This fact sheet is about medication prescribed

• to reduce your risk of stroke
• after a stroke or a TIA. TIA is also known as a Transient Ischaemic Attack, ‘mini stroke’, warning stroke.

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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 medicine specialist 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.

The pharmacy team can help if you need extra support e.g. organising your medicines into weekly or monthly dose packs; providing advice so you get the best benefit from the medicines you are prescribed.

Ask your pharmacy about the long-term condition (LTC) service they offer. The LTC service is funded by the DHB. But if you require blister dose packing of your medicines this usually involves a small cost, unless there is extra funding available in your area. Your pharmacist will discuss the best solutions with you.

Here is [more information about managing medication at home](#).

**Prescription subsidy card:** This is available for a family or person once they have paid for 20 prescriptions after 1 February each year. If you take a prescription to another pharmacy, you need to let your usual pharmacy know so they can add it to your prescription count. Here is [more information about this subsidy card](#).

**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.

- Most hospitals provide a yellow card on discharge that lists all your medicines and what they are for. If you did not receive a medication list from hospital your pharmacist might be able to provide you with one.
- 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
- 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.

Here is [more information for family, whānau and carers](#).

If you need more support and advice about stroke, please [contact the Stroke Foundation](#) or call 0800 787 653

In case of medication overdose or accidental poisoning [contact the National Poison Centre](#), for advice, or phone 0800 764 766.

Healthline offers [free medical advice 24 hours a day](#) or 0800 611 116

**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.

Here is [more information about blood pressure](#) and [here](#).
An effective way to manage high blood pressure is to do regular exercise and eat a variety of nutritious foods every day.

**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.** This link has more information about this issue.

A TIA (transient ischaemic attack, mini-stroke, warning stroke) happens the same way, but this blockage is temporary and the situation resolves. This link has more information about mini-strokes.

After both stroke and TIA there is a risk that blood clots may happen again. Blood-thinning medication helps reduce the risk of clots.

**Blood thinning medication**

**Anti-platelets**
- Clopidogrel
- Dipyridamole
- Aspirin

**Anti-coagulants**
- Warfarin
- Dabigatran
- Rivaroxaban

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.

E.g. 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 because of a burst blood vessel bleeding 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 let 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. They can give you the results immediately. When necessary they will adjust your dose in accordance with your doctor’s instructions. This link has more details and the list of pharmacies.

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.

This link has more information on Warfarin. The webpage has links to brochures in Chinese, Korean, Nuiean, Tongan and Samoan.

3. Statins - Cholesterol-lowering medication

Statins are an important group of cholesterol-lowering medicines that could save your life by lowering your chance of a stroke. This link has a video about cholesterol. It shows how cholesterol can block the blood flow to your brain and cause 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.
Types of statins (and alternate names)

**Simvastatin**  Arrow-Simva, Lipex and more

**Atorvastatin**  Lipitor and Zarator

**Pravastatin**  Cholvastin and Pravachol

**Rosuvastatin**  Crestor

This link has [more information about statins](#).

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 it is important you 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.

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.

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.

Here is [more information about cholesterol and cholesterol testing](#).

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.

Here is more information about AF and also here.

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 anticoagulants help to stop blood clots forming.

**Atrial fibrillation medication**

- **Anti-arrhythmic**
  - Beta-blockers

- **Anti-coagulants**
  - Warfarin
  - Dabigatran

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.

Here is further information about depression and here.
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.

For more information about epilepsy and from the Stroke Association UK website. Please remember that the NZ ambulance and emergency number is 111.

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