Background

What is a stroke? – A stroke occurs when part of the brain is damaged by a clot or haemorrhage. The effects may be minor, disabling, devastating or fatal. Stroke survivors commonly have one-sided paralysis, problems with swallowing and difficulty in understanding or speaking. Most people who survive stroke cannot live at home without support. Many need to be placed in hostels or nursing homes for the rest of their lives.

Who does stroke affect? – Stroke can occur at any age but its prevalence increases rapidly in older persons. In Western Australia, stroke is the third most common cause of death and the single biggest cause of adult disability. Nearly 1 000 people die each year from strokes. More than 10 000 survivors, with varying disabilities, are alive at any time.

How can the effects of stroke be reduced? – The hardship to stroke victims and their carers, and the costs to State and Commonwealth governments, can potentially be reduced in four areas: prevention, acute care, rehabilitation and community support. Many of the issues concerning stroke management are also relevant to other areas of health care.

Overall Findings and Conclusions

Stroke management and outcomes have improved in recent years...

The view that stroke is largely unpreventable and untreatable is no longer held. Medical understanding and treatment of the condition has advanced. In 1992 Royal Perth Hospital opened the first purpose-built stroke unit in Australia and rehabilitation has become better organised at some hospitals. Mortality and morbidity rates for stroke have fallen within all age groups. Community support schemes have been enhanced with the aim of allowing more stroke survivors to return home.

...but there is currently no consistent policy or practice for the management of stroke in WA.

Facilities and practices for managing stroke at public hospitals within WA vary. Best practice can be found at a number of acute care and rehabilitation units where medical, nursing and allied health staff all have special expertise in treating stroke. However, the care received often depends on when and where the patient is when the stroke occurs and what beds are available. Some patients, particularly in country areas, have limited immediate access to diagnostic equipment, medical specialists and allied health services, but can be transferred to other hospitals when this is clinically appropriate.

...suggesting that some deaths and disabilities could be avoided.

Research strongly indicates that patients treated in special stroke units have lower death and disability rates than comparable patients managed in general wards. However, only a minority of WA stroke patients are managed in special units, and fewer are admitted to the tertiary neuro-rehabilitation facility at Shenton Park Campus.

Change in stroke management in WA is taking place...

The Department of Health, in line with national health priorities, has been giving special attention to stroke management. A WA Stroke Strategy, funded by the Department, was prepared by the National Stroke Foundation. The Department launched a stroke program in May 2001 that incorporates some of the recommendations of the strategy. Working parties have been set up to address developments in prevention, acute care, rehabilitation, community care, rural issues and research and education.

...in a number of key areas (most of which also apply to other aspects of health care).

Planning for a growing and ageing population - The WA population of persons aged 65 and over is forecast to grow by about 30 per cent in the next ten years. Extra beds, specialists, nurses and allied health services will be needed at some stage to maintain and raise care standards for stroke.
Prevention – The most effective protection against stroke, and many other diseases, is a healthy lifestyle. Changing personal attitudes and habits concerning matters such as diet, smoking, alcohol and exercise is a deep social issue. Health screening programs can identify people with modifiable risk factors, such as high blood pressure, and offer medical treatment that will prevent or defer strokes.

Acute care – Patients need to be more aware of stroke symptoms and react to them as a life-threatening emergency. Ideally, acute care would include a brain scan and assessment by a stroke specialist. Many stroke victims do not receive optimal care because of delays in presenting at hospitals and the absence of specialists and diagnostic equipment.

Rehabilitation – Nearly all stroke survivors require some rehabilitation. Coordinated expert care from a multi-disciplinary team is the key to achieving better outcomes after the initial phase of acute treatment. The range and organisation of allied health services vary widely between hospitals. Access to rehabilitation is a major problem in the country.

Community support – Post-discharge support, apart from services provided at outpatient clinics or day hospitals, is largely a Commonwealth responsibility. There are concerns about the sudden scaling down of services and lack of follow up that often occur after a patient is discharged from hospital.

Evidence-based medicine – Acute care and rehabilitation methods for stroke vary within WA, Australia and other countries. As with other medical conditions, clinical opinions on best practice are divided. WA hospitals can continue to contribute to and learn from international research concerning the effectiveness of different medical, surgical and allied health approaches.

Service delivery – Admission to a tertiary unit is not necessary or desirable for all stroke patients. Many will be better served by treatment closer to their homes. A realistic compromise is to have a tertiary unit that treats the most complex cases, and is the focus of development, research, training and advice to local providers. An important aspect of stroke management is the way in which patients are assessed and transferred to a tertiary unit when this is in their best overall interests.

Outcomes and funding – As with many medical conditions, there is no consistent measurement of outcomes for stroke patients in WA. Little information about trends in the effectiveness of care is available to clinicians or patients. Hospital funding for stroke has yet to take account of the outcomes achieved by different treatment regimes.

The way forward

The Health Department, hospitals and health services should work together to finalise and implement a statewide stroke strategy. The aims will be to prevent disease, provide optimal acute and rehabilitation services, and support chronically affected survivors in the community.

Action plans, within a broader planning framework for stroke and other conditions, should be prepared for each action area and include:

- statements of principles and objectives;
- developments (in facilities, organisation, clinical methods, evaluation and research) needed to give practical effect to the principles;
- estimation and allocation of the resources needed to effect change;
- setting of timelines;
- assignment of responsibilities and accountabilities, particularly in matters requiring cooperation beyond existing management boundaries; and
- specification of evaluation criteria and preparation of systems to capture the required measurements.