strokefoundation

Rehabilitation Stroke Services Framework

Summary 2013

The Rehabilitation Stroke Services Framework is designed to enable the delivery and monitoring of best practice rehabilitation stroke care across Australia.

Rehabilitation services across Australia vary in terms of the infrastructure and resources (e.g. staffing) they provide. In general the models of stroke rehabilitation that currently exist comprise free-standing stroke rehabilitation units and co-located acute and rehabilitation (in-patient, ambulatory and community) stroke services. People with stroke will often exit one service model and re-enter another. They consistently report that this transition is often very difficult and therefore integration of the various rehabilitation stroke service models is important. Ideally the transition from one service to the next should be seamless and therefore it is important that systems are in place to enable this.

The recent *National Stroke Audit Rehabilitation Services Report 2012* recommended "further work should be undertaken to identify core elements of effective stroke rehabilitation units to facilitate greater access to this model of evidence-based stroke care in Australia". The *National Rehabilitation Stroke Services Framework 2013* has been developed in response to this identified need.

As well as detailing the essential elements, principles and models of care for rehabilitation stroke services it also provides administrators, funders, policy makers and health professionals with guidance about systems for effective transition of stroke survivors into the community when they leave hospital. This is a particularly important issue for people with stroke and is often reported as being a difficult time.

Recommendations

To ensure a high quality rehabilitation service that provides the optimal outcomes for stroke survivors, it is recommended:

- All rehabilitation stroke services adopt the core rehabilitation principles and elements described in this document for their care setting.
- All rehabilitation stroke services establish robust communication and referral links with acute stroke providers and community service providers.
- All hospitals that deliver rehabilitation services for stroke survivors be involved in one or more ways to collect data that monitors aspects of the care provided (e.g. AROC; National Stroke Rehabilitation Audit). These hospitals should also be involved in quality improvement activities and use the data to drive change.
- This framework is used in conjunction with the Acute Stroke Services Framework 2011 and the Clinical Guidelines for Stroke Management (2010) to increase access to evidence-based stroke care throughout Australia.

Aims of the framework

The framework aims to improve the quality of Australian rehabilitation stroke services by outlining recommended structures, networks, settings, workforce and criteria for monitoring.

The intended use of the framework is to:

1. Outline essential **principles, elements** and **models** of stroke rehabilitation services in order to **assist planning** of rehabilitation stroke services.
2. Provide a basis for **measuring** adequacy of current structures and resources for best practice stroke care.
3. Enable this information to be used to **advocate** for improved services where gaps are identified.
4. Guide decisions about **resource requirements** (e.g. workforce).
5. Provide an outline for **monitoring** quality of care delivered by stroke services.

The framework is not developed to be used for accreditation purposes (this may change during future reviews).

Target audience

This framework is intended for use by administrators, funders, policy makers and health professionals who plan, organise and deliver care for stroke survivors who require rehabilitation services.

Table 1

Essential principles of stroke rehabilitation services

The *National Rehabilitation Stroke Services Framework 2013* is premised by a number of core principles.

These are:

1. All people with stroke will benefit from rehabilitation[1] and therefore it should be made available unless they meet the exception criteria as outlined in the Australian Stroke Coalition (ASC) Assessment for Rehabilitation Pathway and Decision-Making Tool.[1]
2. Every person with stroke has the right to choose their goals, activities and priorities. [2]
3. Rehabilitation should be client-centered. Health professionals should move towards and enable an equal partnership in care with clients, their families and significant others.[2]
4. Rehabilitation should adopt a whole person approach which includes addressing physical, social and spiritual dimensions.[2]
5. Stroke care should be evidence-based. Processes to promote the implementation of evidence and best practice should be in place to support safe and effective care. Evidence-based practice should be supported through professional development, teaching, quality research and quality assurance activities.
6. The model of care for rehabilitation should be driven by client preference and level of need, i.e. level of support/ability to function in the client's own environment.
7. Service providers have a responsibility to ensure that the resources and environment facilitate maximum recovery of a client's motor, sensory, social and cognitive levels.
8. Rehabilitation should be provided by a specialised interdisciplinary team of health professionals throughout the care continuum.[3] Access to specialised services (e.g. aphasia, return to work, driving etc) should be available at any time along the rehabilitation pathway.
9. Rehabilitation should be offered in a culturally appropriate environment.

Table 2

Essential elements of stroke rehabilitation services

To optimise outcomes for people with stroke, all models of rehabilitation services should include the following elements:

1. Effective links with acute stroke service providers.
2. Specialised interdisciplinary stroke (or neuro-rehabilitation) team with access to staff education and professional development specific to stroke.
3. Co-located stroke beds within a geographically defined unit.[3]
4. Standardised and early assessment for neuro-rehabilitation.
5. Written rehabilitation goal setting processes.[3]
6. Routine use of evidence-based guidelines to inform evidence-based therapy.
7. Best practice and evidence-based intensity of therapy for goal related activity.[3]
8. Systems for transfer of care, follow-up and re-entry.
9. Support for the person with stroke and carer (e.g. carer training, provision of information/education, provision of care plan) to maximise community participation and long-term recovery.
10. Systems that support quality improvement, i.e. regular (at least every two years) review of local audit data by the stroke team to prioritise and drive stroke care improvement.

Models of care for rehabilitation stroke services

There are a number of models of care currently used in rehabilitation stroke services (refer Figure 1). These include:

1. Inpatient rehabilitation services.
    a. Specialised inpatient sub acute (stroke unit) care
2. Early supported discharge services (ESD).
3. Community rehabilitation.
    a. Ambulatory care (day hospital, outpatients)
    b. Ambulatory care (home-based)
4. Outreach.
5. Telemedicine rehabilitation support (inpatient or community settings).

More detailed information about these models of care can be found in the full document[4] available at www.strokefoundation.com.au

Community reintegration

The early post-discharge period is consistently reported by stroke survivors and their families/carers to be a difficult time.[3] Successful reintegration into the community following a stroke requires the consideration of physical, psychological, financial and social aspects of the stroke survivor and their family/carer.

Figure 1

Models of care for rehabilitation stroke services

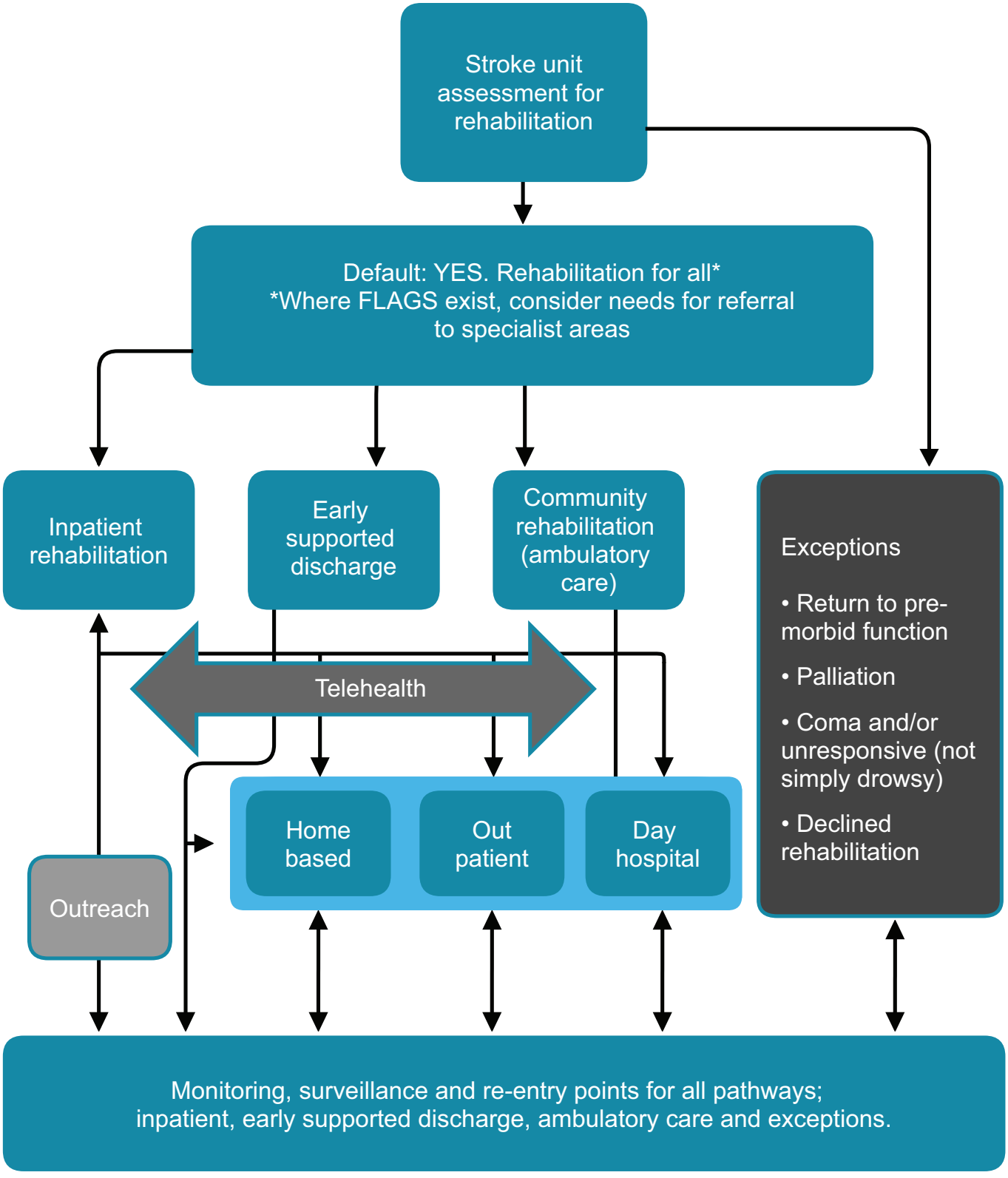

Table 3

Essential activities for safe transition between hospital and community

The minimum activities required prior to discharge include:

1. Pre-discharge needs assessment by the interdisciplinary team. The assessment should address clinical, functional, physical, social, informational and spiritual needs.
2. Communication and early referral to general practitioner, primary healthcare team, providers of community rehabilitation and community services such as the Aged Care Assessment Team (ACAT).
3. Organisation of all medications, equipment and support services.
4. Organisation of specialist treatment and assessments such as return to driving.
5. Carer training where appropriate.
6. Completion of a post-discharge care plan such as My Stroke Care Plan[6] available at www.strokefoundation.com.au/site/media/NSF_MyStrokeCarePlan_web2.pdf This will have been developed in collaboration with the stroke survivor and their family/carer (and a copy provided to them and their GP).
7. Provision of information about local stroke support groups and self-management programs.

Hospitals should have the following systems in place to support the discharge process and provide appropriate follow-up care:

1. Locally developed protocols for discharge planning.
2. Established links with primary health care providers through Medicare Locals.
3. Established links with appropriate community services.
4. Established links with stroke support services including local stroke support groups, telephone or online support (e.g. StrokeLine, StrokeConnect program) and self-management programs.
5. Systems for follow up and re-entry post-discharge.

Workforce and resource requirements

There should be a full range of team members (medical, nursing, allied health and support staff) with an appropriate skill base and training to provide comprehensive, evidenced-based programs of care. Knowledge and skills training is needed to cover the impairments, activity limitations and participation restrictions present in the patients admitted to the rehabilitation service.

There should be sufficient team member hours[5] available to allow each patient to receive an individualised nursing and allied health program (e.g. physiotherapy, occupational therapy, social work, speech therapy, psychology, dietetics, others) of adequate intensity to meet their needs. This program should be delivered in a way that optimises the effectiveness and efficiency of the rehabilitation program.

The *Clinical Guidelines for Stroke Management (2010)* note it is more important the right therapy is provided rather than dictating which team member should provide care. This is particularly important in rural and remote areas which simply do not have access to all the recommended staff. The use of telerehabilitation as an emerging service model linking specialist staff to other centres can assist to overcome shortfalls in less resourced centres, however the resource commitment at the major centre should also be factored into workforce numbers.

Data and quality improvement

Capacity to evaluate the quality of health care delivery is essential for informing clinical practice and improving patient outcomes. It is important and crucial to assess, monitor and evaluate key performance indicators and outcome measures in order to demonstrate effectiveness and efficiencies of stroke rehabilitation services. There are two main existing data collection programs related to stroke rehabilitation – the National Stroke Audit Rehabilitation Services (a biennial survey of rehabilitation hospitals along with clinical case audit) and the Australasian Rehabilitation Outcomes Centre (AROC) program. There is currently no minimum dataset of indicators developed which reflect best practice linked to patient outcomes for stroke rehabilitation. Therefore, general principles are discussed here.

Principles for data collection and quality improvement activities

The principles for collecting data and implementing quality improvement activities in rehabilitation include:

1. Data collection should align with the Australian Stroke Coalition national framework for data and quality.[7]
2. Data collection should be linked to recommendations in the guidelines and measure adherence to evidence-based care.
3. Data collection should be routine and ongoing.
4. Data collection should be linked to benchmarking and become part of an evidence-based quality improvement cycle.
5. Every rehabilitation service should have the ability to collect data for research purposes.

Data elements recommended for all stroke rehabilitation services include:

6. Indicators used to adjust for case mix.
7. Processes of care measures.
8. Functional change – use tool specific to setting.
9. Stroke survivor participation in the community.
10. Quality of life.
11. Patient satisfaction.
12. Access to community support.

Conclusion

All efforts should be made to improve patient access to evidence-based rehabilitation stroke care in Australia. Early assessment for rehabilitation is a critical enabler for this to occur. Capacity to evaluate the quality of rehabilitation stroke services is essential for improvement of health care delivery and patient outcomes. The proposed framework should be used by policy makers, administrators and the clinician to identify gaps in recommended evidence-based service provision for stroke or the planning for new services.

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