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THE UNIVERSITY OF NEWCASTLE AUSTRALIA

HUNTER NEW ENGLAND NSW HEALTH

Newcastle Institute of Public Health

A Vision for Stroke Nursing

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Stroke: bad news

- Stroke is the 3rd (2nd in Australia) biggest killer disease and a leading cause of severe disability in the developed world.
- Almost 1 in 4 men, 1 in 5 women aged 45 can expect to have a stroke if they live to 85
- Every 10 min in Australia, every 3 min in the UK someone has a stroke
- Mortality rates declining since 1950s: accelerated decline 1970s-1990s, from about 1990 decline slowing
- Prognostic factors for survival not amenable to intervention; ‘therapeutic nihilism’

Stroke: continuing bad news

- Leading cause of enduring disability in community at 5 years 42% alive, only 12% or 22% independent
- Self-reported prevalence in US 1.41% _ 1.87%

  1971–1994 average 7.5% increase every 5 years
- Concordant with decreasing stroke mortality but - Does this mean more people living with increasing disability?

Stroke: better news

- 2004 OXVASC figures:
  expected increases due to demographic changes did not occur
- Age & sex-adjusted incidence down 29% compared to 1981-6
- No change in case fatality rates
- Major increases in treatment and gains in risk factor profiles:
  smoking, cholesterol, blood pressure control, use of anti-platelet agents

‘Stroke Units save lives’

- To date the single most effective treatment for stroke
- Short and long term gains:
  reduce odds of death by almost 20%,
  death & dependency by 30% (SUTC, 2004)
- Reflected in quality of life scores at 5 years (Indredavik et al 1998)

National clinical guidelines for stroke

Second edition

Prepared by the Intercollegiate Stroke Working Party

June 2004

Clinical Effectiveness
& Evaluation Unit
ROYAL COLLEGE OF PHYSICIANS

Royal College of Physicians

Setting higher medical standards

National Sentinel Stroke Audit
Phase 1 Organisational audit 2008

Report for England, Wales and Northern Ireland

Prepared on behalf of
The Intercollegiate Stroke Working Party

CLINICAL STANDARDS

Royal College of Physicians

Setting higher medical standards

Royal College of Physicians of London

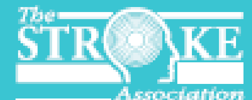
Department of Health

National STROKE Strategy

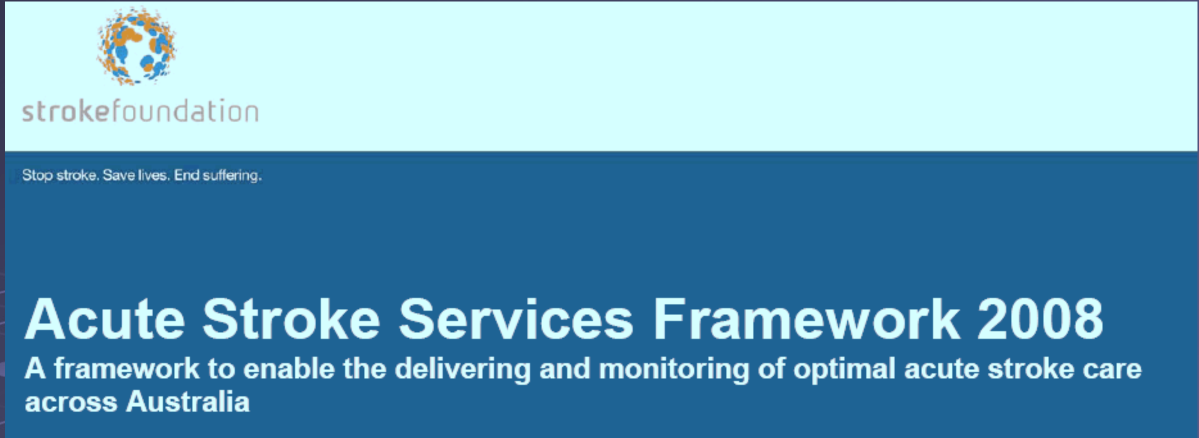
National Stroke Nursing Forum

UK STROKE FORUM

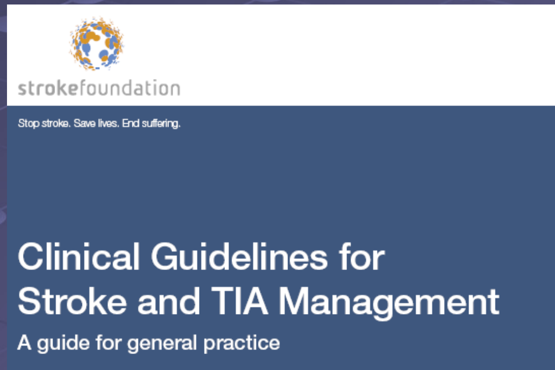
Hosted by

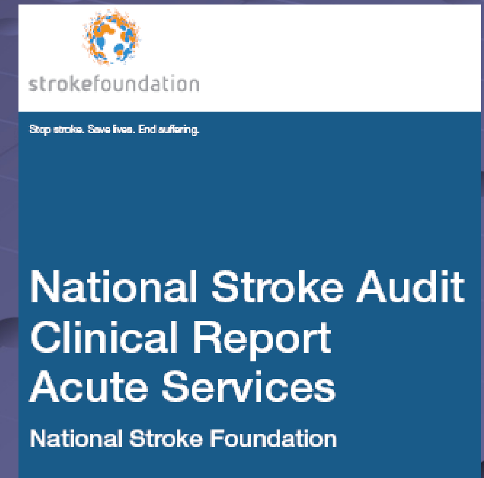


STROKE SERVICES
NSW


strokefoundation
Stop stroke. Save lives. End suffering.
Acute Stroke Services Framework 2008
A framework to enable the delivering and monitoring of optimal acute stroke care across Australia

A·S·U·N
AUSTRALASIAN STROKE UNIT NETWORK


strokefoundation
Stop stroke. Save lives. End suffering.
Clinical Guidelines for
Stroke and TIA Management
A guide for general practice


strokefoundation
Stop stroke. Save lives. End suffering.
National Stroke Audit
Clinical Report
Acute Services
National Stroke Foundation

gmct

smart
strokes

Stroke Society
of Australasia

Stroke
2008

What is a Stroke Unit?

Originally defined in the Cochrane review as:

1) Stroke-specific location:
   a) ASU accepts patients from admission, discharges early (often ≈ 7 days)
   b) Rehabilitation SU accepts patients once ‘stable’, often > 7 days
   c) Comprehensive SU (ie. combined acute and rehabilitation)
2) Mixed rehab ward - MD team provide generic rehabilitation service not exclusively stroke
3) Mobile stroke team - MD team providing care in a variety of settings

What is a Stroke Unit?

Subsequent analyses / comparisons:

1) All variants significantly reduced combined death/ dependency
   a) ASU only – no sig benefit on mortality (OR 0.8)
   b) Rehab SU only – reduced mortality (OR 0.6)
   c) Comprehensive SU - reduced deaths & LOS
2) Mixed rehab ward → less good outcomes
3) Mobile stroke team → less good outcomes

What makes a Stroke Unit?

1. Co-ordinated MDT that meets at least weekly
2. Specialist staff with expertise in stroke
3. Continuing education programme for staff
4. Provision of patient information
5. Carers involved in rehabilitation
6. Formal links with patient & carer organisations (SUTC 2007)

How to make this work?

- Most stroke literature focuses on outcomes; little or no information about processes
- Comparisons indicate teams based in a dedicated ward tend to outperform similarly specialist peripatetic stroke teams
- So …suggests SU is more than specialist individuals working together
- Quantitative studies unable to indicate why SUs get better outcomes, whether and/ or which characteristics of SU essential

1. Team-work

- ‘Real teams.. the whole is definitely greater than sum of the parts, no individual or profession dominates proceedings, people work together for the benefit of patients’. (Arthur et al 2005)
- 'new' organisations have a 'temporary culture’ …. reflects the previous cultural experiences of its most significant stakeholders of the 'correct' way to deliver healthcare. (Arthur et al 2005b)

"At first it was quite difficult as each and every team has their own way of doing things, or strategies to achieve things, or ways of coping" (N 5)

"The nurses had always worked on their own, then physiotherapists came and then the OTs came…felt inhibited with so many people on the ward…7-10 every day, it was like being invaded …. therapists were like vultures descending onto the ward" (N7)

"It's quite demoralising if people don't understand your role" (T 13)

"Therapists were saying "this is how you must do it!" (T15)

"It's (teamwork) something that is built up over time…we were all trying to identify our roles…trying our best to work together…it was difficult" (T 4)

"People felt threatened by each other, nurses and therapists… Therapists didn't want to go to the ward…they felt frosty stares" (T15)

"I think what has really changed is the approach of different members to each other…the OTs weren't working together with the nurses…the nurses weren't working with the OTs…now we are beginning to understand that everyone has to have their time to do their bits. So we are now trying to work together, respect each other's time and roles" (N 6)

2. Specialist staff, specialist knowledge: Stroke nursing

- ‘The role … appears to lack definition’ (Scott 2000)
- *“When we started it was all new to us. We had looked after some stroke patients before, but here we are in a stroke unit” (N 1)*
  “The nurses saw caring for a patient as doing more for them not less” (T15)
- What ‘no-one else wants - a bit of everything’
- ‘A coherent picture .. strong themes of communication, information-giving, support and liaison... relationship-centred partnership-working, and orchestration of care’ (Perry et al 2004)

- ‘Core activities...to prevent further deterioration, prevent harm and maintain safety……
promote partnership between patient and nurse..
to achieve improvement and coping’ (Burton 2000)

Shaping the future of stroke nursing

Currently:

- Roles are multi-faceted, diverse, expanding
- Stroke nursing, more than essential care but variously defined and understood.

Potentially:

- Need clearer role definition/ communication of roles
- Pro-active guidance of service developments
- Nursing stroke strategy, defined career structures, educational provision. (Perry et al 2004)

Continuing education:

	SUs	Rehab	Wards
There is an in-house programme for continuing education of **qualified staff** in the management of stroke	79%	56%	25%
There is an identified in-house training programme with issues relevant to stroke for **non-qualified** clinical staff	82%	56%	26%

(Hoffman et al 2005)

Online Programs:

Masters of Health Science / Clinical Epidemiology / Nursing (Advanced Practice)

Graduate Diploma / Certificate in Health Science / Clinical Epidemiology

Stroke modules: Acute Management

This course will cover cerebral circulation, stroke classification, stroke severity scales, range of investigations, differential diagnosis, acute intervention (including thrombolysis), and the complications of acute stroke in the context of multidisciplinary team management.

Stroke modules: Rehabilitation

Participants will develop knowledge and skills in the identification and team management of physical, psychological, communication, cognitive, perceptual, occupational and socioeconomic problems following stroke. They will also become familiar with the stroke scales, classification types and outcomes measures ordinarily used in stroke care - their validity, utility and limitations.

Carers' needs:

- **Information:** what is stroke, signs and symptoms of stroke, how to minimise future risks
- **Emotions and behaviours:** how to support the stroke patient through emotional distress/ depression / behaviour change
- **Physical care:** Concerns about providing physical care - ADLs, medication management; how to motivate the stroke patient.
- **Instrumental care:** finances, transportation, someone to care whilst carer away
- **Personal responses to caregiving:** double whammy: dealing with both patient & their own responses. Changes in social functioning, responsibilities; emotional and physical toll.

Carers' needs:

Complaint: all too often the focus of HC professionals is all on the patient, ignoring the carer & their needs.

What makes a Stroke Unit?

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6. Formal links with patient & carer organisations
(SUTC 2007)

Development of a Stroke Unit

- London Teaching Hospital
- 1200 + beds
- 4000 + staff
- International / Regional Specialities
- Large Neurosciences Unit

- No dedicated stroke service
- Delivered over 18+ wards
- No specialist staff in stroke altho neuro therapists
- Grass roots MD Stroke Working party 1997

The hospital stroke service

1998

- Hospital at bottom end of National Audit
- Death rate 24%
- No secondary stroke prevention service
- Very limited education or support for patients & carers
- Poor user participation

2002

- Stroke unit in top 5%
- Death rate 15%
- Weekly stroke prevention clinic
- Stroke coordinator post, local booklet, education programmes for staff, patients & carers
- User participation, patient group, feedback forms, key workers

Key development issues

- Building a team
- Developing practice based knowledge and skills in stroke
- Valuing the central role of the nurse
- Creating an organisational climate for supporting change

Building a team

- Strong teamwork:
  "a very different & positive way of working"
- Team
  "not Consultant led, moves forward as a team and not dependent upon one driver"
- But health care teams have professional loyalties as well as being part of a MDT.

  May lead to conflicting allegiances Kilbride 2005

Developing practice based knowledge & skills in stroke

- "I think all the training that we've had and a lot more closer working together, I've learnt an awful lot…"
- " The education programme … we understand more, makes the job more enjoyable, feels better because you know things"
- "Knowledge allows team participation, it gives you the "rules" of the game to play"
- "The cornerstone of teamwork" (Kilbride 2005)

Valuing the central role of the nurse in stroke

- "I think we look more to their individual needs and what they can achieve, rather than before, when we used to do the caring, and …. we just nursed them to make them better"
- Importance of increased specialisation, meeting the "missing sense of expertise"
- Nurses are the "glue" of the Unit (Kilbride 2005)

Creating an organisational climate to support change

- Complex systems, layers of occupational & professional boundaries
- Grass roots enthusiasm; senior support required and motivation at that level too
- Team supported to develop a voice, to challenge the status quo and given a route to open doors
- Linkage of Project Team and Steering Committee, Stroke Committee set up to link clinicians & management

How did it work?

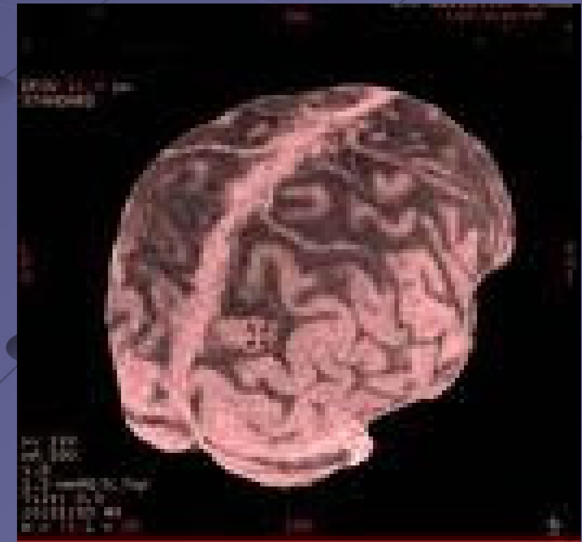
- Building a team
  + valuing role of the nurse
  + practice based knowledge _
  created a community
- Organisational climate:
  community created in a setting ready for change
- = creation of a community of practice
- NOT take guidelines and apply:
  much more complex in practice

“Valuing the role of the nurse”

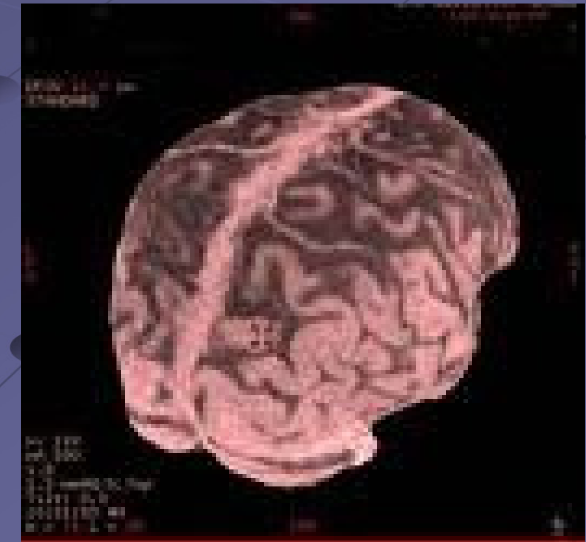
Stroke specialist nursing:

- Specialist essential stroke nursing
- Innovative role development
- Advancing service development
- Shaping local, regional, national policies and strategic direction
- International influence

The sky's the limit!



Thank you for listening



12 Key Indicators

	2002 (%)	2004 (%)	**2006 (%)**
Stroke Unit	36	46	62
>50% time SU	27	40	54
Swallow screen <24 hours	64	63	66
Brain scan <24 hrs	58	59	42
Aspirin < 48 hours	65	68	71
PT < 72 hours	59	63	71

12 Key Indicators

	2002 (%)	2004 (%)	2006 (%)
Weighed	49	52	57
Mood assessed by discharge	52	47	55
Antithrombotic by discharge	91	95	100
Rehab goals documented	61	68	76
Home visit	73	69	63
Average for 12 indicators	**57**	**61**	**65**

How has the sentinel stroke audit help to shape clinical services?

There is evidence it is a major lever for change

- Data is useful at clinical and managerial level e.g. to lobby for opening stroke unit to increase size of stroke unit to improve scanning facilities

"I've been trying to get the trust to offer scanning for stroke patients for 5 years, within a day of receiving the audit report the chief executive had convened a meeting with stroke service and radiology"

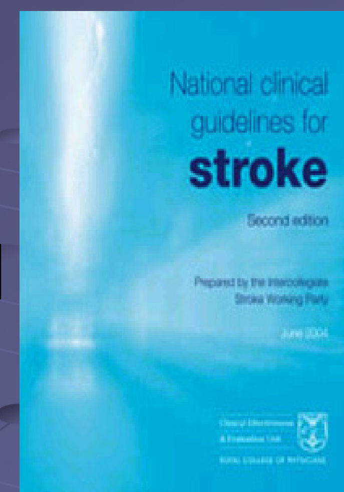
Stroke physician after 2004 performance indicators published

Factors contributing to success

- ☑ Access to reasonably high quality data (better than other sources)
- ☑ Defined by clinicians (Intercollegiate Working Party for Stroke and National Clinical Guidelines for Stroke)
- ☑ Interpreted by clinicians (reports and workshops by MDT)
- ☑ Owned by clinicians

Impact of Stroke Programme

- Informed NSF for Older People Stroke Chapter 2000 and National Stroke Strategy
- Guidelines widely disseminated & quoted
- Evidence audit is a powerful tool for change
- Performance indicator for Stroke ★ratings
- Report for All Party Parliamentary Group
- Informed NAO report
- Work with NHSIA developing minimum dataset



How to Increase the Rate of Change?

- Local champions
- Peer review
- National Strategy e.g. NSF, National Stroke Strategy
- Guidelines
- National Audit Office
- The heavy arm of the Healthcare Commission or Department of Health