the UK, a statement clarifying what proportion of stroke care-givers were targeted by the survey dissemination mailings would be helpful.

I believe that the authors intended to target all clinical an radiologic service leads in the UK, if so, it would be helpful to clarify that point — it isn't merely that service leads were "eligible" for the survey, but rather that the goal was to survey all of them. What, if any, stroke services may not have been targeted by the survey dissemination strategy?

Response: Yes we aimed to send the survey to all Stroke Service leads and all Radiology Departments. Please see details above in response to eritor and on page 4. Our questionnaire included questions about stroke patients that were assessed at the hospital but at other clinics, eg in acute receiving units or general medicine and therefore we think it unlikely that we have missed a major section of stroke prevention services. We have clarified this on page 4.

#### results

Is is possible to crudely estimate the proportion of annual stroke visits in the UK that attended a clinic that responded to the survey by estimating the number of appointments per year per clinic, summing over all clinics and comparing to the national estimate? This may shed some light on the extent to which the survey achieved its goal of being nationally representative.

Response: Thank you for the suggestion but we do not think that we can calculate this with any reliability from the numbers given in the survey responses. We think that our estimate of 45% response rate is correct based on the number of centres that we sent the survey to. The national estimate of the number of TIAs and minor strokes per year is based on surveys of two regions (Oxford and the Scottish Borders) and is not continuous nor is it clear how generalisable these are to the rest of the UK; additionally, clinic numbers are inflated by patients with stroke or TIA mimics which are included in the responses to our survey but not in any national statistics. Therefore any use of estimated annual stroke visits, etc, would be very speculative. Text not changed.

#### discussion

- The routine use of MRI a month after CT and carotid imaging is interesting and surprising. Were they any other survey questions that allow the authors to speculate about the perceived purpose of these MRIs? As the authors' point out, given that DWI signal has likely resolved in many such patients, the diagnostic sensitivity is likely limited. Similarly, it doesn't seem that MRI would have utility for clarifying the vascular territory if a CEA decision has already been made on the basis of CT + clinical evaluation + dopplers. So, if MRI is not being used for its increased sensitivity or to inform CEA decision-making, what is it being used for?

Response: We did not ask why MR was used after CT (or vice versa). We felt that the survey was long enough already. We speculate, based on discussion at national meetings and with colleagues, that the CT is requested at the same time as MR because the physician expects a delay to MR and wishes to exclude haemorrhage or tumour – having done that they then proceed to implement secondary prevention while waiting for the MR; by the time the MR is done, in most cases as the reviewer points out, it will be non-contributory and simply serves to inflate costs and block up radiological services. Comment added to page 9.