Visual assessment in acute stroke patients with reference to the National Stroke Service Model

Emma Kerr[‡], Rachael Calvey[*], Arvind Chandratheva[*], Alex Leff[*], Victoria Anne Nowak[*], Fion Bremner[*]
[‡]UCL Medical School
[*]National Hospital for Neurology and Neurosurgery (NHNN) and UCL Queen Square Institute of Neurology

1. Introduction

- Diagnosing stroke patients with visual symptoms enables them to access appropriate support[1].
- The National Stroke Service Model (May 2021) recommends assessment by appropriate specialists such as orthoptists within 72 hours[2].
- Selecting which patients should be assessed, how this assessment should be done and the rationale for the recommended timeframe are not specified by the model.
- This audit explores current practice for stroke inpatients at our Institution (NHNN).

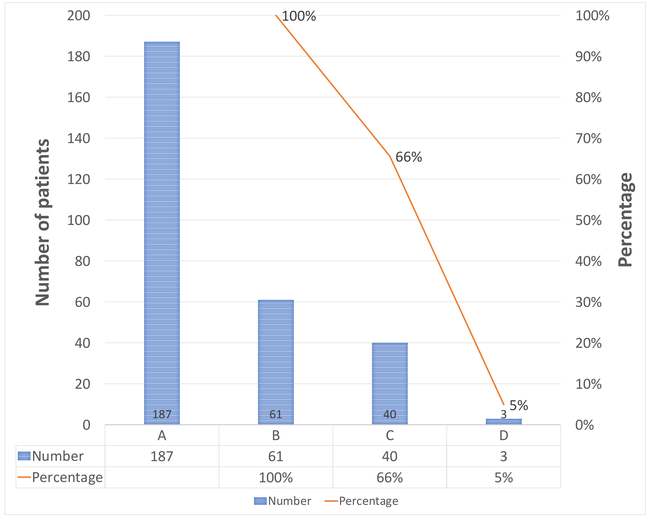
2. Methodology

- 187 electronic medical records were reviewed for new stroke patients presenting to the NHNN over an 8-week period (April 2021 onwards).
- We recorded whether a visual impairment was documented in the initial clerking or National Institute of Health Stroke Scale (NIHSS) Score.
- We reviewed whether the patient had a visual assessment by the therapy teams and whether they were referred for further assessment by an orthoptist or ophthalmologist.

3. Results

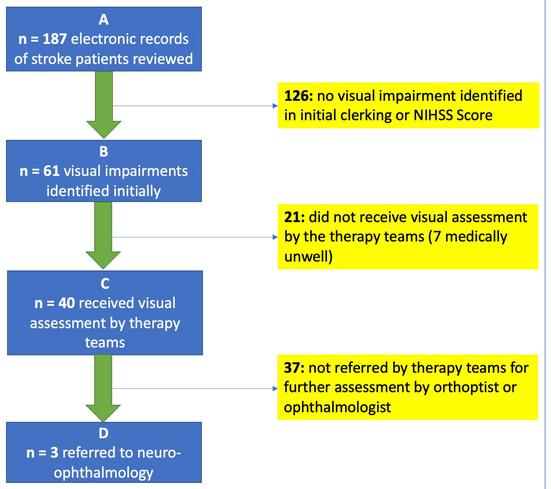
- 61/187 (32%) new stroke patients were identified to have visual impairment from the initial clerking or therapy team review.
- Of these, only three (5%) were referred for further assessment by the neuro-ophthalmology service.

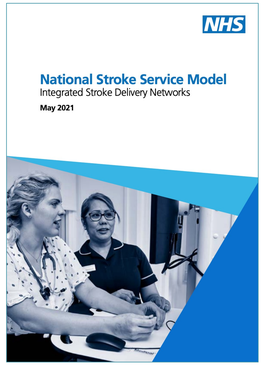
Figure 1: Bar graph showing the number of acute stroke patients with visual impairment, and the number of visual assessments and referrals.



Please see Figure 2 for key.

Figure 2: Flow chart summarising the number of stroke patients at our institution with new visual impairment, and how many of these completed a visual assessment with the therapy teams.





4. Discussion

- More evidence would be helpful to clarify the recommendation for early visual assessments in this guideline, particularly given the many other clinical challenges faced by some acutely unwell stroke patients.
- Our audit revealed a surprisingly low referral rate for neuro-ophthalmic follow-up assessment among patients with new visual impairment following their stroke.
- Orthoptic-led teaching has started at NHNN so staff in the stroke team are better informed about how to refer patients for further assessments.
- We plan to complete the cycle and reaudit to determine whether this teaching leads to an increase in referrals for further assessment by an orthoptist or ophthalmologist.

References
[1]Hepworth, L., Rowe, F., Walker, M., Rockliffe, J., Noonan, C., Howard, C. and Currie, J., 2016. Post-stroke Visual Impairment: A Systematic Literature Review of Types and Recovery of Visual Conditions. *Ophthalmology Research: An International Journal*, 5(1), pp.1-43.
[2]Lowe, D. and Powell, J., 2021. *National Stroke Service Model: Integrated Stroke Delivery Networks*. NHS England.

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