13. Appendices
## Appendix 1: Evidence levels and recommendation degrees

### Levels of evidence and degrees of recommendation SIGN[^27].

<table>
<thead>
<tr>
<th>Level of scientific evidence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1++</td>
<td>High quality meta-analysis, systematic reviews of clinical trials or high-quality clinical trials with very little bias risk.</td>
</tr>
<tr>
<td>1+</td>
<td>Well-performed meta-analyses, systematic reviews of clinical trials or well-performed clinical trials with little bias risk.</td>
</tr>
<tr>
<td>1-</td>
<td>Meta-analyses, systematic reviews of clinical trials or clinical trials with high bias risk.</td>
</tr>
<tr>
<td>2++</td>
<td>High-quality systematic reviews of studies of cohorts or of cases and controls. Well-performed studies of cohorts or of cases and controls with low bias risk and with moderate probability of establishing a causal relationship.</td>
</tr>
<tr>
<td>2+</td>
<td>Well-performed studies of cohorts or of cases and controls with very low bias risk and with moderate probability of establishing a causal relationship.</td>
</tr>
<tr>
<td>2-</td>
<td>Studies of cohorts or of cases and controls with high bias risk and significant risk of the relationship not being causal.</td>
</tr>
<tr>
<td>3</td>
<td>Non-analytical studies, such as case reports and case series.</td>
</tr>
<tr>
<td>4</td>
<td>Experts’ opinion.</td>
</tr>
</tbody>
</table>

### Degrees of recommendation

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>At least one meta-analysis, systematic review or clinical trial classified as 1++ and directly applicable to the target population of the guidelines; or a volume of scientific evidence comprised of studies classified as 1+ and with great consistency between them.</td>
</tr>
<tr>
<td>B</td>
<td>A volume of scientific evidence comprised of studies classified as 2++, directly applicable to the target population of the guideline and that show great consistency between them; or scientific evidence extrapolated from studies classified as 1.</td>
</tr>
<tr>
<td>C</td>
<td>A volume of scientific evidence comprised of studies classified as 2+, directly applicable to the target population of the guideline and that show great consistency between them; or scientific evidence extrapolated from studies classified as 2++.</td>
</tr>
<tr>
<td>D</td>
<td>Scientific evidence of level 3 or 3; or scientific evidence extrapolated from studies classified as 2++.</td>
</tr>
</tbody>
</table>

The studies classified as 1 and 2 must not be used in the recommendations preparation process due to their high bias possibility.

[^1]: Sometimes the development group realised that there were some important practical aspects which they wished to place emphasis on and for which there is probably no evidence that supports it. In general these cases have to do with some aspects of the treatment considered as good clinical practice and that nobody would normally question. These aspects are assessed as points of good clinical practice. These messages are not an alternative to the scientific evidence-based recommendations, but they must only be considered when there is no other way to highlight this aspect.

[^27]: CLINICAL PRACTICE GUIDELINE FOR THE MANAGEMENT OF STROKE PATIENTS IN PRIMARY HEALTH CARE
**Levels of evidence and formulation of recommendations for questions on diagnosis**
(The adaptation of the NICE of the Oxford Centre for Evidence-based Medicine and of the Centre for Reviews and Dissemination is used, as included in the methodological manual[1,2]).

<table>
<thead>
<tr>
<th>Level of scientific evidence</th>
<th>Type of scientific evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ia</td>
<td>Systematic review with homogeneity of level 1 studies.</td>
</tr>
<tr>
<td>Ib</td>
<td>Level 1 studies.</td>
</tr>
<tr>
<td>II</td>
<td>Level 2 studies. Systematic review of level 2 studies</td>
</tr>
<tr>
<td>III</td>
<td>Level 3 studies. Systematic review of level 3 studies.</td>
</tr>
<tr>
<td>IV</td>
<td>Consensus, expert’s opinions without explicit critical evaluation.</td>
</tr>
</tbody>
</table>

**Level 1 studies**
They satisfy:
- Masked comparison with a reference test “golden pattern” valid.
- Adequate spectrum of patients.

**Level 2 studies**
They only have one of these biases:
- Non representative population (the sample does not reflect the population where the test will be applied).
- Comparison with the inappropriate reference pattern (“gold pattern”) (the test that will be assessed forms part of the gold pattern or the result of the test influences the execution of the gold pattern).
- Non-masked comparison.
- Case studies-control.

**Level 3 studies**
They have two or more of the criteria described in level 2 studies.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Ia or Ib</td>
</tr>
<tr>
<td>B</td>
<td>II</td>
</tr>
<tr>
<td>C</td>
<td>III</td>
</tr>
<tr>
<td>D</td>
<td>IV</td>
</tr>
</tbody>
</table>
Appendix 2. Main guidelines consulted as a secondary source of evidence

<table>
<thead>
<tr>
<th>Acute stroke management</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Stroke management after acute phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. “Clinical practice guideline for the management of stroke rehabilitation in the primary care setting” Veterans Health Administration, Department of Defence. VA/DoD. 2003</td>
</tr>
</tbody>
</table>
Appendix 3. Data collection sheet in acute stroke

<table>
<thead>
<tr>
<th>SUSPICION OF STROKE: DATA COLLECTION SHEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATIENT’S IDENTIFICATION DATA</td>
</tr>
<tr>
<td>NAME:</td>
</tr>
<tr>
<td>SURNAME:</td>
</tr>
<tr>
<td>NATIONAL IDENTITY CARD:</td>
</tr>
<tr>
<td>DATA OF CENTRE REFERRING THE PATIENT</td>
</tr>
<tr>
<td>NAME.</td>
</tr>
<tr>
<td>ADDRESS:</td>
</tr>
</tbody>
</table>

ANAMNESIS:

- Date and time of onset of symptoms:
- Previous stroke/TIA
- Recent episodes: AMI, Traumatism, Surgery, Bleeding
- Comorbidity/risk factors: HBP, DM, Arrhythmias, Nicotine addiction
  Alcoholism, Dyslipidemia, Past history of dementia or cognitive impairment
- Current medication: Insulin, Antihypertensive, Anti-aggregants, Anticoagulants
- Rankin Scale:
  0 - No symptoms.
  1 - No important disability
  2 - Light disability
  3 - Moderate disability
  4 - Moderately severe disability
  5 - Severe disability
  6 - Death
- Other data of interest (in there is time):
  - Telephone numbers of witnesses or relations:
  - Duration of the symptoms:
  - Accompanying systems:
  - Triggering circumstances:
  - Risk factors for CV/arteriosclerosis:
  - Drug abuse:
  - Cardiac pathology:
  - Episodes of migraine, convulsions, infections:
  - Pregnancy, Puerperium, Consumption of anovlulators, Hormone therapy

INITIAL EXAMINATION

Respiratory function: Heart beat:
Blood pressure: Temperature:
If feasible: Glycaemia: Blood saturation:

NEUROLOGICAL EXAMINATION (evaluate mental functions, language, meningeal signs, cranial pairs, oculocephalic deviation, motor, sensory deficits and cerebellar alterations).
(Describe the neurological examination if this does not delay the patient’s transfer).
Appendix 4. Cincinnati Prehospital Stroke Scale (CPSS)²⁸²

**Facial droop** (have patient show teeth or smile)
- Normal: Both sides of face move equally.
- Abnormal: One side of face does not move as well as the other side

**Arm Drift** (patient closes eyes and extends both arms straight out for 10 seconds)
- Normal: Both arms move the same or both arms do not move.
- Abnormal: One arm does not move or one arms drifts down compared with the other.

**Speech** (have the patient repeat a sentence)
- Normal: The patient uses correct words with no slurring
- Abnormal: The patient slurs words, uses the wrong words or is unable to speak

<table>
<thead>
<tr>
<th>Criteria for identifying stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of any of the abnormal elements in the physical examination.</td>
</tr>
</tbody>
</table>
## Appendix 5. Melbourne Ambulance Stroke Screen (MASS)\textsuperscript{84}

### Clinical history elements
- Age > 45 years
- No past history of convulsions or epilepsy.
- Patient not in med or in wheelchair
- Glycaemia between 50 and 400 mg/dL

### Physical examination elements

#### Facial droop
- Have patient show teeth or smile
  - *Normal:* Both sides of face move equally
  - *Abnormal:* One side of face does not move

#### Strength in arms
- Ask patient to close eyes and extend both arms straight out for 10 seconds
  - *Normal:* Both arms move/do not move the same
  - *Abnormal:* One arm does not move and drifts down compared with the other.

#### Handshake
- Hold both patient’s hands and ask him or her to press hard
  - *Normal:* Handshake same in both hands / no shake in either of the hands
  - *Abnormal:* Weakness or no shake in one of the hands.

#### Speech
- Have patient repeat a sentence
  - *Normal:*
  - *Abnormal:* Slurs, unable to speak, wrong words

### Criteria for identifying stroke
- Presence of any of the elements in the physical examination and
- Affirmative answer in all the elements of the clinical history
### Appendix 6. Stroke code (Madrid Community)\(^ \text{93} \)

<table>
<thead>
<tr>
<th><strong>Inclusion criteria for an outpatient’s stroke code</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>– <strong>Onset of symptoms</strong>: Exact time when they began. Objective: Onset of symptoms to hospital door &lt; 6 hours.</td>
</tr>
<tr>
<td>– <strong>Basal situation of patient</strong>: Rankin Index &lt; 2.</td>
</tr>
<tr>
<td>– <strong>Current neurological focality present at time of diagnosis</strong>: Presence of any of the following symptoms of stroke suspicion:</td>
</tr>
<tr>
<td>1. Numbness, weakness or sudden paralysis of face, arm or leg of one half the body.</td>
</tr>
<tr>
<td>2. Sudden confusion.</td>
</tr>
<tr>
<td>3. Difficulty to speak or understand.</td>
</tr>
<tr>
<td>4. Sudden loss of sight in one or both eyes.</td>
</tr>
<tr>
<td>5. Intense, sudden cephalia without any apparent cause, associated with nauseas and vomits (not attributable to other causes).</td>
</tr>
<tr>
<td>6. Difficult to walk, loss of balance or concentration.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Exclusion criteria for an outpatients stroke code</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>– Does not satisfy stroke diagnosis criteria</td>
</tr>
<tr>
<td>– More than 6 hours’ evolution no symptoms</td>
</tr>
<tr>
<td>– Patient with great dependence</td>
</tr>
<tr>
<td>– Terminal illnesses and/or dementia</td>
</tr>
</tbody>
</table>
Appendix 7. Functional evaluation scales

Modified Rankin Scale$^{62,63}$

<table>
<thead>
<tr>
<th></th>
<th>No symptoms at all</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No symptoms at all</td>
<td>Able to carry out all usual duties and activities.</td>
</tr>
<tr>
<td>1</td>
<td>No significant disability</td>
<td>Unable to carry out all previous activities, but able to look after own affairs without assistance.</td>
</tr>
<tr>
<td>2</td>
<td>Slight disability</td>
<td>Symptoms that significantly restrict style of life or prevent totally autonomous subsistence (e.g. requiring some help)</td>
</tr>
<tr>
<td>3</td>
<td>Moderately disability</td>
<td>Symptoms that clearly prevent independent subsistence although not requiring continuous care (e.g. unable to attend to own bodily needs without assistance).</td>
</tr>
<tr>
<td>4</td>
<td>Moderately severe disability</td>
<td>Totally dependent, requiring nursing care and attention, day and night.</td>
</tr>
<tr>
<td>5</td>
<td>Severe disability</td>
<td>Dead</td>
</tr>
</tbody>
</table>

Modified Rankin Scale$^{62,63}$

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Patient’s situation</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeding</td>
<td>- Totally independent</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>- Needs help cutting meat, bread, etc.</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>- Unable</td>
<td>0</td>
</tr>
<tr>
<td>Bathing</td>
<td>- Independent: Get in and out of the bath alone</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>- Dependent</td>
<td>0</td>
</tr>
<tr>
<td>Dressing</td>
<td>- Independent: Able to get dressed and undressed, fasten buttons, tie shoes</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>- Needs help</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>- Dependent</td>
<td>0</td>
</tr>
<tr>
<td>Grooming</td>
<td>- Independent to wash face, hands, comb hair, shaving, make up, etc.</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>- Dependent</td>
<td>0</td>
</tr>
<tr>
<td>Bowels</td>
<td>- Continent</td>
<td>10</td>
</tr>
<tr>
<td>Bowels (Evaluate previous week)</td>
<td>- Occasional accident, or requires help to administer suppositories or laxatives</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>- Incontinent</td>
<td>0</td>
</tr>
</tbody>
</table>
### Basic Activities of Daily Living

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Patient’s situation</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bladder control</strong>&lt;br&gt;(Evaluate previous week)</td>
<td>- Continent, or is able to take care of probe if uses one&lt;br&gt;- One daily episode at most of incontinence, or needs help to care for problem&lt;br&gt;- Incontinent</td>
<td>10 5 0</td>
</tr>
<tr>
<td><strong>Toilet use</strong></td>
<td>- Independent to go to toilet, remove and put on clothes…&lt;br&gt;- Needs help to go to toilet, but can clean themselves&lt;br&gt;- Dependent</td>
<td>10 5 0</td>
</tr>
<tr>
<td><strong>Transfers (bed to chair and back)</strong></td>
<td>- Independent to go from armchair to bed and back&lt;br&gt;- Minor physical help or supervision to do so&lt;br&gt;- Needs major help but can sit alone&lt;br&gt;- Dependent</td>
<td>15 10 5 0</td>
</tr>
<tr>
<td><strong>Mobility</strong></td>
<td>- Independent, walks 50 metres alone&lt;br&gt;- Needs physical help or supervision to walk 50 metres&lt;br&gt;- Wheelchair independent without help&lt;br&gt;- Dependent</td>
<td>15 10 5 0</td>
</tr>
<tr>
<td><strong>Stairs</strong></td>
<td>- Independent to go up and down stairs&lt;br&gt;- Needs physical help or supervision to do so&lt;br&gt;- Dependent</td>
<td>10 5 0</td>
</tr>
</tbody>
</table>

**Maximum score: 100 points**

<table>
<thead>
<tr>
<th>Result</th>
<th>Degree of dependence</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>Total</td>
</tr>
<tr>
<td>20-35</td>
<td>Serious</td>
</tr>
<tr>
<td>40-55</td>
<td>Moderate</td>
</tr>
<tr>
<td>≥60</td>
<td>Slight</td>
</tr>
<tr>
<td>100</td>
<td>Independent</td>
</tr>
</tbody>
</table>
### Functional Independence Measurement Scale (FIM)*

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>DOMAIN</th>
<th>TOTAL FIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Eating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Grooming</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Bathing/showering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Dressing upper hemibody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Dressing lower hemibody</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Toileting</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control of sphincters</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Bladder management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Bowel management</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mobility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Transfers from bed to chair or wheelchair</td>
<td>91 points</td>
<td>126 points</td>
</tr>
<tr>
<td>10. Transfers in toilet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Transfers in bathtub or shower</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Locomotion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Walk/move in wheelchair</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Go up and down stairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Comprehension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Expression</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social knowledge</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Social interaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Problem solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Memory</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Each item is scored from 1 to 7 as follows:

<table>
<thead>
<tr>
<th>Degree of dependence</th>
<th>Level of functionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete independence</td>
<td>7 fully independent</td>
</tr>
<tr>
<td></td>
<td>6 modified independence</td>
</tr>
<tr>
<td>Modified dependence</td>
<td>5 Supervision</td>
</tr>
<tr>
<td></td>
<td>4 Minimal assistance (more than 75% independence)</td>
</tr>
<tr>
<td></td>
<td>3 Moderate assistance (more than 50% independence)</td>
</tr>
<tr>
<td>Complete dependence</td>
<td>2 Maximal assistance (more than 25% independence)</td>
</tr>
<tr>
<td></td>
<td>1 Total assistance (less than 25% independence)</td>
</tr>
</tbody>
</table>
Advice and care after a stroke: information for patients and family members.

Information for the patient
This information for patients has been proved by the development group of the Clinical Practice Guideline for the Management of Stroke Patients in Primary Care. Quality Plan for the National Health System of the Ministry of Health and Social Policies. Health Technology Assessment Unit of the Lain Entralgo Agency of the Community of Madrid; 2009. Clinical Practice Guidelines in the Spanish NHS: UETS No. 2007/5-2

This information is also available in electronic format on the web pages of GuiaSalud and of the UETS. The full version and the abridged version of the CPG can be consulted on these pages.
Table of Contents

- Who is this information directed at?

  What is a stroke? What is a Transient Ischaemic Attack?

- What are the symptoms of a stroke or TIA? What must I do if I have these symptoms?

  What is the evolution of patients who suffer a stroke?

- If I have already had a stroke, can I prevent a new attack?

  What sequelae and complications may I suffer after having a stroke? What treatments are available in Primary Care?

- What advice about care in daily living must I follow?
Role of the carer: Taking care of yourself to care for others

What resources and health and social aid can I request?

Where can I obtain more information?
Who is this information directed at?

This information is intended for adult patients who have suffered a stroke or a Transient Ischaemic Attack and for their relations and carers.

The aim of the information given herein is to help understand the illness, as well as provide advice and information about the care and treatment options available in Primary Care.

What is a stroke? What is a Transient Ischaemic Attack?

A stroke is a neurological illness that occurs when the blood flow from the brain is interrupted. There are two types:

Ischaemic stroke: When the blood flow is interrupted due to an obstruction (for example a clot) in a blood vessel.

Haemorrhagic stroke: When a blood vessel breaks, causing bleeding in the brain.

A Transient ischaemic attack (TIA): This is an ischaemic stroke that also occurs due to the interruption of the blood flow, but temporarily. It is normal for the symptoms to last for a few minutes and for the patient to recover entirely in less than 24 hours. The TIA increases the risk of suffering a stroke and, the same as the latter, it is also a medical emergency.
What are the symptoms of a stroke or TIA?

Some of the most common symptoms of a stroke are described below:

- **Sudden loss of movement** or weakness of the arm, leg or face, especially when it occurs on one side of the body.
- **Sudden loss of sight** in one or both eyes.
- **Sudden headache**, with no known cause.
- **Speech difficulty**: mumbling, inability to find the right words or unable to understand what other people are saying.
- **Sudden problems for walking** or loss of equilibrium or coordination.
- **Sudden feeling of numbness** or pins and needles in the face, arm and/or leg on one side of the body.

What must I do if I have these symptoms?

If you believe that you or someone close to you is suffering a stroke you must immediately call the emergency services.

**Call 112**
The professionals will probably ask you questions to be able to assess if it is a stroke, like those described below:

— Have patient show teeth and smile, to see if both sides of the face move equally.
— Have patient close eyes and extend arms straight out for 10 seconds to see if one of the arms does not move or drifts down compared with the other.
— Ask patient to repeat a sentence to see if he or she can speak, if they use wrong words or slur their words.

If the professionals confirm the suspicion of stroke, the patient will be referred to a hospital.

What is the evolution of patients who suffer a stroke?

Recovering from a stroke will depend on several factors such as the extension and area of the lesion that has been damaged, speed with which the blood irrigation is re-established and the previous state of health.

Three things can happen after suffering a stroke:
EVOLUTION

• An almost immediate recovery (minutes or hours). This is the case of Transient Ischaemic Attacks, which generally do not leave after effects.

• A recovery to a greater or lesser extent. In this case recovery normally takes weeks or months and requires rehabilitation, and may leave some type of after effect.

• Worsening of the patient. This can be due to neurological causes or other complications such as fever, infections or others.

If I have already had a stroke, can I prevent a new attack?

People who have suffered a stroke or a Transient Ischaemic Attack have a greater risk of suffering a stroke again.

PREVENTION

To reduce the risk of a relapse insofar as possible, it is important to follow the advice provided by the physician regarding diet, exercise, and consumption of alcohol and tobacco among others. If you have high blood pressure it is essential to control it correctly.

You must also follow the pharmacological treatment prescribed in each case.

To prevent another stroke, it is very important to continue with all these measures during the rest of your life.
What sequelae and complications may I have after having suffered a stroke? What treatments are available in Primary Care?

PHYSICAL PROBLEMS

| MOVEMENT | After having suffered a stroke a secondary disability may remain which will affect movement. This is expressed as a loss of strength (called plegia or paralysis if no movement can be made with the part of the body affected or paresia if it possible to make movements but with less strength than with the part not affected), lack of coordination or loss of control of movement.
These alterations tend to improve, although it is possible that, despite the rehabilitation, recovery may not be complete. |
| FALLOWS | Patients who have suffered a stroke are more prone to having falls, so it is important to do the exercises recommended to strength the muscles and train equilibrium at home. It is also important, insofar as possible, to identify and modify those aspects in the home that may give rise to a greater risk of falls, such as remove carpets, place plastic chairs in the bathtub or shower, as well as handles, and use shoes with non-slip soles. |
Sight impairments are also frequent. Sometimes a loss of sight of half the field of vision occurs, which is called hemianopsia. Other times the patient may not be aware of this loss of sight of half the field of vision. In these cases, the family must remind the patient to look towards the affected side, as with a little training, the hemianopsia is compensated by turning the head to look towards the damaged side.

Speech impairment may also occur. This is called aphasia when the patient is unable to understand and/or emit any type of adequate speech. Dysarthria is a speech alteration, which is expressed by difficulties in articulating words. Some patients are unable to emit a single word, which is called mutism. The speech therapist is the professional who will be responsible for evaluating and rehabilitating in the cases where speech alterations occur after a stroke.

In other cases, there may be a sensitivity disorder, which is expressed as pins and needles, unpleasant sensations or lack of sensitivity to touch. These alterations generally occur on one single side of the body and are usually accompanied by problems of movement on that same side. Special care must be taken when sensitivity of a side of the body has been lost as injuries or burns can happen without the person realising it.
**Spasticity** is another problem that usually appears and consists of a permanent contraction of certain muscles. This may cause rigidity, pain, spasms and hinder some movements. Spasticity will be taken into account in rehabilitation. When it is slight no treatment is required and when it is serious it will have to be evaluated by a specialist. If the spasticity is moderate, your physician may prescribe some drugs to treat it.

**Central pain** is a superficial type of pain such as a burning or pricking feeling which gets worse when touched, with water or with movements and which has been associated in a small percentage of patients who have suffered a stroke. Some antidepressants and anticonvulsants have proven to be efficient when controlling this type of pain.

Another type of pain that is associated with patients who have suffered a stroke is **shoulder pain** of the paralysed arm. Some type of simple analgesic can be used during the pain episodes, but if the pain persists, it is best to consult your physician.
Another possible after-effect is the difficulty to swallow, which is called dysphagia. To help patients with dysphagia problems, measures can be taken such as changes in diet and safe eating techniques to prevent undernourishment and dehydration of the patient and avoid aspirations, that is, passage of food or liquid to the lung.

**DYSPHAGIA**

Sometimes, in the more serious cases of dysphagia or at the start of the illness, a probe may have to be used to guarantee the correct nutrition of the patient. When the probe is used for a short period, the patient can be discharged with a nasal probe. However, if it is going to be required for a long period, the probe may have to be inserted directly into the stomach, which is called gastrostomy. The advice on what and how to eat and necessary care in patients with dysphagia are given below in another section of this guideline called *What advice on care in daily living must I follow?*

**URINARY INCONTINENCE**

At times the patient may suffer urinary incontinence, which is usually transient, although it may last in patients with important sequelae. If the problems still persist when discharged, the Primary Care physician or nurse must be consulted about the treatment and management of incontinence. If a catheter is worn, ask your physician about the possibility of removing it.
PSYCHOLOGICAL PROBLEMS

During convalescence, during the rehabilitation process and when this ends, mood alterations often take place.

<table>
<thead>
<tr>
<th>MOOD ALTERATIONS</th>
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<tr>
<td>Depression is particularly common and may interfere or slow down the rehabilitation process. Anxiety is also frequent (with or without attacks of panic), emotionalism (going from crying to laughing without any reason, crying or laughing without any apparent cause), apathy, irritability and lack of awareness of the sequelae of the stroke.</td>
</tr>
</tbody>
</table>

Due to the high frequency, the physician will probably ask you questions or give you a test that will enable him or her to evaluate if there is depression or any of the other alterations mentioned. Patients who have suffered a stroke do not need to receive antidepressants in order to prevent a possible depressive episode, although they may perhaps need to receive pharmacological treatment if depression is finally diagnosed.

Emotionalism tends to disappear with time, but if it is serious and persistent, the patient may perhaps benefit from treatment with antidepressants.

In any case, if you believe you have mood alterations you must consult your physician or nurse.

COGNITIVE AFFECTATION

Sometimes, after a stroke, cognitive impairment occurs (reduction of memory, attention, orientation, difficulty in planning and organising tasks). Your physician will
probably ask you questions or give you a test to evaluate if any type of cognitive affectation has occurred after the stroke. Although this deterioration may improve with time, in those cases where it may affect your recovery, you will probably have to consult a specialist.

DURATION OF THE REHABILITATION

In moderate or serious lesions, the recovery mainly takes place in the first three months after the stroke. Recovery continues, in a much slower manner up to at least six months and some patients continue recovering slightly up to one year. Not all patients recover entirely.

The rehabilitation time that a patient will require (physiotherapy, occupational therapy, speech therapy or others) is going to vary depending on the objectives of each case. So, in an older patient with serious affectation, the rehabilitation can focus on achieving a transfer from the bed to the wheelchair with ease and without harming the carer. This can occur in a few days or weeks; however, in a young and occupationally active patient, with a slight or moderate affectation of speech or mobility, the rehabilitation may last for up to 6 months, or until the greatest functional capacity and return to work is achieved.
What advice about care in daily living must I follow?

Activities of Daily Living

Activities of daily living include both daily self-care activities (washing, dressing, eating) and the necessary skills to be independent at home and in the community (cooking, shopping, driving). If difficulties arise to carry out this type of activity, occupational therapy may be beneficial. This consists of capacitating people who suffer discapacitating states to carry out the daily tasks required and to achieve maximum independence and integration to improve their independence.

Personal cleanliness and hygiene

It is important to care for the patient’s hygiene to avoid infections, with special attention if there is urinary or faecal incontinence, and for the patient to feel better. If possible the person must assume responsibility for his or her own hygiene.

To make personal hygiene easier, place a chair for the patient to wash his or her face, comb his or her hair or shave. The shower is better than the bathtub. You can place a chair or stool in the shower and it is advisable to fit a handle on the shower or bath wall for the patient to hold on to and avoid falls.

If the patient cannot get out of bed, wash with a sponge and neutral soap, paying special attention to drying folds in the skin, as moisture favours the growth of bacteria.
and fungi.

**Dressing**

One of the objectives to increase the patient’s independence is for them to put on all possible garments alone, reserving the carer’s help just for what they cannot do. It is advisable to facilitate the operation by replacing buttons with strips of Velcro. To begin with, it is best to use loose and practical clothing, like sports clothes.

To get dressed, always begin with the affected limb and when getting undressed, the other way round.

Long-handled shoehorns can be used to put on shoes, which must be comfortable and closed-toe for the foot to be secure.

If the patient is in bed and cannot put on trousers, put the legs in first with the trousers bunched up and then the patient or carer will complete the operation by pulling upwards whilst the patient (if they can) helps by lifting up their buttocks whilst resting on the bed with back and heels.

**Food and hydration**

A balanced diet, with sufficient protein and caloric intake and good hydration are essential for the patient’s good general state. Bad nutrition is a frequent problem and can give rise to skin ulcers, oedemas, and reduction of defences, making it easier to contract infections.

If the patient can swallow properly, the diet must be similar to a normal diet. Food rich in fibre must be taken into account to avoid constipation.
If the patient can be fed by oral route (mouth), but does not swallow properly, it is advisable to follow the advice given below:

**FEDDING BY ORAL ROUTE**

- Modify the consistency of the food, in other words, grind all the food and bit by bit change the texture as the patient gets better.
- If the dysphagia is to liquids, thicken the liquids with special thickening agents or with corn flour, purée, gelatine. The ability to swallow solid food is recovered first and then liquids.
- Maintain a correct posture. The person must be seated, the food must be offered to the unaffected part of the mouth and sometimes it is advisable to lower the chin to swallow.
- Give small servings slowly and frequently. This will prevent the person from getting tired.
- Stimulate the swallow reflex. This can be done by administered cold food, unless there is a possibility of cold food triggering muscular spasms in the person.
- If the person chokes, always consult, do not force him.

**Example of advisable food:**

Thick vegetable cream, fruit purée, yoghurt, custard, egg pudding, scrambled eggs, thick semolina soup, minced meat, mild fish.
Examples of food that must be avoided:
Liquids (water, milk, juices), raw fruit, bread, non-minced meat, soups, cakes,…

If the patient cannot be fed orally (mouth), as they are not able to swallow or easily choke with liquids, an alternative route must be sought. In this case, the physician will indicate the alternative to be followed, which may include feeding through a probe (tube), which is called enteral feeding.

**Feeding by probe**

- Maintain a correct posture. The person must be seated or half-seated
- Mouth hygiene must not be forgotten as this is important in patients fed by probe.
- Pass a little water through the probe when feeding is interrupted to prevent obstructions.
- When food is administered, this must be ground and mixed with water.
- If the probe gets obstructed, try to remove the obstruction with oil or a coke drink. If this is not possible, go to the health centre.
- Keep the probe plugs closed when not in use.

In patients with gastrostomy, the skin around the probe, the probe and the connections must be cleaned each day with soap and water. It is advisable to place some dressings and cover with a soft sticking plaster, changing the plaster each day and the place where the probe is secured.
Postural mobilisation of the patients

The best way to avoid bad postures of feet and ankles is to use cushions to keep them at the right angle. With the cushions we will also lighten the contact of the body on the bed and avoid the appearance of pressure ulcers.

In patients with nasogastric probe, the nostrils must be cleaned each day, supporting the probe in a different part of the nose each day to prevent sores.

We will make posture changes every three or four hours in a bed well prepared with cushions, preferably in a lateral position.

In general, whenever we have to make some type of movement, or we simply have to address a person who has suffered a stroke, it is advisable to do so on the plegic
side, so as to stimulate the afferences as much as possible. If we have to help them get up, make a transfer, walk, etc. it is advisable to do so on the affected side, always avoiding holding them or pulling their arms as the possible flaccidity of the shoulder muscles could lead to a subluxation of the joint. This is the best way to lift the patient from the bed:

To pass the patient from the bed to the chair or vice-versa, keep the back straight and the legs bent.
The coordination of two people is also a way of carrying out a mobilisation, above all if the person does not collaborate:

Prevention of immobility complications: Sores and ulcers

The skin of patients with sequelae after a stroke is very sensitive. The paralyses mean that certain areas are exposed to long supports and suffer alterations that lead to the formation of sores and ulcers. The most predisposed places for these to form are: Sacrum area and back, ankles, hips and knees.
Frequent changes in posture, massage of these areas with moisturising cream, trying to correct vicious postures and good diet are the most efficient preventive measures.

If possible, place an anti-bed sore mattress (on sale in surgical aids shops) to avoid the appearance of ulcers. If ulcers do appear, dressings can be used to treat them correctly.

**Postural changes must be carried out every 3 or 4 hours.**

**Communication with people who have speech difficulties: Advice for carers and relations**

Our relation can communicate even though they have a lot of difficulties in the language and speech area:

- We will call their attention when we want to communicate something.
- We will use simple and short sentences, we will talk in a normal tone of voice, without shouting, making it easy for them to answer, giving them several options.
- Trying to get them to make decisions: “what do you like” or “what do you prefer” and always trying not to answer for them.
- We will ask questions that can be answered with a “yes” or “no”.
- We will be direct, with specific messages.
- In the communication field, we may find technical aid and adaptations on computers for the telephone, writing and others.
Leisure and free time.

Free time leisure activities can be adapted. For example:
- Large chess boards with adapted pieces
- Card shuffler
- Aid for threading needles
- Adaptations for oil painting
- Musical instruments.

Rest and sleep

Maintain the patient’s stimulation during the day, as the inactivity that is typical of this illness leads to boredom and to the person sleeping for a large part of the time, thus making it difficult to sleep later at night.

Sexuality

During the first weeks after the stroke it is normal for there to be a lack of sexual appetite; after the first few months this will gradually be recovered. With some exceptions, sexual activity is recommendable once the patient has been stabilised and the recovery phases has started. The lack of libido is often due to psychological problems, to some drugs (tablets for sleeping or to lower blood pressure, antidepressants and others) and/or incorrect beliefs that they can interfere with the sexual function or cause impotence. In this case, do not hesitate to consult your physician or nurse.
Return to work

The return to work will take place sooner or later depending on the sequelae and on the type of job carried out. In some companies, less heavy work can be done temporarily, which adapts to your situation better.

Role of the carer: Taking care of yourself to care for others

PHYSICAL PROBLEMS OF THE CARER

When the patient who has suffered a stroke preserves very little ability or no ability to move, it is recommendable to change posture frequently to avoid skin ulcers. It is not advisable for one single person to carry out the movement without the help of another person or of a mechanism such as a crane, as moving a person who does not collaborate is too much of a strain.

In those cases where the patient does collaborate to a certain extent, consult with the physiotherapist about the best way to mobilise the patient, to optimise their rehabilitation, and always taking care so as not to harm our backs. The bed must be high (about 70 cm) to make it easy for the patient to get in and out easily as well as to avoid unnecessary effort by the carers.
STRESS OF THE CARER

The stress that families suffer and especially the main carer is due to several factors. On the one hand, it is due to the dependence of the patient and to the care that must be provided as a result of this dependence. On the other hand, factors related to changes in the patient’s state of mind, behaviour or cognitive alterations and factors related to changes that take place on a social and family level (changes in family relationships, financial situation, leisure activities).

If the carer suffers stress or anxiety he must consult his physician or nurse when the first symptoms appear.
DECALOGUE FOR THE CARER

1. Ask for help without waiting for people to offer it. The others may not know when you need it.

2. Get information and use the social-health and community resources.

3. Plan the activities and the future, and organise your time to find a moment in the day for yourself. A relaxing bath, reading a book or just resting is essential to be able to continue providing care.

4. Do not medicate yourself.

5. Do not abandon your relationship with friends.

6. Do not judge your own feelings; they are not good or bad.

7. Express your feelings and emotions.

8. Set limits.

9. Go to family associations and/or mutual help groups, as they play an essential role in providing support, information and advice to patients and their carers.

10. Intervene in family respite programmes (programmes to facilitate the rest of those families who have dependent people under their charge), fostered by the provincial councils and in multimodal workshops (nutrition, mobilisation of the patients, etc) that is done from Primary Care.
What resources, and health and social aid can I request?

It is important to know what resources are available both from the health care and from the social point of view. You can find information about the available resources and on how to request them at your health centre.

Health Centres
The Primary Health teams are the link between the different care levels, exercising the function of welfare coordination. The Primary Care of the National Health System has also established home medical care systems and nursing systems to manage frequent problems in strokes, such as managing probes, enteral feeding, administration of injectables, dressings and others.

Remote care (Local/State Level)
Uninterrupted telephone service, with permanent control so that the user can stay at home. This must be requested at the social services.

Day Centres
Day centres are amenities whose objective is to provide social-health care that will prevent and compensate the loss of independence of the stroke patient,
which will provide support for the family or carers to make it possible for the patient to remain in his or her normal environment.

**Temporary Residences**

These residences can be used in certain transient circumstances (hospital admission, maternity) when the family or carers cannot devote all the attention required to the patient.

**Permanent Residences**

The requirements to request admission into a residence may vary from one Autonomous Community to another, but they usually include: Being 65 years of age or older (sometimes people aged 60 to 65 are admitted), proving that they have lived in the Community for the two previous years and have no infectious diseases. The social services normally take charge of all the details.

**Medium and long stay hospitals**

These are centres that base their care activity on the treatment of patients who may need palliative care, functional rehabilitation in a hospital and care for convalescence or other disorders.
EVALUATION OF THE DEPENDENCE

What is the Law of Dependence?


This law regulates the basic conditions to promote personal autonomy and care of people in situation of dependence via the creation of the System for Autonomy in which the General State Administration, the Autonomous Communities and the local administrations collaborate and take part.

The procedure to evaluate the situation of dependence will start, on the request of the citizen, through the municipal services of the town where the requesting party is registered.

Under the concept of care to dependence, both financial benefits and services are contemplated, although the latter will be priority and will be given through the public offer of the Social Services Network, by the respective Autonomous Communities, via centres and public or private, duly authorised, services.

**Prosthesis**

In those cases where the patient needs ortho-prosthetic devices (wheelchair, cushions, walker, splints on feet or hands or others), these are financed provided that this is justified by a specialist’s report and presenting the purchase receipt. The references of the
items that are financed by the Social Security can be consulted at the surgical aids shops.

**Adaptations of the home and home aids**

It may be advisable to carry out certain adaptations in the home, especially when a wheelchair is used.

When the home is evaluated, apart from the actual house, the entrance door, lift and accesses must be considered.

The occupational therapist is the best professional to help us evaluate which adaptations are appropriate in each particular case.

In some circumstances there may be aid to finance the necessary reforms. We advise you to consult the social services of your town council or the Social Services Management of the Regional Health Department of your Community.

You can also consult the social services of your town council about home aid programmes, which provide help for several hours a day, cleaning, hygiene, cooking or daily shopping and which can thus permit those patients who live alone maintain their independence thanks to minimal supervision, and in other cases, facilitate the work of the carer in those cases of more serious disabilities.
Parking space for the disabled
Consult with your Town Council about the possibility of requesting a parking space for the disabled.

Incapacity for work
In the case of those people who were working when they had a stroke, the family physician will prepare the relevant reports that will permit the medical tribunal of the INSS to grant the degree of disability. Several reports may be requested or an update of the reports already issued by the hospital.

Incapacity for work has a series of degrees that are going to determine the amount of pension the person is entitled to.

- Temporary incapacity for work.
- Permanent incapacity for work.
- Permanent partial incapacity.
- Total permanent incapacity.
- Absolute partial incapacity
- Severe disablement

Certain requirements must be met in each one of them such as the time contributions have been made for, the normal profession, age or others. The requirements differ depending on the degree of disability and according to the cause of incapacity (illness).
Where can I obtain more information?

ASSOCIATIONS OF PATIENTS AND RELATIONS

Spanish Stroke Federation (FEI)

C/ Riereta, 4
08830-Sant Boi de Llobregat (Barcelona)
Tel. 93 661 25 25
www.ictusfederacion.es
E-mail: fei.ictus.secretaria@hotmail.es

MEMBER ASSOCIATIONS OF THE SPANISH STROKE FEDERATION

Stroke Association of the Principality of Asturias (ADIPA)
C/ Calvo Sotelo, nº 15, 1º derecha
33007- Oviedo (Asturias)
Tel. 616012442
E-mail: katia@estors.es

Stroke Association of Aragon (AIDA)
C/ Ventura Rodríguez, nº 12-16 (local)
50007 Zaragoza
Tel. 976 282 242
E-mail: asociacion@aidaictus.com

Associació Catalana de persones amb Accident Vascular Cerebral (AVECE)
C/ Riereta, nº 4
08830-Sant Boi de Llobregat (Barcelona)
Tel. 936 402 482
E-mail: avecRCTt@hotmail.com

- Association of Stroke Patients and Families (NEURO-AFEIC)
Avda. de Cádiz, nº 46, Complejo Galicia, Edif. Orense B
18006- Granada
Tel. 958 089 449
E-Mail: neuroafeic@hotmail.es

Associació Balear de Familiars i Malalts d’Ictus (AIBAL)
C/ de Sor Clara Andreu, 15-Baixos
07010-Palma (Mallorca)
Tel. 971 498 777
E-mail: ictusbalears@gmail.com

Association of Families with stroke in Extremadura (AFIEX)
C/ Carreras, nº 8 Bajo
10002-Cáceres
Tel. 927 238 856
E-mail: afix@hotmail.es

REGIONAL SOCIAL SERVICES DEPARTMENTS OF THE
AUTONOMOUS COMMUNITIES.

PROVINCIAL SOCIAL SERVICES OFFICES.

ONLINE RESOURCES.

Institute of Older People and Social Services (IMSERSO)
Avda de la Ilustración, s/n. - 28029-Madrid
Tel. 913 638 935
Fax.: 913 638 880
www.seg-social.es/imserso/

Spanish Society of Neurology
www.sen.es/publico

Study Group of Cerebrovascular Diseases
of the Spanish Society of Neurology.
www.ictussen.org/pacientes

Spanish Foundation of Neurological Diseases
www.feeneurologia.com/pacientes.php

ONCE Foundation
www.fundaciononce.es
Appendix 9. Glossary and abbreviations

GLOSSARY


Aphasia: Alteration of speech/oral communication. The patient does not understand what he is told, he cannot express himself correctly or both things.

Agnosia: Inability to recognise the meaning of the different sensorial stimuli.

Allodynia: Secondary pain to a stimulation that normally does not trigger pain.

Sensitivity analysis: Analytical process that examines how the results of the study change when the values of certain relevant variables are modified.

Intention to treat analysis: In a controlled RCT, analysis of the data according to the treatment group initially assigned, instead of by the treatment really received.

Apraxia: Loss of ability to carry out learned and familiar movements on purpose, despite having physical capacity (muscular tone and coordination) and the desire to carry them out.

DALY (Disability adjusted life years): Measure of the overall burden of disease that reflects the number of years that a person would have been able to live, lost due to early death, and the productive life years lost due to disability.

Cochrane library: Database on effectiveness produced by the Cochrane Collaboration, comprised among others, of original systematic reviews of this organisation.

Interobserver concordance: This refers to the consistency between two different observers when they assess the same measurement in the same individual.

Direct health costs: These are the costs directly related to the health services consumed.

Indirect costs: These refer to the losses of productivity caused by the illness, early retirements, loss of productivity of the relations that must accompany these patients to the doctor’s and travelling costs.

Helsingborg Declaration: Declaration of Consensus on Stroke Management and the plans of action suggested to implement this Declaration.

Deficiency: This represents the abnormality of the structure or function of an organ or system.

Disability: Restriction or loss of the ability to carry out an activity in a certain way or within an interval considered as normal.

Dysesthesia: Abnormal sensation not motivated by an outside stimulation or caused by a normal contact, but where the perception is deformed.

Effectiveness: Magnitude that measures the degree in which an intervention or procedure achieves the intended result in normal medical practice conditions.

Efficiency: Magnitude that measures the degree in which an intervention or procedure achieves the intended result in experimental conditions.

Embase: European (Dutch) database produced by Excerpta Medica with clinical medicine and pharmacology content.
**Randomised Clinical Trial (RCT):** This is a study design where the individuals are randomly assigned to two groups: One (experimental group) receives the treatment that is being tested and the other (comparison or control group) receives standard treatment (or sometimes a placebo). The two groups are monitored to observe any difference in the results. Thus the efficiency of the treatment is assessed.

**Ashworth scale:** Test that measures the resistance of the muscles whilst the examiner moves them. It goes from 0 (no increase in muscle tone) to 5 (the affected muscle is rigid in flexion or extension).

**Spasticity:** Alteration of the motor function where there is an increase in resistance to the passive stretching of the muscles, in proportion to the speed of the latter.

**Specificity:** This is the probability of correctly classifying a healthy individual, in other words, the probability of obtaining a negative result for a healthy individual. Cost effectiveness study: Social-economic form of analysis where the costs are measured in monetary terms and the results are expressed as effectiveness. Prospective study: This is a type of study that starts with the presentation of a supposed cause and then continues through time to a certain population until the appearance of the effect is determined or not.

**Retrospective study:** This is a longitudinal study in time that is analysed in the present, but with data from the past, in other words, both cause and effect have already been presented.

**Transversal descriptive study:** This is a study that describes the frequency of an event or of a presentation at a certain moment (single measurement). It permits examining the relationship between a risk factor (or exposure) and an effect (or result) of a defined population and at a certain moment (a cut). Also called prevalence studies.

**Case studies-control:** A study that identifies people with an illness (cases), for example lung cancer, and compares them with a group without the illness (control). The relationship between one or several factors (for example tobacco) related to the illness is examined, comparing the frequency of exposure to this or other factors among the cases and the controls.

**Cohort Studies:** This consists in monitoring one or more cohorts of individuals who present different degrees of exposure to a risk factor in whom the appearance of the illness or condition studied is measured.

**Reliability:** This indicates the extent to which the same values are obtained when the measurement is made on more than one occasion, under similar conditions.

**Fibrinolysis:** Treatment that consists in administering a fibrinolytic drug in order to dissolve the clot (thrombus or piston) which has produced a vascular episode.

**Hemianopsia:** Loss of half the field of vision.

**Heterogeneity:** See Homogeneity.

**Homogeneity:** This means ‘similarity’. It is said that studies are homogeneous if their results do not vary from each other more than what can be expected by random. The opposite to homogeneity is heterogeneity.

**Incidence:** Number of new cases of an illness that are developed in a population during a certain period oft time.

**Kappa Index:** Measurement to evaluate the concordance: The values go from 0 (no agreement) to 1 (total concordance).

**Confidence Interval:** This is the interval in which the real magnitude of the effect is found (never known exactly) with a pre-established degree of safety or confidence. 95% confidence in-
terval (or 95% confidence limits) are often spoken of. This means that within that interval the real value would be found in 95% of the cases.

**Medline:** Predominantly clinical database produced by the National Library of Medicine of the US available in CD-Rom and Internet (PubMed).

**Meta-analysis:** This is a statistical technique that permits integrating the results from different studies (diagnostic test studies, clinical trials, cohort studies, etc.) in one single estimator, giving greater weight to the results of the larger studies.

**Activity limitation:** A disadvantageous situation for a certain individual, resulting from a deficiency or a disability, which limits or prevents carrying out a role which is normal in their case (depending on age, sex, and social and cultural factors).

**Morbidity:** Illness or frequency with which an illness occurs in a population.

**Mortality:** Rate of deaths or number of deaths for a certain illness in a group of people and a certain period.

**Spatial neglect:** This is a disorder that may reduce the ability of a person to look, listen or carry out movements in one half of his environment.

**NICE:** This forms part of the NHS (National Health Service in England). Its role is to provide physicians, patients and the public at large with the best available evidence, mainly in the form of clinical guidelines.

**NNT/NNH:** A measurement of the efficiency of a treatment that consists in the number of people need to be treated (NNT) with a specific treatment to produce or prevent an additional episode. Likewise, the number needed to harm (NNH) is defined to assess undesirable effects.

**Odds Ratio (OR):** This is a measurement of the efficiency of a treatment: If it is 1, the effect of the treatment is not different to the effect of the control. If the OR is greater or less than 1, the effect of the treatment is greater or less than the effect of the control. Take note that the effect that is being measured may be adverse (e.g. death, disability) or desirable (e.g. stop smoking).

**Paramedic:** Professionals trained at medical intermediate-technical level of the emergency.

**Prevalence:** The proportion of people with a finding or illness in a certain population, at a certain time.

**QUALY:** Life years corrected by a value that measures the relative quality of life experienced.

**Incremental ratio:** Cost of a unit of effect of one intervention compared with another.

**Relative risk (RR):** This is the quotient between the rate of events in the treatment and control groups. Its value follows the same interpretation as the OR.

**rt-PA:** Recombinant tissue plasminogen activator. Fibrinolytic drug.

**Sensitivity:** This is the proportion (or percentage) of really ill patients who have a positive test result. Otherwise, it is the proportion of real positives.

**Case series:** Analysis of series of patients with the illness.
**Bias:** This is the systematic deviation between the result obtained and the real value, due to the way in which the study was done.

**SIGN:** Scottish multidisciplinary agency that prepares evidence-based clinical practice guidelines as well as methodological documents on their design.

**Negative predictive value (NPV):** This is the probability that the individual is really healthy when the result of the test is negative.

**Positive predictive value (PPV):** This is the probability that the individual is really ill when the result of the test is positive.

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**ABBREVIATIONS**

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<tr>
<td>AHA</td>
<td>American Heart Association</td>
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<tr>
<td>NSAID</td>
<td>Non-Steroid Anti-inflammatory Drugs</td>
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<tr>
<td>TIA</td>
<td>Transient Ischaemic Attack</td>
</tr>
<tr>
<td>PC</td>
<td>Primary Care</td>
</tr>
<tr>
<td>ARA</td>
<td>Angiotensin Receptor Antagonists</td>
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<td>ASA</td>
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<td>DALY</td>
<td>Disability Adjusted Life Years</td>
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<td>ADL</td>
<td>Activities of Daily Living</td>
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<td>CAST</td>
<td>Chinese Acute Stroke Trial</td>
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<tr>
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<td>International Classification of Primary Care</td>
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<td>International Classification of Diseases</td>
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<tr>
<td>CNE</td>
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<tr>
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<td>Cincinnati Prehospital Stroke Scale</td>
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<td>High Blood Pressure</td>
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<td>IPSM</td>
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<td>ISEDIC</td>
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<td>IST</td>
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LAPSS  Los Angeles Prehospital Stroke Scale
LG  Legislation
MASS  Melbourne Ambulance Stroke Screen
MMSE  Mini Mental State Examination
NANDA  North American Nursing Diagnosis Association
NBO  Normobaric Oxygen
NIC  Nursing Intervention Classification
NICE  National Institute for Clinical Excellence
NIHSS  National Institute of Health Stroke Scale
NINDS  National Institute of Neurological Disorders and Stroke
NOC  Nursing Outcome Classification
NSF  National Stroke Foundation
WHO  World Health Organisation
OR  Odds ratio
BP  Blood pressure:
DBP  Diastolic Blood Pressure
SBP  Systolic Blood Pressure
RCP  Royal College of Physicians
MR  Magnetic Resonance
ROSIER  Recognition of Stroke in the Emergency Room
RR  Relative risk
SR  Systematic review
SEDEN E  Spanish Society of Neurological Nursing
SEMAP  Madrid Primary Health Care Nursing Society
SEMERGEN  Spanish Society of Primary Health Care Physicians
SEMFYC  Spanish Society of Family and Community Medicine
SEMG  Spanish Society of General and Family Medicine
SEN  Spanish Neurology Society
SIGN  Scottish intercollegiate guidelines network
NGP  Nasogastric probe
NHS  National Health System
SoMaMFYC  Spanish Society of Family and Community Medicine
CT  Computerised Tomography
HTAU  Health Technology Assessment Unit
VA/DoD  Veterans Affairs, Department of Defence
NPV  Negative Predictive Value
PPV  Positive Predictive Value
WONCA  World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians
Appendix 10. Conflict of interest declaration

All the members of the development group have declared no conflicts of interest.

The members of the group, Oscar Aguado Arroyo, Carmen Aleix Ferrer, José Álvarez Sabín, Ángel Cacho Calvo, Mª Isabel Egocheaga Cabello, Javier Gracia San Román, Juan Carlos Oballa Rebollar, Beatriz Nieto Pereda, Raquel Ramírez Parrondo and Paloma Roset Monrós, have declared no conflicts of interests.

Jose Vivancos Mora has been an advisor for Pzifer for the last two years. He is also the national coordinator of the PERFORM study on secondary stroke prevention, as well as the principal investigator in several clinical trials on acute phase stroke prevention and management.

Jaime Masjuan Vallejo carried out a medical expert’s report for MSD in 2007 and also received financing through the Ramon y Cajal Foundation for Research for the participation in clinical trials.

The form used to facilitate the collection of the declaration of interests is included in the methodological material, available both on the Guia Salud website and on the UETS website, where detailed information is presented with the methodological process of the CPG.
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