

### What are Stroke Units?

There are three main categories of Stroke Unit:

- The first consists of a team of stroke specialists who provide specialized care to people where they are located within the hospital. These units are sometimes referred to as “mobile teams specialized in stroke”.
- Another type of unit is located in a specific area of the hospital or rehabilitation centre where people with stroke are admitted and treated by a specialized team. Usually these units do not admit people with other health problems.
- Finally, in some hospitals, “acute” and “rehabilitation” units are grouped in one place, assessments and treatments are provided by the same team.

• These units include health professionals who specialize in the treatment of people with stroke; nurses, physicians, physical therapists, occupational therapists, social workers, speech language pathologists, nutritionists or clinical dieticians and possibly physiatrists, psychologists and neuropsychologists. These Stroke Units work both in the acute and stroke rehabilitation phases.

Here are the descriptions of the phases:

1. Acute phase: During the first few days (or weeks if it is a more severe stroke) after a stroke, the treatment focuses on the prevention of other illnesses and complications. Health professionals will assess you to determine the impact of stroke on your speech, how you work, your ability to eat solid foods, the strength of your arms and legs, and so on. During this time of assessment, your rehabilitation will be spread over short periods of time and will be consolidated as soon as you begin to recover your strength and regain your tolerance.

Some patients return home directly after the acute phase. For others, treatments continue during a rehabilitation phase.

2. Rehabilitation Phase: You may be referred to a Rehabilitation Hospital where you will still be treated by specialized clinicians who will use various types of interventions to work on the skills and activities affected by the stroke.

NOTE: A link to a description of several of these interventions can be found on <https://www.strokeengine.ca/>

The acute care hospital may have a different room or floor that offers rehabilitation services and you can be transferred there.

In conclusion, as mentioned above, in some hospitals, acute care and rehabilitation units are grouped together in one place, assessments and treatments are provided by the same team.

### **How can Stroke Units help me?**

All members of a stroke rehabilitation team are specially trained to treat people who have had a stroke. Treatments should be specifically tailored to your needs. It is important that the team also considers goals that are important to you – for example, if you have stairs at home you might want to practise walking up the stairs more than someone who lives in an apartment with an elevator. It is also important that your family be involved in your rehabilitation. Various members of the stroke unit team are trained to work with families. There is strong evidence that family support and education help the recovery process after a stroke. One of the most important aspects of a stroke unit is that the team adjusts to you and adapts to your changing state. So, when you get better, they focus on encouraging you to regain the skills that have been affected by the stroke. For example, shortly after a stroke you may need the help of two people and a cane to walk. As your balance and strength improve, team members will let you know when it is safe to walk with only one person.

### **Do Stroke Units make a difference after a stroke?**

Note: The research results presented in StrokEngine come from past and present studies, but as we write these lines, new studies are being conducted and new evidence is being released. Thus, if the answers to certain questions continue to show a lack of agreement or even remain unanswered, it only means that the studies have not mentioned this question specifically.

The researchers conducted studies to see if treatment in a stroke Unit, combining the acute and rehabilitative phases, helped people and that they demonstrated

faster recovery. The researchers also looked specifically at the benefits gained from being treated within a rehabilitation unit or by the “mobile stroke unit” teams. These various studies looked at the effects of different types of stroke units and their impact on:

1. Function – this refers to basic activities such as eating, dressing, getting out of bed, going to the bathroom, etc.
2. Institutionalization – the need for institutionalization is felt when patients cannot recover enough to return home. In this case, the person may need long-term care and rehabilitation.
3. The length of hospital stay – the number of days or weeks that a patient stays in hospital after being admitted for a stroke.
4. Mortality rate – It is rare, but possible, that some people who have had a very severe stroke die following the cessation of vital functions.

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**What are the benefits of combining acute care units with rehabilitation units?**

High quality studies have shown that when acute and rehabilitative care is combined in a stroke unit, patients demonstrate better functional improvements.

There is strong evidence that stroke units are useful in reducing the need for institutionalization, length of hospital stay, and mortality rates.

But when acute care is combined with rehabilitation units, they are not effective in reducing the rate of stroke-related hospital deaths.

It appears that recovery is best when acute care is given in an acute unit, and rehabilitation is offered in a department or Rehabilitation Center.

**Stroke Units (with transfer from a unit or acute care unit)**

Currently, high quality research provides strong evidence that when specialized rehabilitation teams are used during the rehabilitation phase, there is no additional functional gain over a regular rehabilitation unit.

The need for institutionalization is not reduced when patients are treated in an intensive rehabilitation unit compared to those treated by a regular rehabilitation team or a general medical team.

There are conflicting answers to the question of whether treatment by a specialized stroke rehabilitation team decreases mortality or reduces length of stay in hospital. High quality research supports the idea that mortality and length of stay are reduced, while other high quality studies indicate that they are not.

**Post stroke a mobile team**

Research shows that mobile stroke teams do not reduce the number of stroke-related deaths, the need for institutionalization, or the length of stay in hospital following a stroke. We can also compare the level of recovery of patients followed by a mobile team with that of those followed in a department of general medicine.

Studies have found that improvements in the ability to manage personal care and perform activities of daily living are not better for patients treated by a mobile team.

### **What can I expect in Stroke Units?**

Stroke Units are designed so that patients make the most gains during their stay in the hospital or at the Rehabilitation Center. Treatment of the after-effects of a stroke requires the active participation of the person concerned. In the post-stroke unit, patients are expected to attend treatment sessions on their own, or possibly with the help of a family member or friend, and perform the exercises or activities that their team of therapists explained to them.

The team approach is a key component of stroke units. As mentioned previously, you can benefit from occupational therapy, physical therapy, speech therapy, and other therapies depending on the help you need. Sometimes, these professionals will ask you questions or use assessments that you think you have already done. Keep in mind that everyone is trying to identify ways to help you recover from the harmful effects of stroke.

The team should always work to help you improve and should work toward the goals that are important to you.

### **Are there any risks related to Stroke Units?**

Being treated in a Stroke Unit does not involve more risk to your health. In fact, the team is specifically trained to prevent and mitigate (if any) the consequences that might result from stroke.

### **Who works in a stroke rehabilitation unit?**

- Doctors (neurologists and / or general practitioners, physiatrists)
- Physical therapists
- Occupational therapists
- Social workers
- Speech language pathologists
- Psychologists or neuropsychologists
- Nutritionists or clinical dieticians
- Specialized stroke nurses

- Team coordinators
- Pharmacists
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For more details on all these professions, click on the titles or visit The National Institute of Health

**Should I consider a stroke rehabilitation unit a good option for me or a family member?**

Usually the decision regarding admission to a stroke unit is made as soon as a stroke is diagnosed. This decision is made on the basis of several factors defined by the hospital's administration and its ability to provide post-stroke care.

Choosing where to go for your rehabilitation may be difficult to determine if the Rehabilitation Center closest to your home does not have a stroke rehabilitation unit. The decision should be made carefully and it is important to discuss the different alternatives and what is best for you with your team of health professionals.

*Information on this web site is provided for informational purposes only and is not a substitute for professional medical advice. If you have or suspect you have a medical problem, promptly contact your professional healthcare provider.*