



National Audit of Seizure Management in Hospitals

St. Elsewhere's Hospital

Organisational Analysis

June 2012



2012 NASH Organisational Audit Report Prepared by:

Professor Mike Pearson, Professor of Clinical Evaluation

Professor Tony Marson, Professor of Neurology

Pete Dixon, NASH Study Coordinator

Karen Billington, NASH Research Coordinator

Dr Duncan Appelbe, NASH IT Manager

Dr Jamie Kirkham, NASH Statistician

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Please forward audit enquiries to:

Dr Pete Dixon

Karen Billington

+44 (0) 151 529 5463

info@nashstudy.org.uk

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FOREWORD

The National Audit of Seizure management in Hospitals (NASH) is the first UK-wide epilepsy audit and includes data from almost 3,800 patients across 127 sites (from 108 Trusts/Health Boards) in England, Wales, Scotland and Northern Ireland.

The aims of NASH were to:

- a) describe and understand the organisation of care available for people presenting to Emergency Departments with seizures;
- b) describe the variations in care actually delivered; and
- c) set out options and opportunities for improving care and to share those with the hospitals, with patient organisations and with NHS managers in the hope that together they can act to effect improvement.

The clinical report was released at the end of 2011; here we present the organisational report which should be read in conjunction with your patient-level results. The clinical report has generated a considerable amount of interest from professionals, patient organisations and bodies such as HQIP. You will recall that the basic findings were of care that showed plenty of room for improvement and that varied hugely between hospitals.

The organisational data shows a similar wide range of responses. In summary the headlines are:

1. A lack of policies and pathways
2. A lack of capacity and structure
3. There are no significant patterns between the organisational data and sites with better or less good care.

The NASH data are being shared at national meetings (including the Association of British Neurologists, the International League Against Epilepsy and the Epilepsy Nurses Association) and we are hoping to invite you shortly to regional meetings to discuss next steps (provisional funding support agreed). In addition, the patient charities are taking the opportunities to national leaders, hoping that we can generate commissioner interest and thus some resource to help optimise care provision.

All possible safeguards to preserve the quality of data collected have been made. Nevertheless, it is important to interpret your results in this report using your knowledge of your own service and any difficulties you experienced in collecting your audit data that may have biased your own outcomes. If you are aware of significant biases or inconsistencies in the reported data for your site, please inform the NASH study office as soon as possible (info@nashstudy.org.uk).

We are grateful to everyone who has helped with the project and appreciate the very considerable amount of time and effort that has gone into obtaining local data. We hope that all participants will feel it has been worthwhile and that the audit represents a significant step in raising the profile of epilepsy. Thanks are also due to Eisai, GlaxoSmithKline and UCB Pharma for their financial support to the audit.



Pete Dixon
Study Coordinator
June 2012



Prof. Tony Marson
Joint Study Lead



Prof. Mike Pearson
Joint Study Lead

EXECUTIVE SUMMARY

The 2011 National Audit of Seizure management in Hospitals (NASH) is remarkable in that it is the first ever comprehensive audit of this condition in the UK. This release contains the organisational data – the clinical results were presented in an earlier report published in December 2011. Sites that participated in the audit were asked to provide data on the available resources and organisation of care. Data was entered via an online system. This opened on March 14th 2011 and closed on July 14th.

The first site-specific NASH reports, produced in December 2011, reported each site's clinical results benchmarked against all 127 UK sites (from 108 Trusts/Heath Boards) that completed the audit. This second report examines the available resources and organisation of care available at all participating sites and also presents your own site's responses. Further reports will be produced aggregating data at SHA level that will allow the variations in care across regions to be assessed.

The methods and oversight of the study were described in the clinical report (available at www.nashstudy.org.uk/Newsletters.aspx) and will not be repeated here, except to remind that the questions were developed with a Steering Committee of clinicians and patient organisations and that we invited all hospitals with Emergency Departments to take part. 127 sites (from 108 NHS Trusts/Health Boards) provided clinical data for the NASH audit and organisational data was received for 126 sites

This organisational report can be utilised by individual sites to identify the facilities and resources they offer to patients presenting with a seizure at the Emergency Department. The data collected for this report may be used alongside the clinical report to provide an overall analysis of the patient facilities and services that are offered at your site. For example if, in the clinical report, your site has recorded low admissions to a neurology ward following a seizure with no known epilepsy symptoms it may be that your site does not have access to an onsite neurology ward, and this information is represented in the organisational data.

How to interpret the data

We have presented the data in tables giving the number (n) and percentage (%) of national samples side-by-side, with the response from your own site in a separate column.

Overall Picture and Interpretation and Actions

As was the case with the clinical data, there is a lot of variation between sites. We have analysed the organisational data to see if there are any particular patterns that go with better or less good patient-level care but, although there are trends, the associations are weak and we can say that almost any pattern of care can be seen with almost any pattern of policies and structures. Thus there are examples of:

Scoring well on the clinical data

- either with no policies of any sort in place
- or with apparently little neurological support on site

Scoring poorly on the patient data

- either with all policies in place
- or with apparently strong neurological support on site

So there is no single recommendation, except to observe that it is very hard to change the ways people work without putting some specific policies in place and without ensuring that the right facilities are in place. We present the data, therefore, to encourage thinking about the services you offer for patients presenting with seizures, but add the

thought that there are data suggesting that patients in the UK are not optimally controlled and that for many of these patients we might be doing better – in preventing the next episode at least.

Indeed the data from the NASH patients shows that 40% are on monotherapy – surely an opportunity to consider a step-up of therapy to prevent another episode – and that nearly half of first seizures are not getting to a neurologist. Yet Hospital Episode Statistics (HES) data shows that up to 3% of all medical emergency admissions are with a seizure – a considerable opportunity to keep patients out of hospital.

Findings

Lack of policies and pathways

- a. 38% have no policy for the management of patients with first seizures
- b. 32% have no policy for the management of status epilepticus
- c. 44% have no policy for onward care of seizure patients

Lack of capacity and structure

- a. only 31% have a neurology ward
- b. 33% of neurology wards do not take acute admissions from Emergency Departments
- c. 10% have no general neurology clinics
- d. only 54% have access to an epilepsy nurse
- e. 31% of sites are more than 20 miles from a neurology centre.

ORGANISATIONAL DATA

127 sites (from 108 NHS Trusts/Health Boards) provided clinical data for the NASH audit. However, organisational data was only received for 126 sites.

Royal Blackburn Hospital did provide organisational data for analysis.

Does your Trust have a written policy for management of patients with first seizures?: n (%)

National Audit n= 126			Your Site
Yes	No	Under Development / Intended	
74 (58.7)	48 (38.1)	4 (3.2)	Yes

Does your Trust have a written policy for the management of status epilepticus?: n (%)

National Audit n= 126			Your Site
Yes	No	Under Development / Intended	
80 (63.5)	40 (31.7)	6 (4.8)	Yes

Does your Trust have a written policy for pathway for onward referral of patients presenting with seizures?: n (%)

National Audit n= 126			Your Site
Yes	No	Under Development / Intended	
64 (50.8)	55 (43.7)	7 (5.6)	Yes

Having a written policy is an important part of the structure for ensuring that there is a uniform service. If there is no policy, then Trusts run the likelihood that individual clinicians will feel free to vary care at will. However, it is important to bear in mind that merely having a policy is not the same as *using* it. In this report we note that only 44 sites (35% of the total) have all three policies in place, whilst 26 (21% of the total) have none.

How many of the three written policies for management and referral listed above does your Trust have?: n (%)

National Audit n=126	Total	Your Site
0	26 (20.6)	
1	26 (20.6)	
2	30 (23.8)	
3	44 (34.9)	Y

If a patient's seizure has stopped, but the patient needs to be observed or admitted, where would they go to from the Emergency Department?: n

NB. Seven sites did not provide a response to this question. Sites could answer multiple options.

National Audit n=226	Total	Your Site
Medical admissions / assessment unit	113	Y
Observation ward	50	
General ward	26	
ITU	20	Y
Neurology ward	8	
Other	9	

Does your Trust have a neurosurgeon on the staff?: n (%)

National Audit n=126		Your Site
Yes	No	
35 (27.8)	91 (72.2)	No

This question is a proxy for whether it is likely there is a specialist neurological unit on site. We know these may not necessarily be correlated with acute take. There was no difference in care parameters according to whether the Trusts did or did not have a neurosurgeon.

Does your site have a neurology ward?: n (%)

National Audit n=126		Your Site
Yes	No	
39 (31.0)	87 (69.0)	No

If yes; does it take admissions from the Emergency Department?: n (%)

National Audit n=39		Your Site
Yes	No	
26 (66.7)	13 (33.3)	

An analysis was undertaken to assess if sites which do have a neurology ward (and especially those which take admissions from the Emergency Department) exhibit differences in care parameters to those which do not have such wards. Firstly we examined the relationship between the provision of a ward and whether or not patients who present with a seizure were under the care of a neurologist during their stay (this data was shown in the clinical NASH report).

Does the site have a neurology ward	Patients under the care of a neurologist – mean % (min-max)
Yes (n=40)	11.3 (0 – 61.1)
No (n=86)	0.7 (0 – 11.1)

There is a trend for sites with a neurology ward to be more likely to have patients under the care of a neurologist. However, even where this trend exists it is important to note that the majority of patients do not reach a neurologist.

This analysis was further subdivided in to those whose neurology wards took admissions from the Emergency Department and those who didn't.

Does the neurology ward take admissions from ED?	Patients under the care of a neurologist – mean % (min-max)
Yes (n=26)	15.8 (0 – 61.1)
No (n=14)	3.0 (0 – 21.1)

Once again there is a trend – bit most patients do not get specialist care.

A further analysis examined whether the presence of a neurology ward which takes admissions from the Emergency Department was associated with appropriate neurological examinations being performed.

Does the neurology ward take admissions from ED?	Fundi examined – mean % (min-max)	Plantars elicited– mean % (min-max)
Yes (n=26)	20.8 (0 – 78.8)	37.1 (0 – 80.0)
No (n=14)	14.4 (0 – 90.0)	33.3 (3.3 – 93.3)

Of the 26 sites whose neurology wards accepted admissions from the Emergency Department there was evidence of appropriate neurological examinations being more likely to be undertaken – but this was still for a minority of patients.

How many general neurology clinics are conducted per week?: n (%)

National Audit n = 126		Your Site
0	13 (10.3)	
1	4 (3.2)	
2	6 (4.8)	
3	10 (7.9)	
4	12 (9.5)	
More than 4	81 (64.3)	Y

An analysis was undertaken to assess if sites which had no general neurology clinics had a different referral rate to that of those sites with at least one clinic. For this we used the loosest definition of referral as used in the NASH clinical report, i.e.:

- they were transferred to a neurology ward from ED
- they were under the care of a neurologist at some point in their hospital stay
- advice was sought from a neurologist regarding the patient
- they were referred to a neurology specialist as an outpatient

Number of general neurology clinics	Referral rate – mean % (SD)
None (n=13)	34.6 (15.6)
At least one (n=113)	42.9 (19.0)

There is a weak trend for greater referral rates in sites where neurology services are available.

How many dedicated epilepsy clinics (i.e. a clinic that only sees epilepsy-related problems) are conducted per week?: n (%)

National Audit n = 126		Your Site
0	69 (54.8)	Y
1	21 (16.7)	
2	8 (6.3)	
3	6 (4.8)	
4	10 (7.9)	
More than 4	12 (9.5)	

The results from the four questions above appear to show that there is ample opportunity for referral to neurology services in most Trusts, and it is a surprise that only 46% of patients with new seizures were able to access this (results from the clinical NASH data). There is a capacity to accept referrals which greatly exceeds what is being achieved. Setting up structures to which patients can be referred is important but is dependent on pathways enabling referral.

Do you have a neurology consultancy service available on the wards?: n (%)

National Audit n=126		Your Site
Yes	No	
114 (90.5)	12 (9.5)	Yes

If yes; for how many days is that available?: n (%)

National Audit n=114			Your Site
1-2	3-5	Don't know	
26 (22.8)	86 (75.4)	2 (1.8)	3-5

Does your Trust have access to an Epilepsy Specialist Nurse?: n (%)

National Audit n=126		Your Site
Yes	No	
68 (54.0)	58 (46.0)	Yes

If yes; how many Epilepsy Specialist Nurses are there?

National Audit n= 68		Your Site
1	44 (64.7)	Y
2	16 (23.5)	
3	6 (8.8)	
4	0 (0.0)	
5	0 (0.0)	
Don't know	1 (1.5)	
Missing data	1 (1.5)	

and; what is their availability, i.e. how soon can an appointment be arranged?: n (%)

National Audit n = 68		Your Site
0-2 weeks	38 (55.9)	Y
3-4 weeks	16 (23.5)	
5-6 weeks	8 (11.8)	
7+ weeks	6 (8.8)	

Do you have an MRI scanner?: n (%)

National Audit n=126		Your Site
Yes	No	
120 (95.2)	6 (4.8)	Yes

If yes; what is the waiting time for a routine MRI scan?: n (%)

National Audit n= 120		Your Site
0-2 weeks	30 (25.0)	Y
3-4 weeks	39 (32.5)	
5-6 weeks	43 (35.8)	
7+ weeks	6 (5.0)	
Don't know	2 (1.7)	

An analysis was undertaken to assess if sites which did not have a MRI scanner had lower outpatient requests for MRIs.

Does the site have a MRI scanner	Outpatient MRI requested following discharge – mean % (min-max)
Yes	5.0 (0 – 30.0)
No	4.4 (0 – 13.3)

An analysis was also undertaken to assess if this referral rate was different dependent on the waiting time for a routine MRI scan.

Waiting time for a routine MRI scan	Outpatient MRI requested following discharge – mean % (SD)
0-2 weeks	4.0 (0 – 15.0)
5 weeks or more	5.2 (0 – 30.0)

This shows that there is no association between access to the MRI scanners and MRI requests, reinforcing the message from the other analyses conducted that almost any pattern of care can be seen with almost any pattern of policies and structures.

Access to EEGs?: n (%)

National Audit n = 126			
	Yes	No	Your Site
Do you have access to routine EEGs from your site	75 (59.5)	51 (40.5)	Yes
Do you have access to routine EEGs from another site	75 (59.5)	51 (40.5)	No
Do you have access to routine EEGs from either your own or another site	122 (96.8)	4 (3.2)	Yes

Which is your tertiary neurology centre?

NAME REDACTED

How far away is your tertiary neurology centre?: n (%)

National Audit n= 126		Your Site
0-20 miles	83 (65.9)	Y
20-50 miles	33 (26.2)	
50+ miles	6 (4.8)	
Missing data	4 (3.2)	

31% of sites are more than 20 miles from a neurology centre. This represents a serious problem for many patients as they are not easy to get to if you have had a seizure and are therefore unable to drive.