

Performance assessment of stroke care

Adherence to National Guidelines

2018



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Fewer and fewer people are having strokes or are dying as a result of strokes. This is largely due to the sharp increase in preventive measures, concludes the National Board of Health and Welfare in its performance assessment of stroke care. At the same time, there are major shortcomings in follow-up and rehabilitation after stroke, and there are large regional differences within many areas of the healthcare chain.

What is stroke?

Stroke is a collective term for the symptoms that occur when the brain is damaged due to impaired oxygen supply. This occurs when a blood clot forms in one of the brain's blood vessels, a so-called cerebral infarction. Stroke can also be caused by a cerebral haemorrhage (bleeding), when a blood vessel ruptures inside the brain or on the surface of the brain. In Sweden, approximately 25,000 to 30,000 people suffer strokes each year, and about 10,000 people suffer a transient ischemic attack (TIA). TIA is a rapid, transient and temporary oxygen deficiency in one of the brain's blood vessels, which produces symptoms similar to that of a stroke, although in the case of TIA, the symptoms subside within minutes up to a day.

What does the performance assessment show?

The National Board of Health and Welfare's performance assessment shows that some of the recommendations in the national guidelines for stroke, especially with regard to secondary prevention, have had an impact on stroke care. Preventive measures, such as medical treatments for high blood pressure, atrial fibrillation and high blood lipids have increased significantly since 2009 when the first stroke guidelines were published. During this period of time, the stroke mortality has decreased by 32 per cent, which is a notable progress.

The performance assessment also shows that there are still large regional differences in Sweden. More work is required to optimise the acute chain of care and improve rehabilitation and follow-up after stroke, in order to achieve high quality care for stroke patients.

More people should receive reperfusion therapy

With regard to reperfusion therapy and how quickly it is administered upon arrival to hospital, there are large regional variations in Sweden.

Treatment with thrombolytic drugs may only be administered up to 4.5 hours after onset of stroke symptoms. To be able to increase the proportion of people who receive the treatment, more patients should seek hospital care at an earlier stage. The public's knowledge of strokes must be increased, so that everyone understands the importance of seeking help as soon as possible after symptom onset. There is also great potential in optimizing the prehospital care and shortening in-hospital door-to-needle times. Today, door-to-needle times vary considerably between hospitals, most likely due to time delays in parts of the healthcare chain that could be avoided. The time between arriving to hospital and start of treatment is an important area of improvement within acute stroke care, and all hospitals must ensure this time frame is as short as possible.

It is important for the patient to be admitted to the stroke unit as quickly as possible

Receiving care at a stroke unit reduces mortality and disability, regardless of age, gender and the severity of stroke. Today, nine out of ten people who suffer a stroke receive care at a stroke unit. However, about a quarter of stroke patients are first admitted to an observation ward or other ward, despite that direct admission to stroke unit has been the guidelines'

recommendation since 2009. The logistics of the emergency department or hospital bed capacity could be a reason why almost every seventh patient has to wait more than a day to be admitted to the stroke unit.

An optimised acute care chain and a hospital bed capacity dimensioned according to needs is necessary, so that patients with a suspected stroke or TIA are admitted directly to the stroke unit, according to the guidelines' recommendation.

Deficiencies in rehabilitation after a stroke

People who have suffered a stroke often have a long-term need for rehabilitation. Expertise in stroke is needed especially in acute phase rehabilitation (hospital-based), but personnel competent on stroke rehabilitation is needed throughout the chain of care.

Regarding the inpatient rehabilitation after a stroke, the performance assessment shows that length of hospital stay varies greatly between county councils. The hospital stay is especially short for people who reside in care homes when stroke occurs, and are again discharged to a care home after stroke. Elderly people generally receive less rehabilitation compared with people of working age, regardless of the type of rehabilitation.

For people who have suffered mild to moderate strokes, the guidelines recommend early discharge from hospital to home with the support of a multidisciplinary stroke team. This type of rehabilitation is not yet established throughout the country. The county councils therefore need to establish an infrastructure to be able to offer this type of rehabilitation to a greater extent.

In order to provide an individualised and high qualitative rehabilitation throughout the long-term follow-up after a stroke, it is necessary to improve coordination between healthcare providers, and to ensure access to a multidisciplinary team throughout the chain of care. At present, this is often lacking at the later stage, when the rehabilitation is offered within the municipality and the coordination of efforts is deficient. The county councils

should therefore take responsibility for organising rehabilitation at primary care level, with regional coordination. Access to personnel competent in stroke care is required in all levels of care, but is currently limited in primary care, municipal healthcare and social services.

People who have suffered a stroke or TIA should be offered a structured follow-up

According to the guidelines, people who have suffered a stroke or TIA should be offered structured follow-up, in which the effects of rehabilitation, the effects of preventive treatments and new needs for interventions are assessed continuously. Unfortunately, there are major shortcomings at present, which increases the risk for patients not receiving the support they need. County councils should establish an infrastructure for team-based structured follow-up.

More areas in need of improvement

More areas that county councils need to improve:

- Work more actively with information and smoking cessation interventions for people who smoke at the onset of stroke or TIA
- Optimise the use of anticoagulants and statins after stroke and TIA
- Pay more attention to socio-economically vulnerable groups, in order to achieve equality in stroke care.

What are national guidelines and performance assessments?

National guidelines and performance assessments consist of recommendations, indicators, target levels and performance assessments. The recommendations concern diagnostics and investigation, medical or surgical treatment, rehabilitation and follow-up. They are primarily addressed to decision-makers and management officials, but may also be of benefit to professionals, patient associations and the media. The performance assessments demonstrate the extent to which county councils and, where relevant, municipalities, work in accordance with the guidelines' recommendations, and what is in need of improvement.

In 2018, the National Board of Health and Welfare revised the national guidelines for stroke care. The associated indicators and target levels were also revised in connection with this. The aim is to ensure that these are evidence-based and up-to-date.

Visit our website for more information

The performance assessments, indicators, targets levels and guideline recommendations for health care in stroke cases are available (in Swedish) on the National Board of Health and Welfare's website, www.socialstyrelsen.se.