National Institute for Health and Care Excellence

2017 surveillance – Head injury: assessment and early management (2014) NICE guideline CG176

Appendix B: stakeholder consultation comments table

Consultation dates: Tuesday 21 February to 6 March 2017

Do you agree with the proposal not to update the guideline?

Stakeholder	Overall response	Comments	NICE response
Headway – the brain injury association	In general, we support the proposal not to update the guideline; however we are disappointed that a previous recommendation made by Headway regarding the inclusion of hormonal deficiency assessment has not been addressed despite evidence that people can experience pituitary disorders after head injury. More information on this is provided below.	Headway – the brain injury association produces a range of information resources that can be of particular benefit to address points covered in this guideline. We would welcome widespread dissemination of our relevant publications in light of the following guideline items: Item 1.6.3. *Staff should consider how best to share information with children and introduce them to the possibility of long-term complex changes in their parent or sibling. Literature produced by patient support groups may be helpful.* Headway has published a booklet *Supporting children* when a parent has had a brain injury that provides information on how to offer age-appropriate support to children when a parent has sustained a brain injury. Headway would encourage dissemination of this booklet. People directly affected by brain injury can receive printed copies of this booklet for free, while electronic versions are freely available on the Headway website at www.headway.org.uk/information-library. Item 1.6.5. *Ensure there is a board or area displaying leaflets or contact details for patient*	Thank you for your comment and for highlighting the services that your organisation provides. As part of the surveillance process, we considered whether hypopituitarism as a consequence of head injury could be covered by Head injury: assessment and early management in response to similar comments received after publication of the guideline. However, pituitary disorders were considered to be a late consequence of head injury rather than an indication for immediate management. Therefore, treatment of pituitary disorders was considered to be outside of the remit of this guideline.

		support organisations either locally or nationally to enable family members and carers to gather further information. Headway provides national and local services to individuals affected by brain injury and families/carers. Headway would welcome hospitals keeping a regular stock of our leaflets *All about Headway* and *Brain Injury* Explained, and posters. Leaflets and posters can be received by contacting Headway on 0115 924 0800 or enquiries@headway.org.uk. Item 1.9.7. *Give verbal and printed discharge advice to patients with any degree of head injury who are discharged from an emergency department or observation ward, and their families and carers*. In 2010, Headway published a minor head injury discharge advice checklist factsheet to offer this information, to address the concerning finding that 92% of A&E departments across the country were failing to provide patients with satisfactory written information following minor head injuries. More information on this is available at www.headway.org.uk/get-involved/campaigns/minor-head-injury-discharge-advice. In order to ensure that this is addressed, Headway would welcome the widespread dissemination of the Minor head injury discharge factsheet, available at www.headway.org.uk/information-library.	
Elcena Jeffers Foundation	Yes	Self assessment for all or most long term sufferers and a place to update their own records. Same as a medical professionals.	Thank you for your comment. Any new evidence on these areas will be assessed at the next surveillance review of this guideline.

Association of Paediatric Anaesthetists of Great Britain and Ireland	Yes	We have reviewed the paediatric components and we agree with the conclusion of the expert group that there is no need to update the guideline.	Thank you for your comment.
Society for Research in Rehabilitation SRR	Yes	No comment	Thank you.
British Academy of Childhood Disability (BACD)	Yes	No comment	Thank you.
University of Sheffield	No	The consideration of whether to update the guideline relating to patients taking warfarin and head injury is incomplete. The reviewers have not considered cost effectiveness of whether the 'CT all' option should be followed. Our paper recently published following the ahead study clearly demonstrated this policy was not cost effective. This paper supports the view that the 'CT all' option should be reconsidered and revised. Should all anticoagulated patients with head injury receive a CT scan? Decision-analysis modelling of an observational cohort. Maxine Kuczawski,1 Matt Stevenson,1 Steve Goodacre,1 M Dawn Teare,1 Shammi Ramlakhan,2 Francis Morris,2 Suzanne Mason1 http//dx.doi.org/10.1136/bmjopen-2016-013742	Thank you for highlighting this paper. We assessed the cited paper by Kuczawski et al. (2016). It was not detected in the searches performed for this surveillance review because it published after the search was conducted. It has been added to the evidence summaries. There are a number of concerns about the approach taken in this economic analysis that we believe limit its importance in the surveillance review. The benefit of CT as estimated in the analysis is based on a very small number of patients (n=7) from the AHEAD study (Mason et al. 2017) who did not have CT, with expert opinion on their probability of surviving in particular outcome states measured on the Glasgow Outcome Scale. The ICER appears to partly be driven by the rarity of adverse events in the target population but this approach ignores the data for 65 people who had no symptoms of brain injury, had CT as part of the AHEAD study, and had an adverse outcome, which suggests the true prevalence of adverse events in anticoagulated patients with no neurological symptoms may be much higher. It is unclear whether the 7 patients in Kuczawaski et al. (2016) are truly representative of the target population at large. The report also did not adequately explain or explore the uncertainty around the assumptions used to populate the model, or explore the variables that most impacted on the cost effectiveness of performing CT in all people on warfarin. When models are heavily underpinned by

			assumptions rather than robust evidence, NICE committees are usually only able to have confidence in the results following extensive threshold and scenario analysis on the key input parameters. In the sensitivity analysis of the 3 survivors who may have benefitted from improved outcome, the reported ICER of £36,864 remains outside of the usual threshold of £20,000 to £30,000. However, again there was no exploration of the uncertainty around this ICER, which would have been substantial. The cost effectiveness of the recommendation to perform CT in all people on warfarin is of interest but we believe the analysis by Kuczawski et al. (2016) is insufficient to support an update of this section of the guideline at this time.
Faculty of Sport and Exercise Medicine UK	No	I would recommend, on behalf of the FSEM, that the current guidance be expanded to include more detail around the identification, triage, assessment and management of sports related concussion. The current guidelines have a focus on more severe traumatic brain injury.	Thank you for your interest in this aspect of the guideline. The guideline did not consider sports-related concussion as a discrete type of injury. Sports-related concussion is thus covered by any recommendation in the guideline that applies to concussion (or mild traumatic brain injury). The guideline acknowledges its emphasis on identifying people who may have 'clinically important' brain injury. However, this definition of outcome was deliberately broad to reflect the heterogeneity of brain injuries that may be experienced following a head injury. The guideline committee looked for evidence on identifying people at risk of post-concussion syndrome. In 2003, only 1 study relating to post-concussion syndrome was identified. This aspect of the guideline was not updated in 2007. In surveillance of this guideline the focus was also on identification of clinically important brain injury. However, in response to your comment, the searches were checked again for evidence on concussion or mild traumatic brain injury that might impact on current recommendations. The evidence in this area generally consists of exploratory studies that identify risk factors or prevalence of ongoing

			symptoms after mild traumatic brain injury. There was little new evidence that could impact on recommendations. In selecting evidence on identifying signs or symptoms indicative of clinically important traumatic brain injury, only studies validating clinical decision rules or prediction models were eligible for inclusion. This criterion is consistent with the approach used in developing the guideline and was also applied for this subsequent check for evidence related to mild traumatic brain injury. Two additional studies (Lingsma et al. 2015 and Zemek et al. 2016) were identified and added to the summary of evidence. Lingsma et al. 2015 validated 2 models for predicting post-concussion syndrome. Unfortunately, the authors found both models to perform poorly, so could not impact on current recommendations. Zemek et al. 2016 reported both the derivation and validation of a model for predicting post-concussion syndrome. However, the authors found their model to have modest discrimination, which again could not impact on current recommendations.
NHS-England. National Clinical Director for Trauma	Yes	No comment	Thank you.
Royal College of Physicians (RCP) and British Society of Rehabilitation Medicine (BSRM)	No	Section 1.8 - Patients admitted to hospital who have not returned to GCS 15 within 4 calendar days should be assessed by a Consultant in Rehabilitation Medicine or Elderly Care, dependent upon the patient's age and medical co-morbidities. Services should develop local criteria for referral Section 1.9 - all patients who are discharged home with GCS 15, but who had either clinical or radiological signs of acute brain injury on admission, should be referred to a Consultant in Rehabilitation Medicine for follow up	Thank you for your comment. In this surveillance review, we did not find any new evidence that could impact on recommendations around referral for rehabilitation. Additionally, a guideline on rehabilitation for chronic neurological disorders, including traumatic brain injury, is planned.

		For patients who have repeated mild/moderate head injury, the patient's GP should be made aware of the possibility of development of chronic traumatic encephalopathy which can present as progressive cognitive impairments.	
Society of British Neurosurgeons	Yes	No comment	Thank you.

Do you agree with the proposal to remove the research recommendation?

Is the clinical outcome of patients with head injury with a reduced level of consciousness improved by direct transport from the scene of injury to a tertiary centre with neuroscience facilities compared with the outcome of those who are transported initially to the nearest hospital without neurosurgical facilities?

Stakeholder	Overall response	Comments	NICE response
Headway – the brain injury association	No answer	No comments	Thank you.
Elcena Jeffers Foundation	No	Learning process is always welcome to the person in time of first hand help is vital to life in time of crisis.	Thank you for your comment.
Association of Paediatric Anaesthetists of Great Britain and Ireland	Yes	Note that it is a shame that we have been unable to provide evidence to support a very sensible hypothesis.	Thank you for your comment.
Society for Research in Rehabilitation SRR	Yes	No comment	Thank you.
British Academy of Childhood Disability (BACD)	No answer	No comments	Thank you.
University of Sheffield	No answer	No comments	Thank you.
Faculty of Sport and Exercise Medicine UK	No answer	No comments	Thank you.
NHS-England. National Clinical Director for Trauma	Yes	No comment	Thank you.

Royal College of Physicians (RCP) and British Society of Rehabilitation Medicine (BSRM)	No answer	No comments	Thank you.
Society of British Neurosurgeons	Yes	We think this is clearly established	Thank you for your comment.

Do you agree with the proposal to remove the research recommendation?

Research is needed to summarise and identify the optimal predictor variables for long-term sequelae following mild traumatic brain injury. A systematic review of the literature could be used to derive a clinical decision rule to identify relevant patients at the time of injury. This would in turn lay the foundation for a derivation cohort study.

Stakeholder	Overall response	Comments	NICE response
Society of British Neurosurgeons	Impartial	We think this is still a relevant question, but no strong opinion to its removal or continued inclusion.	Thank you for your comment. In response to another commentator (see above), the evidence in this area was reassessed and 2 relevant studies were added to the summary of evidence. As a result, the research recommendation will be retained because of research activity in the area.
Headway – the brain injury association	No answer	No comments	Thank you.
Elcena Jeffers Foundation	No	Health and life is too fragile.	Thank you for your comment.
Association of Paediatric Anaesthetists of Great Britain and Ireland	Yes	No comment	Thank you.
Society for Research in Rehabilitation SRR	Yes	No comment	Thank you.
British Academy of Childhood Disability (BACD)	No answer	No comments	Thank you.
University of Sheffield	No answer	No comments	Thank you.

Faculty of Sport and Exercise Medicine UK	No answer	No comments	Thank you.
NHS-England. National Clinical Director for Trauma	Yes	No comment	Thank you.
Royal College of Physicians (RCP) and British Society of Rehabilitation Medicine (BSRM)	No answer	No comments	Thank you.

Do you have any comments on areas excluded from the scope of the guideline?

Stakeholder	Overall response	Comments	NICE response
Headway – the brain injury association	Yes	There is no mention in the guidelines about hormonal deficiency assessment. This is a concern that Headway has previously raised in light of the fact that there is good evidence that people can experience undiagnosed hypopituitarism or other pituitary disorders and that testing at 3, 6, etc, months after injury can detect these problems. Testing at the acute stage is not satisfactory as hormone levels tend to be wildly fluctuating at this stage, especially after severe TBI. Some English hospitals have already introduced standard follow up testing, such as QE in Birmingham and Wessex in Southampton. Future updates to the guidelines should fully investigate the effectiveness of such standard procedures and introduce routine testing for pituitary dysfunction for patients with head injury.	Thank you for your comment. As noted above, pituitary disorders after brain injury are outside of the remit of this guideline.
Elcena Jeffers Foundation	Yes	The guideline was created based upon facts. Why Change now.	Thank you for your comment.
Association of Paediatric Anaesthetists of Great Britain and Ireland	None	No comment	Thank you.

Society for Research in Rehabilitation SRR	No	No comment	Thank you.
British Academy of Childhood Disability (BACD)	No answer	We recommend that a “research recommendation” be added on the following topics: 1. Best tool for identifying the patients who should be referred to rehabilitation services following the initial management of a head injury. 2. How soon should patients be referred (or transferred) to rehabilitation services following the initial management of a head injury.	Thank you for your comment. Research recommendations can only be added during guideline development, such as in an update. Unfortunately, in this surveillance review, we did not find any new evidence that could impact on recommendations around referral for rehabilitation.
University of Sheffield	No answer	No comments	Thank you.
Faculty of Sport and Exercise Medicine UK	No answer	No comments	Thank you.
NHS-England. National Clinical Director for Trauma	Yes	No comment	Thank you.
Royal College of Physicians (RCP) and British Society of Rehabilitation Medicine (BSRM)	No answer	No comments	Thank you.
Society of British Neurosurgeons	No	No comment	Thank you.

Do you have any comments on equalities issues?

Stakeholder	Overall response	Comments	NICE response
Headway – the brain injury association	No	No comments	Thank you.
Elcena Jeffers Foundation	Yes	Is there any issue to believe that this has to be about funding?	Thank you for your comment.
Association of Paediatric Anaesthetists of Great Britain and Ireland	None	No comment	Thank you.
Society for Research in Rehabilitation SRR	No	No comment	Thank you.
British Academy of Childhood Disability (BACD)	No answer	No comment	Thank you.
University of Sheffield	No answer	No comments	Thank you.
Faculty of Sport and Exercise Medicine UK	No answer	No comments	Thank you.
NHS-England. National Clinical Director for Trauma	Yes	No comment	Thank you.
Royal College of Physicians (RCP) and British Society of Rehabilitation Medicine (BSRM)	No answer	No comments	Thank you.
Society of British Neurosurgeons	No	No comment	Thank you.

No comments:
The Royal College of Nursing has no comments to submit to inform on the surveillance review at this time.