Fairfield Hospital
Stroke Forum: Reducing Unwarranted Clinical Variation

Thursday 28 April 2016

Drummond, Myra - Nursing Unit Manager
The ACI acknowledges the traditional owners of the land that we work on - the Gadigal People of the Eora Nation. We pay our respects to Elders past and present and extend that respect to other Aboriginal peoples present here today.
Clinical Audit Results

- This audit report was funded by the ACI of New South Wales (NSW) Health, with involvement of Stroke Services NSW and the Unwarranted Clinical Variation Taskforce. Acknowledgements are as per report. Cross sectional audit methodology was used.

- This report is based on stroke audits conducted in 2005 and 2015 at Fairfield Hospital. The baseline (2005) sample of 49 cases was primarily for admissions between February 2004 and May 2005. The 2015 audit includes a sample of 40 cases from admissions between March 2013 and March 2014.
Audit results

- Considerable variability in investigation and treatment of patients with stroke
- Reasons that investigations or treatments were used or not used in individual patients were not available.
- Blood pressure management was suboptimal, although it is increasingly recognised as important in secondary prevention of stroke and other atherosclerotic vascular disease
- The prevalence of direct care by stroke protocol was low, despite being known to reduce mortality and improve outcomes
Evidence is increasing that patients with stroke who are treated in specialised stroke units have better survival and functional outcome than those treated in general medical wards.

Dedicated stroke units differ from general medical wards in their care of patients with stroke:
- Clear clinical pathways for diagnosis, treatment, prevention of complications
- Clear pathway for rehabilitation.
- Interdisciplinary teams of physicians, therapists and nurses coordinate medical management, rehabilitative therapy
- Stroke education, aimed at reaching defined medical and functional goals before the patient is discharged.
# Areas for improvement identified

<table>
<thead>
<tr>
<th>Area</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Presentation &amp; Clinical Management</strong></td>
<td>41% patients presenting via private transport</td>
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<td><strong>Investigations</strong></td>
<td>MRI off site</td>
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<td><strong>Adherence to recommended clinical process</strong></td>
<td>- 55% (n=22) documented swallowing ability</td>
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<td>- 35% (n = 20) non walking patients received heparin/low molecular weight heparin</td>
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<td>- 3% patients have documented neurological observations</td>
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<td>- 5 patients febrile during admission</td>
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<td>- 59% ischemic strokes received aspirin within 24 hours</td>
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<td><strong>Time trend changes in acute care practises</strong></td>
<td>- 65% use of stroke clinical pathway</td>
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<td>- Nil documentation of multidisciplinary team rounding within 7 days</td>
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<td><strong>Adverse Events</strong></td>
<td>6 severe adverse events (3 UTI, 3 Pneumonia)</td>
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Strategy developed/ solution(s)

- Train the trainer
- Multidisciplinary input
- ePJB
- Portfolios & self directed learning packages
- Environmental changes
- Dedicated Acute Clinical Stroke/TIA Pathway
Implementation approach

- Multidisciplinary
- Collaborative
- Systematic
- Clinician and patient focused
- Innovative
Nursing Acute Stroke Care Pathway

Guidelines for using this clinical pathway

The Clinical Pathway remains with the Bed Chart and is filled in the medical discharge on discharge. The patient care plan is completed for a patient who is currently on a clinical pathway. Specific interventions for an individual patient are noted in the Careplan. The clinical pathway must be completed and signed by each care provider.

Affix Patient identification Labels to all pages - 2 (both sides of attached Pathway) Cross – X - to denote the event has occurred and sign in the column alongside

A ‘VARIANCE’ is a deviation or detour from the planned clinical path. Variance may occur providing individualised patient care. The goal of variance management is to avoid or reduce during their practice.

Variance are to be recorded using BLACK ink and signed in the column alongside. To discontinue this clinical pathway;...

This Pathway is intended as a guide only and does not replace clinical judgement.

Always assess whether an intervention is appropriate for individual patients. Adhere to policy (if relevant)

Nursing staff directly involved in the patient's care are responsible for completing this form

Instructions for use:

- The pathway should be completed in conjunction with the Adult Admission and Discharge Assessment AMR000.001
- Patients recognised as meeting the criteria should start the clinical pathway immediately.
- The pathway should be commenced in the Emergency Department
- Start a new page for each day.
- Actions must be initiated by the nurse.
- Variance must be documented in their shift.
- A patient taken off a clinical pathway must have reasons for this documented clearly in the health care record.

If any problems or queries arise with the pathway contact the acute stroke senior nursing staff.

Patients must meet the below criteria for use

All patients admitted with TIA / stroke requiring stroke workup.

Abbreviations

TIA: Transient ischaemic attack
SAGO: Standard Adult General Observation Chart
GCS: Glasgow Coma Scale
ASSIST: Acute Screening of Swallowing in Stroke TIA
BGL: Blood Glucose Level
VTE: Venous thromboembolism
NGT: Nasogastric tube
MSU: Mid stream urine
NSF: Nudge

SWSA: Stroke Units
CAMP: Campbelltown
FAIR: Fairfield
LD: Liverpool
Acute Stroke/TIA Clinical Pathway

THIS PATHWAY IS INTENDED AS A GUIDE ONLY AND DOES NOT REPLACE CLINICAL JUDGEMENT

Always assess whether an intervention is appropriate for individual patients. Adhere to Policy (if relevant).

NURSING STAFF DIRECTLY INVOLVED IN THE PATIENT'S CARE ARE RESPONSIBLE FOR COMPLETING THIS FORM

Instructions for use:
- The pathway should be completed in conjunction with the Adult Admission and Discharge Assessment AMR030.001
- Patients recognised as meeting the criteria should start the clinical pathway immediately
- The pathway should be commenced in the Emergency Department
- Start a new page for each day
- Actions must be initiated by the nurse
- The pathway is designed for use by nursing staff only
- Variances must be documented each shift
- A patient taken off a clinical pathway must have reasons for this documented clearly in the health care record.

If any problems or queries arise with the pathway contact the acute stroke senior nursing staff

PATIENTS MUST MEET THE BELOW CRITERIA FOR USE

All patients admitted with TIA /stroke requiring stroke workup.

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BGL: Blood Glucose Level
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NGT: Nasogastric tube
MSU: Mid stream urine
NSF: National Stroke Foundation
<table>
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<th>Date</th>
<th>Time Off</th>
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**Preventing Falls**

**To Do**

1. Check your footing and ability to get up immediately if you fall.
2. Make sure there is nothing slippery or uneven under your feet.
3. Use walking aids such as canes or walkers.
4. Have good lighting in your home.
5. Keep your home free of clutter.

**Falls Prevention**

- **April 2016**
- **Falls Prevention**
- **Everyone's Business**

**MUST RECORD REASON FOR ANY INCREASED MONITORING**

- **NSTEMI** → 24h
- **STROKE** → 48h
- **TIA** → 48h
# Action Plan 2016

<table>
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<tr>
<th>Standard</th>
<th>Achievement 2015</th>
<th>Plan</th>
<th>Goal 2016</th>
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<tbody>
<tr>
<td>1</td>
<td>Discharge medication cards &amp; storage</td>
<td>Train all staff on PB</td>
<td>100% staff trained and used PB</td>
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<tr>
<td>2</td>
<td>Team Leader handover</td>
<td>PB updated every shift</td>
<td>100% disciplines attend PB rounds 2/7</td>
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<td>Patient Flow Record Tool</td>
<td>QUARTERLY PB meetings recorded and attendance by all disciplines</td>
<td>Quarterly PB meetings recorded and disseminated to all disciplines</td>
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<td>4</td>
<td>Patient Journey Planning</td>
<td>QUARTERLY PB report designed and disseminated</td>
<td>ELC audit completed</td>
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<td>5</td>
<td>Establishment of end of life care champions portfolio</td>
<td>Monthly training by all ELC Champions</td>
<td>80% ELC audit completed</td>
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<td>6</td>
<td>Attendance at district patients care advance workshop</td>
<td>Develop and implement ELC checklist</td>
<td>100% ELC checklist recorded in all clinical records of ELC patients</td>
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<td>7</td>
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<td>Repeat ELC audit</td>
<td>ELC audit completed</td>
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<td>8</td>
<td>VTE whole of hospital audit</td>
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<td>80% VTE Medical and Nursing Education</td>
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<td>9</td>
<td>VTE medical versus surgical comparison</td>
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<td>100% Checklist implemented into clinical notes</td>
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<td>Staff watch Barbara’s story on dementia awareness &amp; Staff trained on CARE dementia</td>
<td>80% staff watch National story</td>
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<td>“The Lighthouse” implemented</td>
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<td>80% staff education on RAPID guidelines</td>
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For more detailed information, please refer to the attached documents.
Multidisciplinary Referrals
RaPID Project

Referrals and Planning Identified Discharges
Aim Statement

Within 12 months, 90% of referrals to Allied Health will be appropriate, timely and provide sufficient information for prioritisation.

Sub Goal
Within 6 months, 80% of referrals to Allied Health on 1A are appropriate, timely and provide sufficient information for prioritisation.

Sub Goal
Replicate the study hospital wide January, 2016
Cause and effect diagram

IT Systems

- PowerChart referral system does not prompt for appropriate information
- Nursing staff not looking at front sheet

Workplace Culture

- Medical teams document ‘blanket AH referral’ or ‘all AH’
- No ownership of patients
- PowerChart referral system makes things messy
- AH ‘dumping ground’ for patients not appropriately medically managed
- AH only for clearance
- No clear AH plan

Communication

- MO orders followed without question
- Assumptions of patient situation
- Not involving patient/carer in assessment
- Med teams document ‘for AH’ in file however reasons not explained

Time

- Late referrals e.g. day of discharge
- Time pressures on all staff

Poor Knowledge

- Lack of awareness re timeframes for D/C planning e.g. organising equipment
- Medical and Nursing staff expected to understand 5 different roles

Poor quality

Referrals to Allied Health

Within the team

- Old school VMO referral process
- Culture of medical teams expecting NS to enter all referrals on their behalf
- Drs document in notes for referral but don’t enter into PowerChart or ask someone else to do it.

Within the team

- Belief that AH need to check and clear for DC
- AH only for clearance
- Medical teams document ‘for AH’ in file however reasons not explained
- Assumptions of patient situation

Poor

Knowledge

- Poor medical knowledge of AH roles
- Poor nursing knowledge of AH roles

Time

- Poor medical knowledge of AH roles
- Poor nursing knowledge of AH roles
- Lack of awareness re timeframes for D/C planning e.g. organising equipment

Within the team

- Culture of medical teams expecting NS to enter all referrals on their behalf
- Old school VMO referral process
- Drs document in notes for referral but don’t enter into PowerChart or ask someone else to do it.

Time

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Poor Knowledge

- Lack of awareness re timeframes for D/C planning e.g. organising equipment
- Medical and Nursing staff expected to understand 5 different roles
RaPID Timeline

**Planning & Diagnostic**
- Working Party
- Audit of referrals
- Medical & Nursing Questionnaire
- Cause & effect diagram / theming
- Referral IT pathways review
- Identified key issues
- Resource Tool Kit
- Questionnaire Pre/Post
- Audit tool
- JMO education
- Nursing education
- Evaluation tool

**Implementation**
- Questionnaire Pre/Post
- Audit tool
- JMO education
- Nursing education
- IT network meeting
- Resource tool kit train the trainer

**COMPLETED**
Phase one
August 1st 2016 – August 31st 2016

**Phase Two**
September 1st 2016 – October 31st 2016

**Phase Three**
November 1st – December 31st

**Evaluation**
- Replication
What we learned?

Advantages

- Good care does not have to be specialised care
- Easy access for patients reducing delays getting to hospital
- Easy access for visitors
- All stroke professionals continue to see and get experience in the whole stroke pathway
- Innovative ways to deliver good stroke care
Disadvantages

- Where will the staff come from?
- Huge training issues – still not delivering basic acute care
- Cost for providing 24/7 rotations of medical staff
- Small numbers of patients being thrombolysed creating difficulties in obtaining sufficient experience
- Imaging departments problems with providing CT radiographers
- Providing expertise at a network/regional level to local hospitals
- Linking imaging to neuroradiology via telemedicine provide solution to reporting scans but does not negate the need for follow up stroke consultancy service or trained stroke nursing staff
- Insufficient volume of work for experience to be gained in management of rare and complex problems
- Longer travel times when time = brain
Outcomes

- Acknowledge suboptimal use of many evidence-based interventions.
- Re-think resources financial, environmental and staff
- Push for systematic change at executive level
- Commit to a comprehensive training programme and environmental change
- Culture of referral
- Knowledge of Allied Health Role & referral process
- Informatics clinical redesign
Conclusion

- Clearly, management of acute stroke in Australia does not always follow recommended practice, and identifying areas for improvement is only our first step.
- Major change is happening
- There are likely to be local solutions to local problems
- Clinicians and administrators must realise that evidence-based strategies exist for improving care after stroke.
- Systematic assistance with practice improvement is needed.
- We must not see any compromise on quality e.g. any old clinician delivering acute stroke care
- Fantastic opportunity for operational research and we thank the ACI for their work in highlighting these issues