Reviewer’s report

Title: A comparison between reported staffing levels and the Department of Health staffing guidelines for stroke rehabilitation: A UK national survey.

Version: 2 Date: 12 November 2013

Reviewer: Cherry Kilbride

Reviewer’s report:

Major Compulsory Revisions:

Overall comment

• This paper aims to explore the ‘small proportion of stroke patients deemed appropriate by therapists’ for rehabilitation in the National Sentinel Stroke Audit (2010). The authors examine this concern is by comparing reported staffing levels with suggested staffing levels by the Department of Health. To me, here in lies a major problem for the authors, there are a myriad of suggested staffing levels, some assumed, some aspirational. It is well recognised that calculating ‘appropriate’ staffing levels is fraught with problems and none of the published figures are based on evidence. They represent the best approximation of experienced people in the field. In particular I have been unable to find any explanation for how the aspirational levels for staffing were established; there needs to be a stronger articulation of the weak underpinning of stated staffing levels in the article.

• The National Stroke Strategy staffing numbers for PTs and OTs also included assistant level professionals, has this been taken into consideration in the ATRAS survey? This could affect the comparisons drawn between the figures.

• While the authors do acknowledge in the discussion the ‘simplicity’ of their calculations (discussion section), it is my opinion that overall the case presented in the paper does not reflect the more nuanced and complex picture of the challenges surrounding therapy staffing, including accurate data collection. For instance, not all patients in every 10 beds will require each of the therapies (PT, OT and SLT); some patients will be receiving end of life care, some maybe awaiting placement, some may have none or minimal neurological deficits. Therapy input is different depending on case mix, and the stage of rehabilitation etc. I find it hard to understand how more OTs (2.1 WTE) and SLTs (2.0 WTE) are required than PTs (1.7 WTE) per 10 beds. This staffing configuration does not ring true to clinical practice. These figures are repeated in the conclusion.

• Table 1 gives a range of DH published staffing guidelines alongside reported staffing levels from the 19 responding units in the current study. Could the authors comment on why they did not use the actual median staffing levels from 2009 illustrated on p.27 of the NAO 2010 report? The authors draw on the April 2006 figures.

• While the authors do state some limitations of the data gathered in their survey,
for example the difficulty in engaging stroke unit staff to take part; the implications of what can be learnt from 19 in-patient units is not really articulated. How many of the 13,000 patients required therapy? The National Sentinel Stroke Audit (NSSA) (2010) which is well referenced in the paper has 200 participating sites and clearly articulates the therapy data upon which they draw is not 100% reliable. Although the NSSA is well-established national driver for improvement in stroke care, the 2010 audit was the first to try to collect the amount of therapy delivered in stroke rehabilitation. Furthermore, as currently written, the statement that therapists have expectations that are too low and the wording ‘deemed appropriate’ has been much debated by therapists across the country, culminating in a Therapy Consensus Conference hosted by the Royal College of Physicians in March 2012. There are changes being made to how data is collected from therapists in recognition of the problems that arose from the 2010 NSSA. This broader picture is not conveyed in the sentence in the last paragraph in the introduction that ‘...the therapist assessment of patient tolerance for treatment is too low’ and ‘a major review of therapy working practices’ is recommended are two separate points that should not just be joined together as one without further explanation. The latter point being to do with the amount of administration tasks therapists have to undertake daily, thereby cutting down time available for face to face treatment. Minor Essential Revisions:

• The title does not reflect the therapy staffing focus of the paper. The abstract conveys the content of the paper as written.
• Introduction: my NSSA (2010) reports gives a figure of 33% not 32% deemed appropriate for therapy, please check figures given
• Method
  o What was the professional/service user make up of the Advisory Panel of the 12 stroke specialists? What was the make up of the stroke practitioners who took part in the focus group?
  o What was the outcome of the pilot testing of the survey? Were changes made? Were the ten randomly selected stroke units included in the final recruitment of sites?
  o Spelling error in the sentence starting ‘Rather that…’ should it be ‘than’?
• Discussion section:
  o 1st sentence – should read the 2010 NSSA
  o Reference to [16] should be attributed to the RCP guidelines not NICE.
  o Last paragraph: – reference [16] is not the NICE guidelines but the RCP stroke guidelines.
• Table 3: please recheck figures of patients suitable for treatment for PTs and OTs. I have 74% and 69% respectively.

**Level of interest:** An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I represent the Chartered Society of Physiotherapy as the lead physiotherapist on the Intercollegiate Stroke Working Party at the Royal College of Physicians. I am also a past Chair of the Association of Chartered Physiotherapists in Neurology.