The National Early Warning Score 2 (NEWS2) – Elderly patients and training of nursing / allied healthcare professionals in using NEWS2

Editor – I read with interest, 'The inclusion of delirium in version 2 of the National Early Warning Score will substantially increase the alerts for escalating levels of care: findings from a retrospective database study of emergency medical admissions in two hospitals'[1] by Mohammed *et al* and 'The National Early Warning Score and the acutely confused patient'[2] by Bryan Williams. Being a geriatric medicine and general internal medicine higher specialist trainee, who has been working at the front lines and in the medical/surgical wards, my experiences resonate with the facts described in the above-mentioned articles. Although appearance of new confusion necessitates escalation of care among patients (≥85 years of age) with infection, there was a high prevalence of patients in this age group who did not have any evidence of underlying infection coinciding with development of new confusion.[3] Infection is a major cause of delirium[4] but other causes are as important to be considered and dealt with as well.[5] In addition to the challenges described by Mohammed *et al*,[1] one important issue to be recognised is staff (nursing and allied healthcare professionals (AHPs)) training to allow them to recognise delirium / new onset confusion in the elderly population (which is currently the main population cohort requiring medical attention) with or without background cognitive impairment. There must be a validated tool which nurses and AHPs should be able to use to recognise delirium / new confusion and then score that on the NEWS2 scale. One systematic review looked at 21 delirium screening tools described in 31 studies and found that confusion assessment method was the most used tool, with delirium rating scale giving best results in screening for delirium / new confusion.[6] Both screening tools require teaching and training of staff using them for optimal results.[6] Therefore, in order to streamline NEWS2's implementation, decrease false positive alerts/escalations and improve its outcomes, we must train our nursing/AHP staff to use a validated screening tool to identify delirium / new confusion. And for this purpose, we must utilise the expertise of our geriatric medicine colleagues (physicians, clinical nurse specialists and registered nurses). ■

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Acute neurology service

Editor – We read the article 'Hyperacute neurology at a regional neurosciences centre' with interest.[1] The experience of the St George's team in their first year of providing the service demonstrates the improvements in care that can be anticipated through the intensive involvement of neurology at the 'front door'.

Our own experience also supports the approach (though we use the term 'acute neurology service'). We hope this may also be of interest to units as it demonstrates that such systems can be both 'scaled up' and become embedded as a 'routine' method of care.

We have been running a 365 days-a-year, 7 days-a-week acute neurology service in Plymouth for almost 15 years. Last year we were proud to be finalists in the *Health Service Journal* awards for best Acute Services Redesign.

We found that this method of care reduced length of stay by 37% and the bed base by 46%. When we analysed the first 10 years of our service we found we had cared for approximately 20,000 patients. Our acute neurology admission avoidance clinics have been running for around 6 years and have cared for approximately 4,500 patients. They have mitigated the effects of the sustained rise of acute neurology referrals, with a sustained 30% reduction in admissions to the ward team and an increase in the zero length-of-stay rate from 25% to 40%.

We fully support the conclusions reached by the St George's team and agree that a proactive acute neurology model of care can have a transformative effect. Our experience of running an acute neurology service demonstrates these services remain both efficient and sustainable over a prolonged period of time. ■

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Venous thromboembolism

Editor – You recently published an article[1] summarising the new recommendations for medical inpatients within the updated National Institute for Health and Care Excellence (NICE) venous thromboembolism (VTE) prevention guidelines.[2] We welcome the opportunity to highlight a major concern with regards to these recommendations, which affect every patient over the age of 16 admitted to hospital.

The guidelines recommend offering 'pharmacological VTE prophylaxis for a *minimum of 7 days* to [medical and the majority of surgical patients] whose risk of VTE outweighs their risk of bleeding.' In reply to concerns raised at consultation, it was stated that the NICE committee agreed that there was limited evidence for the most effective duration of low molecular weight heparin (LMWH) in these patients and 7 days was the *average* duration of LMWH in the clinical trials evaluated throughout the guideline. Clinical practice has changed significantly in the 20 years since these trials were published and the populations in these clinical trials were highly selected, with prolonged medical inpatients stays and at higher risk of VTE than the majority of current medical admissions.[3,4] The median length-of-stay for acute medical inpatients in our hospitals is 2 days and using the Department of Health VTE tool the majority of these patients are currently prescribed pharmacological thromboprophylaxis only while an inpatient. There is currently no evidence to support this group of patients having a further 5 days of LMWH prophylaxis at home. There would be additional significant cost to the NHS in dispensing time, sharps bins/disposal/training, resources of district nurses (the latter required for 20–30% of patients), and drug costs; without an evidence base for benefit/harm in this setting.

A survey of National VTE Exemplar Centres in October 2018 found that 95% (n=24) reported not adopting this new recommendation (in a personal communication of Roopen Arya accepted for publication). If we do not challenge NICE guidance where recommendations are based on limited data, then we disservice patients through the provision of non-evidence-based interventions requiring reallocation of scarce resources. ■

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Head injury in the elderly

Editor – I welcomed the review on head injury in the elderly[1] for highlighting this growing issue. In addition to the excellent points made I would like to add the following. The first, and most important issue is that of terminology, which denotes diagnosis and has far reaching implications. The term 'head injury' should, in my opinion, be reserved for episodes of trauma to the head without resultant intracranial consequences eg scalp laceration. The consequences of head injury listed in Table 3 of the review all relate to intracranial complications (except skull fracture) and all can lead to, or are intrinsically, a form of brain injury. Use of the term acquired brain injury, traumatic brain injury or intracranial injury would highlight the potential severity of outcomes, and therefore help to reduce the variance in accurate assessment and appropriate management of brain injury in the elderly which currently exists. A similar argument has been made previously regarding the term concussion.[2]

Lack of identification of brain injury is an issue across all pathways and may be a particular problem in more vulnerable groups (including paediatric, elderly, learning disabled, substance misuse and offender populations). As a result, the right care may not be delivered at the right time. Inaccurate or missing codes mean that vast swathes of data are not collected, impeding efforts to characterise cohorts and outcomes, and plan for appropriate resourcing and service delivery.

Secondly, assessment of impairments and planning for follow-up and rehabilitation receives scant attention in the review. While I accept that the focus of the review is on acute management and anticoagulation management, I believe that the stated intention of the review is not fully met without more detail related to assessment of rehabilitation and care needs. Significant neurological impairments may result from acquired brain injury and can considerably affect function and safety.[3–5] Cognitive impairment and balance are of particular note. Selected elderly individuals can achieve similar outcomes to younger patients with neurorehabilitation,[6–8] while those who are not appropriate for rehabilitation require careful assessment and discharge planning, with environment and care needs appropriately supported. ■

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