This 4-page fact sheet is about medication prescribed
- to reduce your risk of stroke
- after stroke or TIA. TIA is also known as Transient Ischaemic Attack, ‘mini-stroke’, warning stroke.

**Your doctor**
Your doctor is the person who works out what is happening in your body and prescribes the appropriate medicines and doses. *This is usually your GP, but could also be specialists you see, for example a neurologist, a cardiologist.* If you have trouble remembering everything, ask the doctor or nurse to write things down so you can share this with your family/whānau.

**Your pharmacist**
Your pharmacist prepares your medication and explains how to use it. They can often provide you with written information about your medicines and how they work. The pharmacist is the expert if you have any questions about your medicines. It is not necessary to make an appointment; you can just call in for advice.

It is best if you can use the same pharmacy each time so the staff get to know you and the medication you use. They can then check for interactions and side effects of your medicines. This is especially important if you are seeing more than one doctor e.g. a GP and a specialist.

It is often tricky for people with stroke to manage their medication well. *If you have difficulty swallowing medicines, it is important you discuss this with your pharmacist and doctor. Some medicines cannot be crushed.*

A prescription subsidy card is available for a family or person once they have paid for 20 prescriptions after 1 February each year. If you want more information about the Prescription Subsidy Card, you can phone the Ministry of Health on 0800 855 066.

**Tips for managing your medication**
*It is helpful to keep an up to date list of all your medications.* You can take this along to all your appointments. This makes it easy for everyone. It means there is no duplication of medication and that all your medications work well together.

- Always check with your pharmacist or doctor before taking any over-the-counter (purchased) medicines. This includes vitamins, minerals and herbal supplements. They may affect the way your prescribed medicines work.
- Some people stop taking medication because they feel fine or think their risk of stroke has gone away. *You must keep taking your medications until your doctor tells you to stop.*
- *You may have to take your medication for the rest of your life.* Your doctor will advise you about this and monitor your health on a regular basis.

Don’t be afraid to ask your medical centre, pharmacy, family, whānau or friends for help to organise your daily medication schedule.
Tips for family, whānau and carers

After a stroke, it may be difficult for a person to manage their medication well. There are many reasons for this. They may include one or more of the following points:

- difficulty talking, understanding conversations, reading and writing (aphasia)
- memory loss, confusion, limited concentration and attention
- difficulty identifying familiar shapes
- not understanding what the medicine is for
- poor eye sight
- difficulty walking and moving around, poor balance
- having the use of one side of the body only
- unable to open bottles and medicine packaging and
- difficulty swallowing medication.

A person with stroke may need support and encouragement to take their medication. It is useful to go over their medications and keep track of how things are going.

If you need more support and advice please contact the Stroke Foundation, 0800 787 653. Healthline 0800 611 116 provides free health advice 24 hours a day.

In case of medication overdose or accidental poisoning contact National Poison Centre, 0800 764 766.

Medication to reduce your risk of a first stroke, or a stroke happening again

1. **High blood pressure risk and medication**

High blood pressure is the biggest single risk factor for stroke. You can have high blood pressure and not know it. It important to get your blood pressure tested regularly. Your doctor, nurse or pharmacist will advise you how often – it will depend on your age, whether you are taking any medications and your general health.

An effective way to manage high blood pressure is to do regular exercise and eat a healthy diet. It may also be necessary to use medication to lower your blood pressure. Many different medications do this. Sometimes it is better to use two or three different medicines at lower doses rather than taking a higher dose of just one or two medicines. Your doctor will advise you and prescribe the most appropriate for you.

It is most important to keep taking your blood pressure medication until your doctor tells you that you can stop.

2. **Blood-thinning medication**

The main cause of stroke is when a blockage such as a clot blocks the blood flow to the brain. TIA (transient ischaemic attack, mini-stroke, warning stroke) happens the same way, but this blockage is temporary and the situation resolves. After both stroke and TIA there is a risk that blood clots may happen again. Blood-thinning medication helps reduce the risk of clots.

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<thead>
<tr>
<th>Blood thinning medication</th>
<th>Anti-platelets</th>
<th>Anti-coagulants</th>
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<tbody>
<tr>
<td>Clopidogrel</td>
<td>Warfarin</td>
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<tr>
<td>Dipyridamole</td>
<td>Dabigatran</td>
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<tr>
<td>Aspirin</td>
<td>Rivaroxaban</td>
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Each of these medications work in different ways. You may be prescribed more than one blood thinner to get the best result for you. The choice of medication for each person will depend on many factors including a person’s age, their medical conditions and other medications that might interact with blood thinning medication.
For instance, a common medication for treating stomach acid, indigestion, is omeprazole (Losec®). Clopidogrel may not work so effectively with this. Make sure you tell your doctor if you are purchasing omeprazole (Losec®) from your pharmacy. Your doctor will discuss treatment options with you.

If you experience any unexpected bruising or bleeding while on any blood thinning medication, it is important you report this to your doctor promptly.

Blood-thinning medication is generally not suitable for people who have a stroke when a blood vessel expands, bursts and bleeds into the brain.

### Warfarin information

Warfarin is available in 2 different brands in New Zealand - the Marevan® brand and the Coumadin® brand. Most patients take the Marevan® brand. Always remember the name of the brand you are taking as it is important to stay on the same brand.

You must tell any health professional treating you that you are taking warfarin, especially your dentist.

Warfarin needs careful monitoring and regular blood testing is essential for all people taking warfarin. Blood tests are usually done by a laboratory. Sometimes the blood is taken at the GPs and sent to the lab. The results come back to the GP. The GP practice will contact you if you need to adjust your dose.

Now some community pharmacists are doing the tests and can immediately give you the results. When necessary, they will adjust your dose in accordance with your doctor’s instructions. Your doctor can advise you about this local service.

Warfarin interacts with many other medicines and some foods. Always check with your pharmacist or doctor before taking any other medicine including vitamins, minerals and herbal supplements. It is important to have a consistent diet while taking warfarin. Changes in your diet can affect your warfarin.

### 3. Statins - Cholesterol-lowering medication

Statins are an important group of cholesterol-lowering medicines that could save your life by reducing your chance of a stroke. A doctor may prescribe statins if:

- you’ve survived a stroke or heart attack as they will help reduce your risk of having another
- you have high cardiovascular risk and are at high risk of heart disease or stroke. This risk is common if you have a strong family history of early onset heart disease, an inherited high cholesterol condition or have diabetes.

<table>
<thead>
<tr>
<th>Name</th>
<th>Simvastatin</th>
<th>Atorvastatin</th>
<th>Pravastatin</th>
<th>Rosuvastatin</th>
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<tr>
<td>Also</td>
<td>Arrow-Simva, Lipex</td>
<td>Lipitor and Zarator</td>
<td>Cholvastin and Pravachol</td>
<td>Crestor</td>
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As always, check before you mix statins with other medication. Statins are not safe with some antibiotics called macrolides e.g. Erythromycin, Clarithromycin, Roxithromycin etc. Be sure to tell the doctor treating you that you are taking a statin.
Statins are not just a one-off prescription. It is important that you keep taking them long term. If you experience any unexplained muscle pain, tenderness or weakness while taking a statin you must contact your doctor.

Grapefruit and grapefruit juice can affect the rate at which statins are processed by your liver and cause side effects. You should avoid grapefruit and grapefruit juice while taking statins.

When you start using statins, you will need to be monitored to make sure you are taking the right dose. Your doctor will advise you about this.

Statins are the cholesterol-lowering medications with the best evidence of effectiveness in preventing stroke. If you are not able to take statin medications, there are other cholesterol-lowering medications available as well: talk to your doctor.

4. Atrial fibrillation medication

Atrial fibrillation (AF) is a type of irregular heartbeat that can cause stroke. With AF blood clots may form in the heart. These clots can travel to the brain, cause a blockage in a blood vessel and stroke. People with AF may feel heart palpitations (rapid heartbeats), breathlessness or chest pain. Some people may not have any symptoms.

There are two types of AF medication: anti-arrhythmic medications help to control the heart rate and anti-coagulants help to stop blood clots forming.

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<thead>
<tr>
<th>Atrial fibrillation medication</th>
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<th>Anti-coagulants</th>
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<tbody>
<tr>
<td>Beta-blockers</td>
<td>Warfarin</td>
<td>Dabigatran</td>
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Beta-blockers are commonly used in AF to stop the heart from beating too fast. They are also an effective medication to reduce high blood pressure. Beta-blockers shouldn’t be stopped abruptly without your doctor’s advice.

There can be interaction with other medications that slow your heart rate or lower your blood pressure. It’s important that your doctor and pharmacist knows all the medications you are taking including traditional remedies or ones you purchase over the counter.

Please read the note about warfarin if you are prescribed warfarin for your AF.

5. Depression after stroke

Depression affects about fifty percent of people who have a stroke. Depression is usually treated with medication and possibly other therapies. A person with signs of depression should seek help from their GP as soon as possible for assessment and treatment. Further information about depression is available on the Depression Helpline 0800 111 757 and from the Stroke Foundation 0800 787 653.

6. Epilepsy after stroke

A small number of people develop epilepsy after a stroke. This may be managed with medication. Your doctor will discuss this with you. They may prescribe anti-epileptic medication if this is appropriate.

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