The Role of the Nurse in Discharge Planning and Follow Up for Stroke Patients

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Definition of Stroke

- ‘A focal (or at times global) neurological impairment of sudden onset, and lasting more than 24 hours (or leading to death) and of presumed vascular origin’.

(WHO, 2010)
Ischemic stroke

A clot blocks blood flow to an area of the brain

Hemorrhagic stroke

Bleeding occurs inside or around brain tissue

Common impairments after a first ever stroke include:
- Aphasia
- Apraxia of speech
- Arm/hand/leg weakness
- Cognitive impairment
- Dysarthria
- Dysphagia
- Facial weakness
- Gait, balance and coordination problems
- Perceptual impairments, including visuospatial dysfunction
- Sensory loss
- Upper limb impairment
- Visual problems

Common activity limitations include:
- Bathing
- Communication
- Dressing and grooming
- Eating and drinking
- Participation restrictions (e.g., returning to work)
- Psychological (e.g., decision making)
- Sexual function
- Toileting
- Transferring
- Urinary and/or faecal incontinence
- Walking and mobility

Common complications for stroke patients include:
- Anxiety
- Confusion
- Depression
- Emotionalism
- Falls
- Fatigue
- Infection (especially urinary tract and chest)
- Malnutrition/under-nutrition
- Pain
- Pressure sore/skin break
- Recurrent stroke
- Shoulder pain
- Shoulder subluxation
- Spasticity
- Venous thromboembolism
Delay between stroke onset and complications within first 30 days

Discharge planning begins from admission

- Identification of complexity of needs - all patients admitted to the hospital will be met by the ANP/CNS providing information and education to both the patient and family.

- It is during this time that the patients/families needs and expectations are identified and a management and discharge plan is put in place through the involvement of the Stroke MDT

Pre morbid function

The Modified Rankin Scale

0 No symptoms at all.
1 No significant disability despite symptoms; able to carry out all usual duties and activities.
2 Slight disability; unable to carry out all previous activities but able to look after own affairs without assistance.
3 Moderate disability; requiring some help, but able to walk without assistance.
4 Moderately severe disability; unable to walk without assistance, unable to attend own bodily needs without assistance.
5 Severe disability; bedridden, incontinent and requiring constant nursing care and attention.
6 Dead

0-3: Good outcome
4-5: Poor outcome
6: Death
Nurse-led Ward Rounds

- an effective way of instigating a management plan
- engaging nursing staff and ultimately the whole MDT and patient
- plan the aspects of care required leading to discharge
**Discharge planning at MDT**

- Weekly MDT meetings are coordinated by the ANP and a discharge plan is set in place for each patient.
- Weekly family MDT meetings are also coordinated by the ANP and allows for clarity between the goals of the MDT, patient and family.
- Clinics run weekly allows for review of all patients discharged home post stroke to assess their ongoing needs.
- A Nurse telephone support system is in place for all patients and families easing the transition and discharge process and allowing early identification of problems with direct access to referral to the OPD clinic.
- Monthly visits to Nursing Homes to review patients to identify and assess needs and complications.
A personalised, comprehensive approach to discharge planning

- For each patient, information about, and treatment for, 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.

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

  \( (RCP, 2012) \)

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, dosette boxes according to their level of manual dexterity, cognitive impairment and personal preference and compatibility with safety in the home environment
- be aware of how to obtain further supplies of medication
- have a regular review of their medication

  \( (RCP, 2012) \)
Discharge Planning and Transfer of Care

**Discharge letter should include:**

- Diagnosis(es)
- Investigations and results
- Medication and duration of treatment if applicable
- Levels of achievement, ability and recovery (BI,AMTS,WEIGHT)
- Team care plan
- Further investigations needed at primary care level with dates
- Further investigations needed at hospital and dates
- Further hospital attendance with dates
- Transport arrangements
- The hospital name, hospital telephone number, ward name or number, ward telephone number, CNS/ANP number
- Consultant’s name and named nurse
- The date of admission and discharge.

- What happens to the patients after discharge?
Nurse- led stroke follow-up clinic

- **Secondary Prevention**
  - (B/P, weight, diet, information re-smoking etc)
- **Physical/ medical status**
  - (medications, complications, pressure areas, continence etc)
- **Functional Ability** (Barthel, mRS, MMSE, ACE-R, MoCA)
- **Social  /environmental issues**
  - ( equipment, benefits, support)
- **Mood** (HADS)
- **Carer/family issues (CSI)**
- Nurse Prescribing

Secondary Prevention Guidelines

- **BP** aim clinic BP < 130/80 >50s CCB/diuretic +/- ACE, ARB
- **APT** ASA 75mg +MR dipyridamole 200 bd
- **Statin** aim reduce total C < 4, LDL.C < 2
- **Afib** warfarin INR 2-3, must be in TR >70% NOAC
- **Exercise** moderate intensity 30min/day x5/wk
- **Diet** fruit/oily fish
- **Alcohol** 2u/day(women), 3u/day(men)
- **Smoking cessation**
Secondary Prevention Cautions

- Target BP in very old, frail, fallers should be higher (HYVET 150/80)
- Bilateral critical carotid artery stenosis
- ASA/clopidogrel not for longer than 3/12
- Statins myopathy, ICH risk
- Monitor renal fn in NOACs caution GFR <30
- ?PAF in ischaemic stroke > one vascular territory, normal carotids
- 7d >48h>24h holter

Follow Up of Patients in Nursing Homes

- Simple scores (BI, Weight, cognitive fn measures) helpful in assessing disabled patients’ recovery after discharge from hospital with stroke
- Falls, pain, spasticity, incontinence, dysphagia and mood/ cognitive problems may become more evident after discharge
- Clear guidelines on secondary prevention but benefit v risk in very old frail patients is less clear
- **Point of education**
### Attachment B: Imelda Noone (CPA August 2008)

<table>
<thead>
<tr>
<th>No.</th>
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<th>Generic Name</th>
<th>Route</th>
<th>Treatment Indication</th>
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<td>1</td>
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<td>Aspirin</td>
<td>PO</td>
<td>Pain relief and antiplatelet for vascular conditions such as angina and MI.</td>
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<td>Fentanyl 50 - 100mcg</td>
<td>Fentanyl</td>
<td>PO</td>
<td>Antiemetic for the treatment of acute vomiting associated with nausea and vomiting, such as chemotherapy induced.</td>
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<td>3</td>
<td>Metoclopramide 10 - 50mg</td>
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<td>PO</td>
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<td>Palonosetron 0.5 - 1.5mg</td>
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Lifestyle

- **Stop smoking** (\( 35\% \) relative risk reduction*)
  - individualised approach: pharmacological agents, psychological support
- **Regular exercise** – (24\% relative risk reduction*)
  - to slight breathlessness, 20-30 min daily
- **Moderate alcohol intake** – (? 20\% relative risk reduction*)
  - \( \leq 3 \) units per day for men and \( \leq 2 \) units per day for women
- **Healthy diet**
  - \( \geq 5 \) a day fruit and veg, 2 fish portions per week (one oily), low fat dairy products, reduce meat intake
- **Target weight**
  - advice, support and exercise
- **Restricted salt intake**
  - avoid adding to food, minimise in cooking, choose lower sodium/salt foods

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**Stroke Service 1998 and 2012**

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<thead>
<tr>
<th></th>
<th>1998</th>
<th>2012</th>
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<tbody>
<tr>
<td>No.</td>
<td>183</td>
<td>333</td>
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<tr>
<td>&lt; 65</td>
<td>22%</td>
<td>15%</td>
</tr>
<tr>
<td>Mortality</td>
<td>26%</td>
<td>13%</td>
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<tr>
<td>Home</td>
<td>42%</td>
<td>59%</td>
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<tr>
<td>Residential Care</td>
<td>17%</td>
<td>9%</td>
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<tr>
<td>Off site rehab</td>
<td>12%</td>
<td>14%</td>
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</table>
National Clinical Programme
Irish stroke thrombolysis rates, change over time

Goal rate, end 2012

Discharges

Percentage Patients (ICD I60-I64) Discharged Directly Home

Carmel.brennan@hse.ie
Nursing Home Discharges (Disability)

Percentage Patients (ICD I60-I64) Discharged to Nursing Home

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>2005</td>
<td>15%</td>
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<tr>
<td>2006</td>
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<tr>
<td>2007</td>
<td>15%</td>
</tr>
<tr>
<td>2008</td>
<td>15%</td>
</tr>
<tr>
<td>2009</td>
<td>17.3%</td>
</tr>
<tr>
<td>2010</td>
<td>17.3%</td>
</tr>
<tr>
<td>2011</td>
<td>17.3%</td>
</tr>
<tr>
<td>2012</td>
<td>14.5%</td>
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Mortality

Percentage Patients (ICD I60-I64) Died

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<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>16.2%</td>
</tr>
<tr>
<td>2006</td>
<td>16.2%</td>
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<tr>
<td>2007</td>
<td>16.2%</td>
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National Stroke Programme

- Funding for TIA, Early Supported Discharge and Rehab. services
- Posts-57 posts (nursing & AHP)
  - 17 of the 21 CNS posts filled
    - 2 posts candidates awaiting start dates (CUH & Loughlinstown)
    - 1 post in recruitment (Drogheda)
    - 1 post awaiting management approval (Kerry)
- Stroke Register-in 28 hospitals
- Care Pathways & Care Bundles-on [www.hse.ie](http://www.hse.ie)
- Atrial Fibrillation Screening Pilot in Primary Care-in progress
- Telemedicine Rapid Access for Stroke and Neurological Assessment (TRASNA)-in progress