Health, Wellbeing and Local Government Committee

HWLG (3) -19-09 paper 4

Inquiry into Stroke Services in Wales – Written evidence from The Welsh Stroke Nurse Alliance.

EXECUTIVE SUMMARY

There has always been a challenge in describing the complex nature of nursing care and how to measure the vital components patients' value and need.

Stroke Services have to date never been included in any National Policy initiatives until the advent of the National Service Framework for Older People. The Stroke Service Improvement Programme has certainly provided an impetus for further developments.

These policy initiatives are of particular importance to nursing as the report wishes to highlight how vital specialist nurses are for the service; patient outcomes are enhanced as a result of good communication between the multidisciplinary team and community specialist teams as they provide one point of contact. These activities often go unrecognised in terms of activity data and funding.

Community is one area which is under resourced and needs investment in terms of education and resources for patients as well as staff.

Systematic, co-ordinated approaches to secondary prevention are lacking. A Nurse Led clinic is a way forward in addressing social reintegration and risk factor modification.

Nurses have important roles to play and many initiatives are instigated in addition to current roles; although in order to continue with this pace of development (as outlined in the Stroke Services Improvement Plan) investment is required.

It is hoped that this report will provide the Panel with a greater insight into the roles and responsibilities nurses undertake and outline some important workforce issues that need to be considered when planning future services.

1. About the Welsh Stroke Nurse Alliance and Nursing

The Welsh Stroke Nurse Alliance was established in 2008 in response to the Welsh Health Circular (2007) 058 regarding Implementation of National Stroke Standards for Stroke Services in Wales; whereby the purpose of the group was to provide authoritative clinical nursing advice to the main Welsh Stroke Alliance Group.

The Welsh Stroke Nurse Alliance is accountable to all levels of nurses (who work within NHS Trusts) involved in the field of Stroke and its aims are to seek to promote leadership, communication, advocacy, education and nursing research in the field of Stroke.

We are a small group of specialist registered nurses who are dedicated in our role as Clinical Nurse Specialists and Stroke Co-ordinators within NHS Trusts. Currently the group membership is at 16 pan Wales.

The Welsh Stroke Nurse Alliance provides treatment and support for their patients/carers in a variety of settings ranging from acute hospital to community; ensuring that the focus is on meeting the holistic needs of individuals and families. The Nurse Specialist Role is one in which we facilitate the patient's pathway by ensuring smooth co-ordination since we see patients throughout their entire journey.

2. Nurse Specialist / Nursing Contribution to Stroke Services

Nurses play a significant role in the care of patients who have had a stroke due to the 24/7 presence; which is a valuable source of continuity and comfort for patient and carer. It is worth noting that throughout the literature, nursing is given very little importance except in the field of rehabilitative care, whereby the Intercollegiate Working Party for Stroke place an important role for Nursing from the perspective of creating a therapeutic milieu (Long et al (2002) cited by Mitchell and Moore (2004:48)). One hypothesis for this lack of recognition could be due to nursing outcomes being intangible.

However progress has been made. There has been a cultural shift with the advent of the Specialist Nurse and Advanced Nursing Practice roles. Patterson and Haddad (1992) cited by Jester (2007:16) define an advanced nurse practitioner as:

"Nurses who will push the known boundaries of their profession, are willing to take risks and face the challenges associated with breaking new ground and have the ability to articulate their thoughts clearly as they move ahead and develop new nursing knowledge and skills, thus leading their profession forward to meet the needs and demands of society".

Nurses do play a vital role in the early assessment and initiation of stroke care. Early nursing assessment has led to patients receiving earlier CT Scans and swallow assessments and administration of aspirin, thereby making a difference between life, disability or death (Cross 2008:49).

Nurses working in stroke care follow the National Clinical Guidelines for Stroke (2008) developed by the Inter Collegiate Stroke Working Party (ISWP). The nursing concise guide for stroke (as part of these guidelines) is included as Appendix One to this submission.

3. Inquiry Considerations

3.1. Current Provision of Stroke Services in Wales

The Welsh Stroke Nurse Alliance considers the picture across Wales to be varied due to the geographical variations, different service delivery models which are mostly dependent on resources and finances.

The WHC (2007) 082 has undoubtedly focused the group with regard to meeting programme outcomes, but it would be fair to note that the Alliance is concerned that whilst the programme has initially focused on hyperacute and acute stroke care, from a resource viewpoint, it is a daunting task to envisage the specialist nurse having to cover all sections of a patient's pathway without extra resources namely funding for additional personnel.

The Welsh Stroke Nurse Alliance contributes significantly to the Royal College of Physicians National Sentinel Audit to measure progress against Wales and other parts of the United Kingdom. Whilst there is no specific specialist nurse interventions, there is reference within the audit to general nurse activities such as monitoring patient's weight and mood.

3.2. Availability of Stroke Units

There is compelling evidence that Stroke Unit care is not only cost effective, but highly effective in preventing death and long term disability in stroke patients compared to general medical wards alone (STUC (2001), Moodie et al. (2006), Patel et al. (2004)). From the Welsh perspective, there are discrepancies with concordance to National Guidelines regarding direct admission of stroke patients to these defined beds in the acute stage. The favoured model is still for patients to go to a general admission unit. The problem with this model of care is that care tends to be delivered by generalist nurses as opposed to the philosophy of "enhanced care" provided by a dedicated stroke unit (Curley and Devitt 2004:19).

Specialist nurses are being proactive in dealing with this and there are many areas of good practice within United Kingdom whereby specialist nurses are receiving patients in Accident and Emergency/Medical Admissions Units to provide specialist nursing advice and implementation of National Clinical Guidelines for Stroke.

Many Units within Wales have only just set up their acute co-located beds to meet the AOF Target, so it is difficult to comment on issues such as capacity and appropriateness of patients.

Rehabilitation Units within Wales have usually been long standing and have a coordinated multidisciplinary team who are interested and knowledgeable about stroke and the overall aim is to minimise the impact of stroke on the individual and carer. The very success of stroke units can also be seen as a cause of some concern in that expectations of both patient and carer are raised by the existence of a specialist unit. It is therefore essential that nursing plays an important role in the acute sector to ensure good communication and correct information.

3.3. Level of Resources –Staffing

In terms of staffing levels, there is little guidance on recommended staffing levels due to the diversity over number of beds.

The only evidence available is based for a 10 bedded stroke unit from the Department of Health (2008). The staffing levels grid is collated data from a variety of sources on actual and aspirational staffing levels. Where possible, they have been standardised to the number of working-time equivalent members of each profession per ten bed unit. This is not to suggest a ten bed ward is the ideal size for a stroke unit but to allow comparison between the various sources of information.
Sources of data include the Stroke Unit Trialists' Collaboration (SUTC), the National Sentinel Stroke Audit (NSA), the British Association of Stroke Physicians (BASP), and the University of Central Lancashire data set (UCLan). There are also figures from a snapshot survey carried out by the Royal College of Physicians on behalf of the Department of Health (DH). A further source of information comes from the consensus statements produced by professional bodies involved in stroke care. These are available as part of the Workforce Planning Resource. Some of these sources have further broken down their analysis into staffing levels for acute (ASU) and rehabilitation (SRU) stroke units.

Actual

	No. Working Time Equivalents of each Profession per 10 Bed Ward						
Profession	SUTC*	NSA*	BASP – ASU	BASP – SRU	UCLan – ASU	UCLan – SRU	DH – Survey*
Nurses	7-12	3.3 (2.9-3.7)^	8	10.1	8.5	12.8	10.9 (9.3-13.1)

*Median (IQR)
^Relates to number of staff on duty at a particular time per 10 bed unit

Aspirational

	No. Working Time Equivalents of each Profession per 10 Bed Ward			
	Consensus Statements	UCLan – ASU	UCLan – SRU	DH – Survey
Nurses	12.5	12.00	11.59	12.9

From a review of current establishments pan Wales – Refer to Appendix Two it can be argued (though the argument is based on anecdotal evidence and not on scientific findings) that there is no local agreement since the stroke beds are part of a general medical ward as opposed to being a stand alone unit and the Welsh Stroke Nurse

Alliance recommends that there should be some consensus over safe nursing establishments for parity.

Investment is needed with regard to specialist nursing role. Whilst most NHS Trusts have a Clinical Nurse Specialist/Stroke Coordinator post, it is worth noting that a number of these posts are taking responsibility for developing and running the stroke services, usually in collaboration with the Physician, hence requiring additional increase in the skills and number of nursing staff.

3.4. Availability of Specialist Staff in Acute Settings, Recruitment and Training

The Welsh Stroke Nurse Alliance wishes to point out that due to the additional investment for acute stroke services from the Stroke Service Improvement Programme, additional Specialist Nursing posts have been created in the form of Clinical Nurse Specialists/ Stroke Coordinators; although there are still areas within Wales without this input whereby aspects of the specialist nurse role tends to be filled by the Ward Manager.

With current mergers of NHS Trusts/Local Health Boards and current economic recession, the group wish to highlight that the availability of nursing staff is currently hampered by recruitment freezes and in other areas vacancies that are managed by in-house management processes are extending the length of time taken to fill vacancies. Once recruited, evidence suggests retention in Stroke Units is good (O'Connor 1993).

A programme of education is an important feature of good stroke unit care so a rolling programme of multidisciplinary education is important. Training is one of the biggest issues. With Trusts being prudent with training budgets there is limited use of utilising them. Due to the degree of specialism, the majority of training is sourced from England and is quite expensive; hence limiting the uptake to staff members. All staff working with stroke patients should be receiving training in stroke management as part of their continuing professional development.

Stroke rehabilitation is a specialist area nursing requiring specialist skills as well as the knowledge and skills to detect acute developments and complications. Many nurses wish to expand their role in stroke care. Long et al (2002) highlight in their study that many nurses wished to integrate therapy into their role and support self –care and promote physical recovery, thereby promoting a consistency in care provided by the Multidisciplinary Team.

The Welsh Stroke Nurse Alliance is a dynamic group which is addressing these inequities by looking to providing knowledge and skills creatively such as in –house training delivered at ward level which can be delivered over a number of weeks and in between nurse handover times.

3.5. Availability of Specialist Equipment / Scanners / Thrombolysis

Access to CT Scanning is improving. The issue is not capacity, rather the limited cover provided at weekends; mostly emergency cover. If this situation is to improve, there needs to be investment into Consultant Radiologists for interpretation of CT scans. With emerging technologies, there is a need to explore the use of telemedicine which is well utilised in the rest of the United Kingdom.

Thrombolysis for acute ischaemic stroke has been recognised as an effective treatment since the outcome of clinical trials in the late 1990s. Despite our late progression, thrombolysis is now a rapidly expanding service. Training has been a considerable barrier to the introduction of thrombolysis within Wales. Specialist nurses can offer an important role in the assessment of patients due to the small timeframe of treatment (3 hours of stroke onset), so symptom recognition is vitally important. Other barriers that need consideration is the lack of nursing knowledge; nurses need to be educated in the core nursing complications of thrombolysis –to bridge this deficit most hospitals are using the Coronary Care Model since they have the knowledge and skills in lysis management.

Whilst education has been highlighted as one of the main barriers, lack of necessary skill mix within the general ward environment is another. Thrombolysis for stroke patients can have serious complications and skill mix is vital to safely deliver a thrombolysis service. These patients require one-to-one nursing due to the level of physiological monitoring; staffing which is not feasible currently. The current nursing recommendations is for one staff nurse who has been trained in stroke thrombolysis to be on each shift (IST-3 Stroke Nurse Collaborative Group 2003:5).

Specialist equipment- issue of finance and adequate space within existing hospital structures are the main barriers.

3.6. Aftercare and Rehab Services – Focus on Nursing

Length of stay in rehabilitation is dependent on availability of services such as

- Day Hospital
- Reablement Teams
- Community Services
- Early Supported Discharge Teams
- Outpatient clinics

Discharge planning is vital to ensure a seamless transition into the community in order to alleviate patient/carer's anxieties. Inadequate planning and poor follow up can have an effect on quality of life after stroke (Perry, Brooks and Hamilton 2004).

Promotion of the specialist nurse role is important when considering the aftercare of a patient discharged from hospital. Jones et al. (1997) identified the importance of the quality of the relationship between the professional and the patient/family. On discharge, the patient usually has multiple needs and it is important that these needs are assessed and met.

Early supported discharge is an effective way of organising stroke care. There is a plethora of evidence to support that it reduces length of stay and produces slightly better outcomes. There are only a small number of Trusts within Wales that offer this service, but all are without Nursing, therefore being heavily reliant on Community District Nurses and Primary Care Practice Nurses to assist the multidisciplinary team.

Long term care is equally important but has received low priority due to the focus on hyperacute care. Community is a poorly resourced area since many specialist nurses focus on the acute and or rehabilitation units due to being in a small team and therefore heavily reliant on chronic condition nurses (where appointed within local boroughs) to assist in monitoring patients.

Nurse led clinics are the way forward, they provide a single point of contact in addressing issues such as social reintegration and secondary prevention.

To provide long term aftercare, links have been established with The Stroke Association for their ongoing commitment to support groups for patient and carers.

3.7. Good Practice in the Treatment and Management of Stroke in Wales, the United Kingdom and Other Countries

Best practice such as local developments for Care Pathways and written protocols are already in existence in most Welsh NHS Trusts to improve continuity of care and improve communication between all healthcare providers.

One of the Welsh Nurse Alliance's objectives is to promote the Living with Stroke Module which is accredited by the Open College Network. This has been running successfully in the Torfaen Borough by the Specialist Nurse who devised the Module. It is worth noting that the Open College Network does not exist in England, so we are ahead of our counterparts in this aspect of service delivery.

Often good practice is poorly disseminated within the UK and other Countries. Dissemination is essential and the Welsh Stroke Nurse Alliance welcomes the opportunity that NLIAH (National Leadership & Innovation Agency for Healthcare) has given the group (and other professions) by providing them a webpage on the HOWIS (Health of Wales Information Service) Stroke Services Improvement Programme website.

Research must be actively resourced for specialist nurses to participate in; the barrier being low priority within the Trust's agenda and limited support in terms of administration and staffing. Within Wales it is only our Consultant Nurse in Stroke who has been seconded to Swansea University to link with the Stroke Research department.

Nurses have the ability to promote cohesion and aid interagency communication and cross-boundary developments. Strong nursing leadership will ultimately evolve clinical champions and Wales is proactive in promoting clinical leadership via its current nursing model for continued practice.

3.8. Prevention of Stroke and Promotion of Lifestyles to Minimise the Risk of Stroke

There is an urgent need to raise public awareness about stroke and prevention strategies as implementation is inconsistent and inequitable (Perry, Brooks and Hamilton 2004). The Department of Health's FAST campaign has been seen during peak time television breaks; however the question is whether it has had any significant impact on the general public?

Risk factor identification is a key initial step, but it is not always effectively achieved during acute admission. If patients are transferred to a stroke rehabilitation unit, nursing is able to employ systematic approaches linked to health promotion sessions.

A nurse led clinic especially for TIA patients is essential as this group of patients can be missed due to the brief hospital admission period, or alternatively the patient is given too much information in a given session thereby not allowing the opportunity for assimilation and discussion. The majority of specialist nurses are providing input into TIA clinics. The added value specialist nurses can bring to these clinics is their established links with other specialist nurses to other specialities such as Diabetes and Coronary Heart Disease for example.

3.9. The effectiveness of Indicators and Performance Measures Applied to Stroke Services

As reiterated earlier in the report specialist nurses contribute significantly to the Royal College of Physicians Sentinel Audit and has participated in October 2008 with the Welsh pilot of the nurse specific professional audit.

Whilst the Alliance recognises the importance for audit, we welcome indicators/ performance measures that are directed to patient satisfaction and envisage the All Wales Stroke Service Improvement Collaborative Care Bundles work for the rehabilitation and TIA stage to encompass this issue which would complement the Fundamentals of Care Audit which has been implemented on an all Wales basis. By making measures more patient focused we believe it assists healthcare professional to what might be realistically delivered and attained for the service.

3.10. The Likely Impact of the NHS Restructure on Stroke Services in Wales

To conclude, stroke services need to remain a priority in order to achieve equitable care pan Wales.
The Alliance would welcome a review of nursing establishments by Welsh Assembly Government; in England Lord Darzi's review in 2007 created significant investment for specialist nurse jobs across London (Nursing Times.net.10 february.2009).

Nurses play a significant role in the care of patients who have had a stroke due to the twenty-four hour, seven days a week presence which is a valuable source of continuity and comfort for patient and carer. Nurses provide the critical factor which assists cohesion with the full multidisciplinary team.

Summary Recommendations

Pre and Post Registration Education to support nurses developing a career in stroke nursing are currently inadequate. There is a need to review training budgets especially if we wish to achieve the Standards outlined in The Department of Health Stroke Education Framework and to review the issue of lack of protected time for study.

The Welsh Stroke Nurse Alliance is keen to actively contribute to the development of competency frameworks in stroke care to drive forward workforce and service developments.

Consensus is required on an All Wales level with regard to nurse staffing and skill mix ratios. There is substantial evidence that higher nurse staffing and skill mix ratios are important in reducing patient mortality, acquisition of healthcare associated infections and improving the general quality care.

Collaboration is vital between the multidisciplinary team and nurse to patient/family relationships are essential for the delivery of high quality and effective stroke care. Nurses have the skills and ability to promote cohesion and aid cross-boundary service developments.

There needs to be greater use of patient satisfaction as part of performance indicators when developing stroke services.

More emphasis should be placed on publicising Good Practice via newsletters or web pages on an All Wales basis. The Welsh Stroke Alliance and NLIAH can be instrumental with this development.

Significant investment is required for specialist nurses in view of the increased demands placed on their role and to maintain good recruitment and retention rates.

Continuing investment is required for specialist nurse roles to act as clinical champions and a catalyst for change.

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Appendix One

Nursing Concise Guide for Stroke 2008

This concise guide contains recommendations extracted from the *National clinical guideline for stroke*, 3rd edition,[1] which contains over 300 recommendations covering almost every aspect of stroke management. The recommendations below, compiled by members of the National Stroke Nursing Forum, have direct implications for nursing practice and aim to provide nurses with ready access to the latest guidance.

Recommendations are given below with their number, so that they can be found in the main guideline. Recommendations that are taken from the National Institute for Health and Clinical Excellence (NICE) guideline[2] have a background tint.

Overall organisation (3.1.1)

C All hospitals receiving acute medical admissions that include patients with potential stroke should have a specialist acute stroke unit to monitor and regulate basic physiological functions such as blood glucose, oxygenation, and blood pressure.

F There should be public and professional education programmes to increase awareness of stroke and the need for urgent diagnosis and treatment.

Specialist stroke services (3.2.1)

B All patients not suitable for transfer home after completion of their acute diagnosis and treatment should be treated in a specialist stroke rehabilitation unit which should fulfil the following criteria:

- it should be a geographically identified unit
- it should have a coordinated multidisciplinary team that meets at least once a week for the interchange of information about individual patients
- the staff should have specialist expertise in stroke and rehabilitation
- educational programmes and information are provided for staff, patients and carers.

C All patients discharged home directly after acute treatment but with residual problems should be followed up by specialist stroke rehabilitation services at home.

Resources (3.3.1)

A Each acute stroke unit should have immediate access to:

- nursing staff specifically trained and competent in the management of acute stroke, covering both its neurological and its general medical aspects.

B Each stroke rehabilitation unit and service should be organised as a single team of staff with specialist knowledge and experience of stroke and neurological rehabilitation including:

- consultant physician(s)
- nurses
- physiotherapists
- occupational therapists
- speech and language therapists
- dietitians
- clinical psychologists
- social workers.

C Each specialist stroke rehabilitation service should in addition:

- have an education programme for all staff providing the stroke service
- offer training for junior professionals in the specialty of stroke
- have easy access to services supplying: pharmacy; orthotics; orthroptists, specialist seating; patient information, advice and support; and assistive devices.

Transfers of care – general (3.6.1)

A All transfers between different teams and between different organisations should:

- occur at the appropriate time, without delay
- not require the patient to provide again complex information already given
- ensure that all relevant information is transferred, especially concerning medication
- maintain a common set of patient-centred goals.

Transfers of care – discharge from hospital (3.7.1)

A Hospital services should have a protocol, locally negotiated, to ensure that before discharge occurs:

- patients and families are fully prepared, and have been fully involved in planning discharge
- patients and families are given information about and offered contact with appropriate statutory and voluntary agencies.

G All patients should continue to have access to specialist stroke services after leaving hospital, and should know how to make contact.

Quality improvement (governance, audit) (3.8.1)

D All clinicians should be involved in audit of stroke care and should use the results to plan and execute service improvements.

Use of assessments/measures (3.10.1)

A stroke rehabilitation service should:

A agree on standard sets of data that should be collected and recorded routinely

D train all staff in the recognition and management of emotional, communicative and cognitive problems

F measure (change in) function at appropriate intervals.

Goal setting (3.11.1)

Every patient involved in the rehabilitation process should:

A have their wishes and expectations established and acknowledged

B participate in the process of setting goals unless they choose not to or are unable to participate because of the severity of their cognitive and linguistic impairments

C be given help to understand the nature and process of goal setting, and be given help (eg using established tools) to define and articulate their personal goals.

Rehabilitation treatment approach (3.12.1)

All members of a stroke service should:

A use an agreed consistent approach for each problem faced by a patient, ensuring the patient is given the same advice and taught the same technique to ameliorate or overcome it

B give as much opportunity as possible for a patient to practise repeatedly and in different settings any tasks or activities that are affected

C work within their own knowledge, skills, competence and limits in handling patients and using equipment, being taught safe and appropriate ways to move and handle specific patients if necessary.

Rehabilitation treatment quantity (intensity of therapy) (3.13.1)

B The team should promote the practice of skills gained in therapy into the patient's daily routine in a consistent manner and patients should be enabled and encouraged to practise that activity as much as possible.

End-of-life (palliative) care (3.14.1)

A Teams providing care for patients after stroke should be taught how to recognise patients who might benefit from palliative care.

B All staff caring for people dying with a stroke should be trained in the principles and practice of palliative care.

Medicines management (3.15.1)

A For every patient admitted to hospital, the clinical team should:
- obtain and confirm information about the patient's pre-existing medicine schedule (drug name, doses, timing/frequency, reason for taking)
- continue all necessary drugs and dosage regimes unless contraindicated.

B At all times, all patients should have existing and newly prescribed medication monitored for effectiveness and adverse effects.

C On discharge from hospital:
- the patient's ability to take full responsibility for self-medication should be assessed, to include cognition, understanding, manual dexterity and ability to swallow.

D Any patient prescribed a drug (new or continuation) should be given for each medication:
- information on the reasons for and adverse effects of the medication
- information on how and when to take medication, including information about any specific interactions they should be aware of
- information on what to do if a dose is missed
- compliance aids, as needed or requested, taking into account factors such as cognitive ability, manual dexterity, personal preference and the home environment and safety concerns
- information on whether a further prescription will be needed and, if so, on when and how to obtain it.

Pre-admission diagnosis (4.1.1)

A In people with sudden onset of neurological symptoms a validated tool such as Face Arm Speech Test (FAST) should be used outside hospital to screen for a diagnosis of stroke or TIA.

B In people with sudden onset of neurological symptoms, hypoglycaemia should be excluded as the cause of these symptoms.

C People who are admitted to accident & emergency (A&E) with a suspected stroke or TIA should have the diagnosis established rapidly using a validated tool such as Recognition of Stroke in the Emergency Room (ROSIER).

Initial diagnosis of acute transient event (4.2.1)

B People who have had a suspected TIA, that is, they have no neurological symptoms at the time of the assessment (within 24 hours), should be assessed as soon as possible for their risk of subsequent stroke using a scoring systems such as ABCD^2.

Immediate specific management of non-haemorrhagic stroke (4.6.1)

D Protocols should be in place for the delivery and management of thrombolysis, including post-thrombolysis complications.

Immediate specific diagnosis and management of subarachnoid haemorrhage (4.8.1)

D After any immediate treatment, all patients should be observed for the development of treatable complications, especially hydrocephalus.

Early phase medical care of stroke – physiological monitoring (4.12.1)

B The patient's physiological state should be monitored closely to include:
- blood glucose
- blood pressure
- oxygenation
- nourishment and hydration
- temperature.

Early phase medical management – homeostasis (oxygen, glucose, blood pressure) (4.13.1)

A People who have had a stroke should receive supplemental oxygen only if their oxygen saturation drops below 95%. The routine use of supplemental oxygen is not recommended in people with acute stroke who are not hypoxic.

B People with acute stroke should be treated to maintain a blood glucose concentration between 4 and 11 mmol/L.

Early positioning and mobilisation (4.15.1)

A People with acute stroke should be mobilised as soon as possible (when their clinical condition permits) as part of an active management programme of a specialist stroke unit.

B Every patient with mobility limitation should be assessed by a specialist to determine the most appropriate and safe methods of transfer and mobilisation.

C People with acute stroke should be helped to sit up as soon as possible (when their condition permits).

Feeding: swallowing, hydration and nutrition (4.16.1)

A On admission, people with acute stroke should have their swallowing screened by an appropriately trained healthcare professional before being given any oral food, fluid or medication.

B If the admission screen indicates problems with swallowing, the person should have a specialist assessment of swallowing, preferably within 24 hours of admission and not more than 72 hours afterwards.

D People with acute stroke who are unable to take adequate nutrition and fluids orally should:

- receive tube feeding with a nasogastric tube within 24 hours of admission
- be considered for a nasal bridle tube or gastrostomy if they are unable to tolerate a nasogastric tube
- be referred to an appropriately trained healthcare professional for detailed nutritional assessment, individualised advice and monitoring.

Bowel and bladder (4.17.1)

A The acute admitting ward should have a documented policy on detection and management of bowel and bladder function in the acute phase.

B Patients should not have an indwelling (urethral) catheter inserted in the first 48 hours unless indicated to relieve urinary retention.

C Urinary and faecal incontinence should be managed by high levels of nursing care in the acute phase.

Initial, early rehabilitation assessment (4.18.1)

A All patients should be assessed within a few hours of admission for their:

- ability to swallow, using a validated swallow screening test (eg 50-mL water swallow) administered by an appropriately trained person
- immediate needs in relation to mobilisation, moving and handling
- bladder control
- risk of developing skin pressure ulcers
- capacity to understand and follow instructions
- nutritional status
- ability to hear, and need for hearing aids
- ability to see, and need for glasses.

Oral nutritional supplementation (4.19.1)*

A All hospital inpatients on admission should be screened for malnutrition and the risk of malnutrition. Screening should be repeated weekly for inpatients.

A personalised, comprehensive approach (5.2.1)

A For each patient, an individualised and comprehensive strategy for stroke prevention should:

- be implemented as soon as possible following a TIA or stroke
- continue long term.

B For each patient, information about stroke and risk factors should be:

- given first in the hospital setting
- reinforced at every opportunity by all health professionals involved in the care of the patient
- provided in an appropriate format for the patient, taking into account both their stroke-specific impairments and their personal situation.

*This recommendation is taken from a NICE guideline on nutrition.[3]

C Patients should have their risk factors reviewed and monitored regularly in primary care, at a minimum on a yearly basis.

D All patients receiving medication for secondary prevention should:

- be given information about the reason for the medication, how and when to take it and any possible common side effects
- receive verbal and written information about their medicines in a format appropriate to their needs and abilities
- have compliance aids such as large-print labels and non-childproof tops provided, according to their level of manual dexterity, cognitive impairment and personal preference and compatible with safety in the home environment
- be aware how to obtain further supplies of medication
- have a regular review of their medication.

Lifestyle measures (5.3.1)

A All patients who smoke should be advised to stop smoking:

- Smoking cessation should be promoted at every opportunity using individualised strategies which may include pharmacological agents and/or psychological support.

B All patients should be advised to take regular exercise as far as they are able:

- The aim should be to achieve moderate physical activity (sufficient to become slightly breathless) for 20–30 minutes each day.
- Exercise programmes should be considered, and tailored to the individual following appropriate assessment, starting with low intensity physical activity and gradually increasing to moderate levels.

C All patients should be advised to eat the optimum diet:

- eating five or more portions of fruit and vegetables per day
- eating two portions of fish per week, one of which should be oily (salmon, trout, herring, pilchards, sardines, fresh tuna).

D All patients should be advised to reduce and replace saturated fats in their diet with polyunsaturated or monounsaturated fats by:

- using low-fat dairy products
- replacing butter and lard with products based on vegetable and plant oils
- reducing meat intake.

E Patients who are overweight or obese (as determined by body mass index (BMI) or waist:hip measurement ratio) should be offered:

- advice and support to aid weight loss, which may include diet, behavioural therapy and physical activity
- medication to aid weight loss only after dietary advice and exercise has been started and evaluated.

F All patients, but especially patients with hypertension, should be advised to reduce their salt intake by:

- not adding salt to food
- using as little as possible in cooking
- choosing lower sodium/salt foods.

G Patients who drink alcohol should be advised to keep within recognised safe drinking limits of no more than three units per day for men and two units per day for women.

H Patients should be advised that there is no evidence that oral vitamin supplementation will reduce the risk of stroke or other vascular events.

Blood pressure (5.4.1)

A All patients should have their blood pressure checked, and should be treated in keeping with national guidelines:

- an optimal target blood pressure (BP) for patients with established cardiovascular disease is 130/80 mmHg
- for patients known to have bilateral severe (>70%) internal carotid artery stenosis a slightly higher target (eg systolic BP of 150 mmHg) may be appropriate.

General principles of rehabilitation (6.1.1)

A All patients entering a period of active rehabilitation should be screened for common impairments using locally agreed tools and protocols.

B Patients should always be informed of realistic prospects of recovery or success and should always have realistic goals set.

Evaluating and stopping treatments (6.2.1)

A Every patient should have their progress measured against goals set at regular intervals determined by the patient's rate of change, for example using goal attainment scaling.

Positioning (6.11.1)

A Nurses and care staff should be given training on how to position patients who cannot position themselves after stroke.

B When lying and when sitting, patients should be put in positions that minimise the risk of complications such as aspiration and other respiratory complications, shoulder pain, contractures, and skin pressure ulceration.

Shoulder pain and subluxation (6.22.1)

A Every patient with significant functional loss in their arm should have the risk of developing shoulder pain reduced by:

- ensuring that everybody handles the weak arm correctly, avoiding mechanical stress (excessive range of movement, tension).

B Every patient with arm weakness should be asked about shoulder pain, initially on most days and then less frequently.

C Every patient who develops shoulder pain should:

- be offered regular simple analgesia (eg paracetamol, non-steroidal anti-inflammatory drugs).

Neuropathic pain (central post-stroke pain) (6.23.1)

A Every patient should be asked whether they are experiencing pain as a result of the stroke, and this question should be asked again after a few weeks.

Musculo-skeletal pain (6.24.1)

D Any patient continuing to experience pain should be offered pharmacological treatment with simple analgesic drugs taken regularly:

- paractetamol, up to 1 g four times daily
- non-steroidal anti-inflammatory drugs (with gastric protection only if needed)
- codeine and similar morphine derivatives. E

Any patient whose pain is still not adequately controlled should be referred to a specialist in pain management.

Depression (6.25.1)

A Every patient entering rehabilitation should be screened for depression using a validated simple screening test (eg asking 'Do you feel depressed?' or the GHQ-12 or PHQ-9 questionnaire). In addition:

- mood should also be assessed at later times, especially after stopping active rehabilitation or if depression is suspected
- screening tests such as 'smiley faces' or observational criteria alone should not be relied upon as the sole means of initial diagnosis
- questionnaires may be simplified to a *yes/no* format for people with communication difficulties
- the patient's past should be investigated for any history of mood disturbance.

C Any patient with depressed mood should be provided with appropriate information and advice.

Anxiety (6.26.1)

A Every patient entering the rehabilitation phase should be screened for anxiety, usually simply

by asking about the patient's concerns or asking family members.

Mental capacity (decision making by the patient) (6.35.1)

A All patients should be assumed to have the capacity to make decisions on their own care unless demonstrated otherwise.

B The patient's mental capacity should specifically be considered and documented when they are being asked to agree to a procedure that involves significant risk, noting that judgements on capacity must relate to the specific decision being made.

Bowel and bladder impairment (6.40.1)

A All wards and stroke units should have established assessment and management protocols for both urinary and faecal incontinence, and for constipation.

B All patients with loss of control of the bladder at two weeks should:

- be reassessed for other causes of incontinence, which should be treated if identified
- have an active plan of management documented
- be offered simple treatments such as bladder retraining, pelvic floor exercises and external equipment first
- only be given an indwelling urethral catheter after other methods of management have failed
- only be discharged home with continuing incontinence after the carer (family member) or patient has been fully trained and adequate arrangements for continuing supply of continence aids and services are confirmed and in place.

C All patients with a loss of control over their bowels at two weeks should:

- be assessed for other causes of incontinence, which should be treated if identified
- have a documented, active plan of management
- be referred for specialist treatments if the patient is able to participate in treatments
- only be discharged home with continuing incontinence after the carer (family member) or patient has been fully trained and adequate arrangements for continuing supply of continence aids and services are confirmed and in place.

D Patients with troublesome constipation should:

- have a prescribed drug review to minimise use of constipating drugs
- be given general advice on diet, fluid intake and exercise
- be offered oral laxatives
- be offered rectal laxatives only if severe problems remain.

Swallowing problems: assessment and management (6.41.1)

A Every patient should have their ability to swallow screened and documented as soon as is practical after stroke onset by a person with appropriate training using (if appropriate) a recognised, standard screening assessment (eg swallowing 50 mL of water).

B Until a safe swallowing method has been established, all patients with identified swallowing difficulties should:

- receive hydration (and nutrition after 24–48 hours) by alternative means
- be given their medication by the most appropriate route and in an appropriate form
- be considered for nasogastric tube feeding,

Oral health (6.42.1)

A All patients who are not swallowing, including those with tube feeding, should have oral and dental hygiene maintained (by the patient or carers) through regular (four-hourly):

- brushing of teeth, dentures and gums with a suitable cleaning agent (toothpaste or chlorhexidene gluconate dental gel)
- removal of secretions.

B All patients with dentures should have their dentures:
- put in appropriately during the day
- cleaned regularly
- checked and if necessary replaced by a dentist if they are ill-fitting, damaged or lost.

C All patients with swallowing difficulties and/or facial weakness who are taking food orally should be taught or helped to clean their teeth or dentures after each meal.

D Staff or carers responsible for the care of patients disabled by stroke anywhere (in hospital, in residential and in home care settings) should be trained in:
- assessment of oral hygiene
- in selection and use of appropriate oral hygiene equipment and cleaning agents
- recognition and management of swallowing difficulties.

Nutrition (6.43.1)

A All patients, when first assessed, should be screened for malnutrition and the risk of malnutrition by a trained person using a validated procedure (eg clinical judgement, the Malnutrition Universal Screening Tool (MUST)).

B Screening for malnutrition should be repeated
- weekly for hospital inpatients
- when there is clinical concern in all other patients.

C Fluid balance should be monitored carefully when modified consistency drinks and enteral input are given.

Sexual dysfunction (6.44.1)

A Every patient should be asked, at a time that seems appropriate, whether they have any concerns about their sexual functioning, and this should be documented.

B Any patient who has a limitation on sexual functioning and who wants further help should:
- be assessed for treatable causes
- be assessed for the use of sildenafil or an equivalent drug, if suffering from erectile dysfunction
- be advised about ways to overcome practical problems
- be referred to a person with expertise in psychosexual problems.

Personal activities of daily living (dressing, washing etc) (6.46.1)

A Every patient who has had a stroke should be assessed formally for their safety and independence in all personal activities of daily living by a therapist or nurse with the results recorded using a standardised assessment tool, preferably the Barthel Activities of Daily Living (ADL) index.

Extended activities of daily living (domestic and community) (6.47.1)

A Any patient who has had a stroke should be asked to what extent previous extended activities have been limited by the stroke.

Driving (6.48.1)

A Before they leave hospital (or the specialist outpatient clinic if not admitted), every person who has had a stroke or transient ischaemic attack should be asked whether they drive or wish to drive.

Vocational activities (6.49.1)

A Every person should be asked about the vocational activities they undertook before the stroke.

Further rehabilitation (7.1.1)

A Any patient whose situation changes (eg new problems or changed environment) should be offered further assessment by the specialist stroke rehabilitation service.

Patients in residential care homes (including nursing homes) (7.4.1)

A All patients in nursing homes, care home and residential homes should be able to receive

assessment and treatment from specialist rehabilitation services.

B All staff in nursing homes, care homes and residential homes should be familiar with the common clinical features of stroke and the optimal management of common impairments and activity limitations.

Carers (informal, unpaid) (7.5.1)

A At all times the patient's views on the involvement of their family and other carers should be sought, to establish if possible the extent to which the patient wants family members involved.

F After the patient has returned to the home (or residential care) setting, the carer should:

- have their need for information and support reassessed whenever there is a significant change in circumstances (eg if the health of either the patient or the carer deteriorates)
- be reminded of how they may seek further help and support on a regular but not frequent basis.

References

1 Intercollegiate Stroke Working Party. *National clinical guideline for stroke*, 3rd edition. London: Royal College of Physicians, 2008.

2 National Collaborating Centre for Chronic Conditions (funded by the National Institute for Health and Clinical Excellence (NICE) to produce guidelines for the NHS). *Stroke: national clinical guideline for diagnosis and initial management of acute stroke and transient ischaemic attack (TIA)*. London: Royal College of Physicians, 2008.

3 National Institute for Health and Clinical Excellence. *Nutrition support in adults: oral nutrition support, enteral tube feeding and parenteral nutrition*, NICE clinical guideline no 32. London: NICE, 2008.

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Appendix Two: Current General Nursing Establishment & Vacancies as of 1st September 2009

Region	No of Stroke Beds	Qualified Nurses – Early Shift	Care Assistants Early Shift	Qualified Nurses – Late Shift	Care Assistants Late Shift	Qualified Nurses – Night Shift	Care Assistants - Night	Current Vacancies
South East Wales								
Gwent:								
Royal Gwent Hospital	28 acute	4	4	4	4	2	2	2wte RN 1wte NA
St.Woolos	19 rehab	4	3	4	3	2	2	Not identified
County Hospital	11 rehab	1	2	1	2	1	1	Not identified
Neville Hall	22 beds: split acute stroke and gen rehab No of strokes vary	4	2	3	2	2	1	No Vacs
Cardiff & Vale:								
University Hospital	10 acute situated in 19 gen med ward	3	3	3	2	2	1	3 RN
West Wing, CRI	24 rehab beds	3	4	2	3	2	2	Not identified
Llandough Hospital	6 acute + 17 rehab all stroke	4	3	3	2	2	2	0 vacs
Cwm Taf:								
Prince Charles Hospital	6 acute situated in 24 gen med ward	3	3	3	3	2	2	Not identified

Region	No of Stroke Beds	Qualified Nurses – Early Shift	Care Assistants Early Shift	Qualified Nurses – Late Shift	Care Assistants Late Shift	Qualified Nurses – Night Shift	Care Assistants - Night	Current Vacancies
Aberdare General Hospital	15 rehab beds in 31 gen rehab ward	3	4	3	2	2	2	Not identified
Royal Glamorgan Hospital	12 acute situated in 27 gen med ward	3	4	3	2	2	1	Not identified
Llwynypia Hospital	28 rehab	3	4	3	3	2	2	Not identified
Mid & West Wales								
Hywel Dda Withybush	6 ASU 8 S rehab located on 26 bed ward	4	4	3	3	2	2	Not identified
Hywel Dda Bronglais	4 acute beds + 3 gen med 11 gen rehab (18 beds total)	3	3	3	2	3	2	1.5 wte RN
Hywel Dda PPH	5 acute beds + 25 elderly rehab beds	3	5	3	2	2	2	Not identified

Region	No of Stroke Beds	Qualified Nurses – Early Shift	Care Assistants Early Shift	Qualified Nurses – Late Shift	Care Assistants Late Shift	Qualified Nurses – Night Shift	Care Assistants - Night	Current Vacancies
Mid & West Wales								
Hywel Dda WWGH	6 collocated acute stroke within 14 gen med beds	3	3	2	1	2	0	0.80 wte Band 5 3.00 wte Band 2
ABM Morriston	8 stroke beds within a 24 care of the elderly ward figures for whole ward	2	4	2	2	2	1	1.00wte Band 5
ABM Singleton	12 co-located stroke beds within a 32 bedded care of the elderly ward	3	3	2	2	2	1	1.00 band 5 and 2.08 Band 2
ABM PoW	15 co located stroke beds within a 27 care of the elderly wards figures based on the 15 stoke beds	2	1	2	1	1	0	0

Region	No of Stroke Beds	Qualified Nurses – Early Shift	Care Assistants Early Shift	Qualified Nurses – Late Shift	Care Assistants Late Shift	Qualified Nurses – Night Shift	Care Assistants - Night	Current Vacancies
Mid & West Wales								
ABM Neath Port Talbot	10 co located stroke beds within a 27 care of the elderly wards figures based on the 15 stoke beds	2	1	2	1	1	0	0
Powys								
North Wales								
North West Wales	15 co-located beds within 15 gen med beds	3	3	2	2	2	1	1XWTE HCA 1x0.25 RN
North Wales Central								
North East Wales	21	4	3	3	2	2	1	0 Vacs