

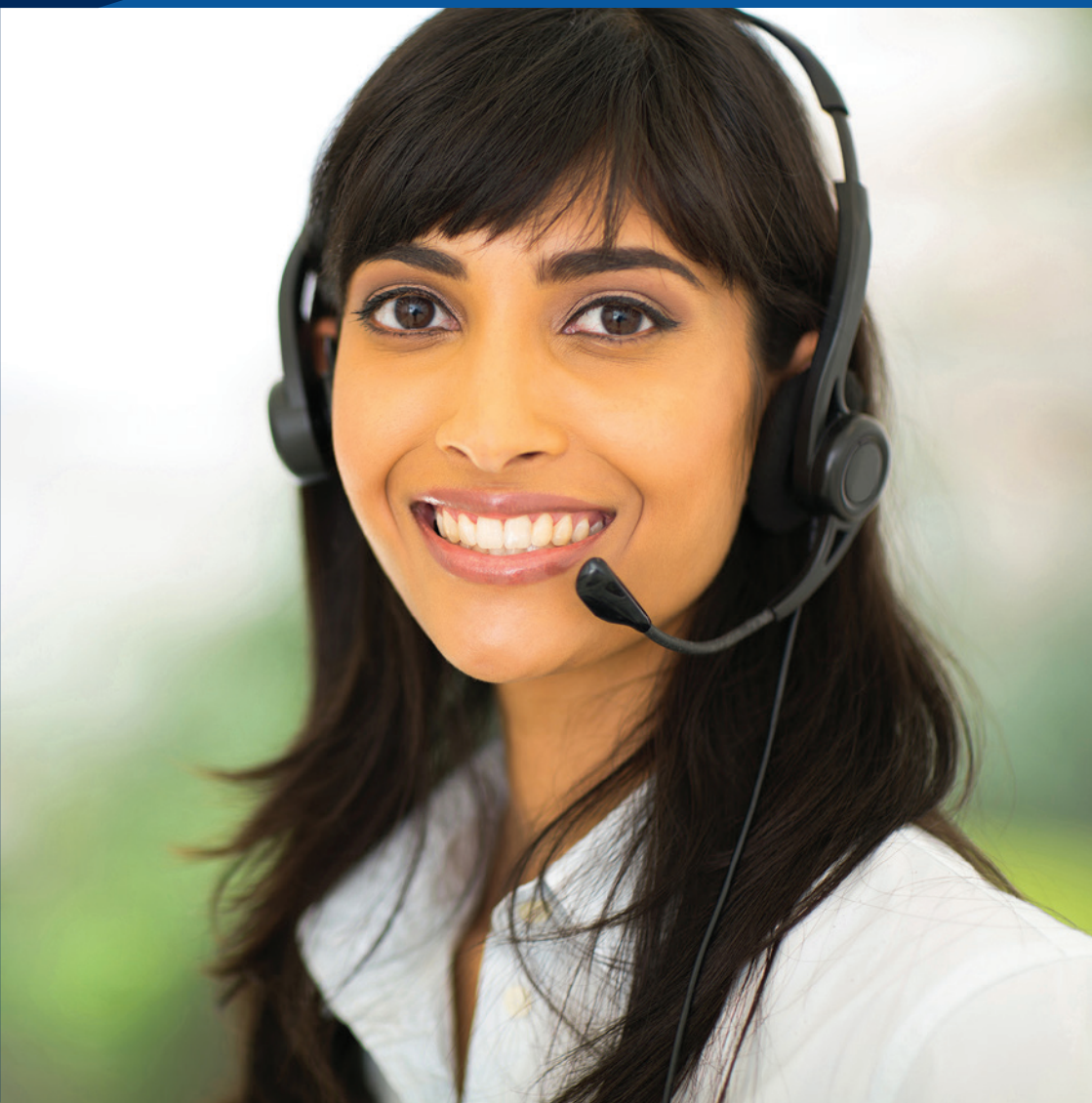


MELBOURNE
PATHOLOGY

Quality is in our DNA

Warfarin Care Patient Guide

November 2016



Warfarin Care Support

For all enquiries regarding the management of your warfarin therapy, contact Warfarin Care Support on:

(03) 8347 7020

Warfarin Care Support Fax Number:

(03) 9287 7898

Warfarin Care Support office hours are:

Monday to Friday 9am – 8pm

Saturday 11am – 7pm

(Closed Sundays and public holidays)

For your dose instructions contact the Results Department on:

(03) 8347 7010 or **1300 550 804** if calling from outside of Melbourne

Results Department office hours are:

Monday to Saturday 8am – 10pm

Welcome to the Melbourne Pathology Warfarin Care program

Your doctor has requested that you join Melbourne Pathology's Warfarin Care program to help manage your warfarin therapy safely and effectively. This requires close co-operation between you, your doctor and our Warfarin Care staff.

This booklet contains important information about your warfarin medication and your responsibilities as a patient in our program. Please read the information carefully and refer back to it whenever necessary.

The tables at the end of this booklet have been provided for your use. We suggest you keep this as a long-term personal record of your results and doses. A pocket record is also available. Please bring your record booklet with you when you have your blood test to confirm your current dosage. You should also take it with you when you travel.

To find out how well you have understood the information provided about warfarin therapy, please complete the patient self assessment questionnaire at the end of this booklet.

If you have any further questions about warfarin, please contact us on (03) 8347 7020.

Yours sincerely,

Warfarin Care Support
Melbourne Pathology

Contents

Patient privacy and Warfarin Care program	1
Our Warfarin Care service	1
Warfarin Care program administration fees	2
The Warfarin Care partnership	2
Responsibilities of Warfarin Care Support	3
Responsibilities of your doctor	3
Responsibilities of you as the patient	4
Current patient questionnaire	5
New patient questionnaire	7
Warfarin results	9
Patient priority	9
How you will receive your dose instructions	9
Communication methods	9
Special information for new patients and patients recently discharged from hospital	10
Public holidays	10
Home visits	10
What you need to know about warfarin	11
What is warfarin?	11
The aim of your warfarin therapy	11
What does INR mean?	11
What does the target range refer to?	12
Warfarin doses	12
Testing frequency	12
Taking your warfarin	13
Warfarin brands	14
Warfarin strengths	14
Warfarin storage	15
Warfarin side-effects	16
Keeping safe on warfarin	16
Frequently asked questions	17
Can I monitor my own warfarin?	17
Why is my dose different to my friend's?	17
Why does my INR level keep changing?	17
What happens when I have a high INR?	18
What if my INR is low?	19
What do I do if I take too much?	19
What do I do if I miss a dose?	20

Why do I have to test so often?	20
Will my other medication affect my warfarin dose?	20
Should I stay on my aspirin?	21
Do I need any other treatment if my INR is low?	21
When can I stop my Clexane?	22
Changing to alternative oral anticoagulants	22
Stopping warfarin and starting Pradaxa, Xarelto, Eliquis or Savaysa	23
Stopping Pradaxa, Xarelto, Eliquis or Savaysa and restarting warfarin	23
What is pre-packed medication and how can it help me?	23
Should I modify my diet?	24
Am I allowed to drink alcohol?	24
What happens when I go into hospital?	25
What happens if I am pregnant (or planning pregnancy)?	25
I have a condition called polycythemia. Is that a problem?	25
What do I do if I am bruising or bleeding?	25
Why have I received a late letter?	26
Can I go to any collection centre?	26
What if I don't want to pay for Warfarin Care?	26
Receiving your warfarin results by SMS	27
How do I enrol to receive SMS notification?	27
What do I do once I receive my SMS notification?	27
What if I forget to respond YES?	28
What if I don't understand the SMS?	28
Why is it so important for me to reply YES?	28
What if I don't receive an SMS on the day of my test?	28
What happens if my result is abnormal or too high?	28
What if my nominated mobile phone number changes?	29
Procedures and surgery	29
Temporarily stopping warfarin	30
Herbal products and warfarin	31
Travel and testing:	33
Information for warfarin patients on holiday	33
Immunisations and Malaria prophylaxis	35
Costs	35
Patient self-assessment questionnaire	36
Websites of interest	38

Patient privacy and Warfarin Care program

Your referring doctor has enrolled you in Melbourne Pathology's Warfarin Care program and has asked us to supply your warfarin dose instructions to you directly. This contact will be by telephone, by post, by SMS or in some cases by fax (eg. to your pharmacist if you receive your warfarin medication in a pre-packed form).

When we are not able to contact you personally (eg. if you are ill or have a hearing impairment) we may have to leave your dose instructions with a relative, carer, nurse, or friend. Direct verbal contact with you or your delegate may be necessary in the case of significantly abnormal results. In this instance, we will always attempt to contact you directly by phone regardless of whether you are registered to receive results in an alternate manner, eg. by SMS.

You will be required to provide your full name and date of birth to our Results Department staff when you receive your warfarin dose instructions by telephone. If a relative, carer, nurse, or friend is to receive your dose instructions, they will need to provide your full name and date of birth.

Please note that we regard your initial and continued enrolment in our Warfarin Care program as giving us implied consent to provide your results by telephone, post, electronic media or fax, and/or in some cases to provide your dose instructions to a carer or other individual.

Melbourne Pathology is committed to maintaining patient privacy and confidentiality and has implemented policies consistent with the national Privacy Principles and the Privacy Amendment (Private Sector) Act 2000 (Cth). We have standard protocols in place to ensure privacy and confidentiality.

If you do not wish to receive your warfarin dose instructions in this way, you will not be eligible to stay enrolled in our Warfarin Care program. If this is the case, please notify **Warfarin Care Support on (03) 8347 7020 or 1300 550 804** if calling from outside of Melbourne.

Our Warfarin Care service

Providing your warfarin dose instructions is a complex process involving:

- correct patient identification
- recording the information you provide at each INR test for our Warfarin Care doctor to review
- collecting and forwarding a sample of your blood to the laboratory for testing
- processing the sample and preparing your test results
- collating the information provided into your personal file
- providing you with warfarin dose instructions from our Warfarin Care doctor

- forwarding a report of your test result and dose instructions to you and your doctor, pharmacy, district nurse or place of residence
- printing and distributing paperwork for your next test including co-ordinating home visits as required.

The care of one patient episode requires the assistance of collection staff, couriers, clerical staff, IT experts, laboratory scientists, highly-trained advisors in our Warfarin Care administration area, specialist doctors and results staff, who together deliver, receive and process your specimen, monitor your important medical information, provide your dose instructions and communicate with your doctors, pharmacy and other personal carers.

Warfarin Care program administration fees

Your doctor has referred you for a private medical service which is not funded by Medicare or any other government agency. The Medicare Benefits Schedule (MBS) provides a tax payer contribution (rebate) towards your blood collection and the automated analysis that provides your INR result. It does not cover the cost of the extensive infrastructure, including specialist staff, devoted solely to personalised warfarin care. Continued cutbacks in Medicare rebates have necessitated the introduction of out-of-pocket fees for initial registration and on-going management in our Warfarin Care program. Please note, these fees are separate from any other fees that may be charged by your referring doctor.

You have a choice as to your involvement in our program. Alternatives to enrolment include:

- Having your own doctor manage your warfarin control
- Changing to a drug which does not need monitoring (eg. Pradaxa, Xarelto, Eliquis, aspirin, clopidogrel). Your individual medical conditions will dictate whether an alternative drug is appropriate and safe for you. Please note that PBS funding is only available for these newer drugs in a limited range of conditions.
- Warfarin management through an alternative private pathology provider.

Please discuss these options with your referring doctor without delay so that your care is not compromised.

The Warfarin Care partnership

You, your doctor, and Warfarin Care make up a very important partnership. Communication and co-operation among all three parties is critical to the safe and effective management of your warfarin therapy.

Responsibilities of Warfarin Care Support

Our aim is to manage your warfarin therapy safely and speedily.

Melbourne Pathology will provide:

- Your INR result, dose and next test date, by phone, electronically or by letter to you or your carer as indicated to us
- A report of your test results and dose instructions to your doctor, place of residence and/or Royal District Nursing Service (as applicable)
- A report of your dose instructions to your pharmacist (if you receive your warfarin medication in a pre-packed form)
- A consultation service to your doctor if issues arise that may affect your warfarin therapy
- Alternatives for warfarin management during periods of travel
- Support and education about managing your warfarin therapy
- Ongoing assessment of whether our program is suitable for you. If we decide our program is unsuitable for you, we will pass the management of your warfarin therapy back to the doctor who referred you.

Responsibilities of your doctor

Your referring doctor remains your primary care giver and the Warfarin Care Support service is not a substitute for this general care.

Your doctor needs to:

- Provide a valid Rule 3 exemption referral for INR tests and dosing. Each referral is valid for as many tests as are required over a 6 month period. If you remain in our program for more than 6 months, we will request another referral from your doctor
- For our records the initial referral must contain:
 - > The reason for warfarin
 - > The period of time you are to stay on warfarin
 - > The appropriate target range for your condition
 - > A summary of your medical problems and other medications
- Provide you with a script for warfarin which must include 1mg tablets in addition to any other dose size
- Be available to discuss management of very high or low results
- Control any extra or alternative therapies that may be prescribed, such as heparin or Clexane
- Notify Warfarin Care of new medications which, when prescribed, may interact with your therapy
- Notify Warfarin Care when therapy is to stop.

Responsibilities of you as the patient

It is essential that you understand and accept your responsibilities as a patient in our program to ensure your warfarin therapy is managed safely and effectively.

While you are a patient in our program you will need to:

- Have regular blood tests
- Continue your routine visits to your own doctor
- Visit and inform your doctor if you experience any bruising, bleeding, or symptoms of your previous clot
- Discuss with your doctor any changes you have made to your medications or diet (including herbal medicines, vitamins and dietary supplements or weight loss programs)
- Maintain an adequate supply of warfarin tablets, always including a supply of 1mg tablets
- Attend your local Melbourne Pathology collection centre on the designated day for your next scheduled blood test
- Assist in standard patient identification
- Provide us with accurate, up-to-date personal details, including a contact phone number that is valid at all times (day or night) particularly on the day of your test
- Confirm your referring doctor's details
- Confirm your pharmacy details where relevant
- Assist in completing a Warfarin Care patient questionnaire at each and every INR test
- Make sure we have your current mobile phone number and that your phone is charged and switched on, that you read the entire message and acknowledge the instruction as requested if you are registered to receive dose instructions by SMS
- Make sure you read your dose letter or SMS if this is how you receive your dose instructions, or make a written record of any phoned instruction
- Take the dose of warfarin as prescribed
- Keep a dated record of your warfarin doses.

Should staff of Warfarin Care have concerns about your medical management they will consult with you and your doctor to determine the best course of action.

Should you or your doctor have concerns about your doses, intervals or the instability of your INR results, or if you believe there is an error in the information provided to us or the instructions provided to you, please contact the service immediately on 8347 7020.

Current patient questionnaire

Each time you have an INR test you must assist Melbourne Pathology staff to complete the Warfarin Care patient questionnaire (illustrated opposite). The information recorded on this form will be provided to our Warfarin Care doctors.

While we recognise that this can be a tedious and repetitive task, it is vitally important that this form is completed fully each time you have your test, as it allows you to communicate directly with our Warfarin Care doctors.

You can help in speeding up this process by bringing a written list of your current medications to each appointment. Your doctor or pharmacist may be able to quickly print this for you from their records.

Please feel free to provide any other relevant information that is not requested by the routine questions.



MELBOURNE
PATHOLOGY

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Central Laboratory Phone (03) 9287 7700
Melbourne Pathology ABN 63 074 699 126
A subsidiary of Sonic Healthcare Ltd ABN 1 www.mps.com.au

Place lab ID here

Patient CITIZEN, JOHN		Dr's ID/Code T679		Doctor DR DOCTOR TEST	
Title _____ Surname _____ Given Name _____		Dr's Tel/Fax No. _____		Address MELBOURNE PATHOLOGY	
Address 103 VICTORIA PDE COLLINGWOOD VIC 3066		Provider No. _____		103 VICTORIA PDE	
File/U.R. No. _____		Copy ID No's 1. _____ 2. _____		COLLINGWOOD, 3066	
Date of Birth 17/1/1935		Sex (M/F) M		Tel/Mobile No. 9287 7777	
Medicare No. _____		Lab Code/Hosp Code SSP		Ward _____	
<input type="checkbox"/> Pen <input type="checkbox"/> WG <input type="checkbox"/> Medicare Assignment (Section 20A of the Health Insurance Act 1973) I assign my right to benefits to the approved pathology practitioner who will render the requested pathology services and any eligible pathologist determineable services. <input type="checkbox"/> HCG <input type="checkbox"/> VA <input type="checkbox"/> <input type="checkbox"/> TAC <input type="checkbox"/> OS <input type="checkbox"/>		<input type="checkbox"/> RD <input type="checkbox"/> PC <input type="checkbox"/> HO <input type="checkbox"/> NJ <input type="checkbox"/> DE <input type="checkbox"/> IV <input type="checkbox"/> IC <input type="checkbox"/> DP <input type="checkbox"/> IN <input type="checkbox"/> PI <input type="checkbox"/> RS <input type="checkbox"/> R3X		Patient Account Statement: Your doctor has requested tests, according to clinical need. Some of these may not be eligible for Medicare rebates, for which you will receive an account.	
Clinical Notes (including relevant medications) Self Determined <input type="checkbox"/> Fasting <input type="checkbox"/> Revised Referral XXXXXXXXXXXXXXXX Hospital Status: State the patient's status at the time of service or when the specimen was collected: Private patient in a private hospital <input type="checkbox"/> or approved day hospital facility <input type="checkbox"/> Private patient in a recognised hospital <input type="checkbox"/> Public patient in a recognised hospital <input type="checkbox"/> Outpatient of a recognised hospital <input type="checkbox"/>		Tests Requested Urgent <input checked="" type="checkbox"/> Tel. <input type="checkbox"/> Fax <input type="checkbox"/> By _____ Hrs Tel/Fax No. _____ Serial INR & Dose Rule3 Exemption 17 4 2016 Doctor's Signature _____ Request Date		Containers Collected _____ Staff ID _____	
Your doctor has recommended that you use Melbourne Pathology. You are free to choose your own pathology provider. However, if your doctor has specified a particular pathologist on clinical grounds, a Medicare rebate will only be payable if that pathologist performs the service. You should discuss this with your doctor.		I certify that the pathology specimen accompanying the request was collected from the patient stated above as established by direct enquiry and/or inspection of wrist band.			
Signed _____		Person identifying patient _____		Specimen Date _____	
Specimen Time _____		Hrs _____			

Previous Test Results

Date 17-4-2016 Lab Id 91704091 INR 2.5
Dose 2.0 mg DAILY

Next Appt
20/4/2016

What dose is the patient taking?
Does this differ from that printed above?
No Yes (give reason).....

Does Today's Test Date differ from date printed above?
No Yes (give reason).....

Any bruising/bleeding/blood in urine
No Yes (State what).....

Any Illness Or Hospitalisation since last warfarin test?
No Yes (state illness, hospital, dates of admission/discharge).....

CURRENT MEDICATIONS (at last test)

Please Tick if current.

AMOXICILLIN
ASPIRIN
COLGOUT
DIGOXIN
LIPITOR

Since last warfarin test, have there been any changes in medications (other than anticoagulants)? Include vitamins, health foods etc.

No Yes (See Below)

Medication:.....
(Please circle one of the options below)
STOP START DOSE INCREASE DOSE DECREASE
Date:.....

Medication:.....
(Please circle one of the options below)
STOP START DOSE INCREASE DOSE DECREASE
Date:.....

Medication:.....
(Please circle one of the options below)
STOP START DOSE INCREASE DOSE DECREASE
Date:.....

FURTHER NOTES (please include and additional information, ie. Patient away, having procedure done or ceasing warfarin)

Do Not Write below This Line

New patient questionnaire

To safely manage your warfarin, we may also require information regarding your recent doses and medication changes during a period of hospitalisation. This information can only be released by the hospital with your written consent. We ask that you sign an agreement to release this information when you join our program and each time you are discharged from hospital.

Patient authority

I hereby authorise Melbourne Pathology to obtain from my medical records all clinical information relevant to my warfarin management.

Completed by: ☐ Patient ☐ Agent*

Name _____

Signature _____ Date _____

* If agent, please provide relationship to patient (eg carer, family member, doctor, nurse).



Warfarin Care new patient enrolment form

For use in Melbourne Pathology collection centres

Patient accepts Warfarin Care fee? (Mandatory completion) ☐ Yes ☐ No

Patient signature

If the patient accepts the enrolment fee, proceed with completion of this form and provide Warfarin Care patient pack. If patient declines enrolment fee, do not complete the form but collect the INR. All forms are to be barcoded and faxed to HUDE.

Patient identification/Bradma label

Patient's first name _____

Patient's surname _____

Address _____

Phone no. _____

Date of Birth _____

Reporting details

(Please direct the patient to call our Results Department on 9287 7777 if result has not been received by 6pm today)

Patient

Speaks and reads English? ☐ Yes ☐ No

Speaks other language? (list) _____

Home phone no. _____

Mobile no. _____

(Please note, the patient MUST be contactable by phone either directly or through next of kin/carer)

Next of kin/English speaking carer

Name _____

Phone no. _____

Relationship to patient _____

General practitioner (Mandatory completion) (Primary medical contact other than referring specialist)

Name _____

Phone no. _____

Clinic _____

Pharmacy

(Complete this section if Dosette or Webster pack managed by local pharmacy)

Name _____

Phone no. _____ Fax no. _____

Address _____

Discharge

Hospital of recent discharge and date (if appropriate)

Discharged to: (Name of facility)

Phone no. _____ Fax no. _____

- ☐ Rehab hospital ☐ Nursing home ☐ Hostel
☐ Independent living ☐ Home

January 2014

Home visit ☐ Yes ☐ No

(Only on request from referring doctor and only for six weeks post discharge)

Medications

(Dosage not required. Attach drug sheet with same barcode)

Dosing information

Reason for anticoagulation _____

Is this patient currently on Clexane®? ☐ Yes ☐ No

INR target range _____ Duration _____

Warfarin start date _____

Patient previously on warfarin ☐ Yes ☐ No

Monitored by _____

Previous stable dose _____

Next INR due ____ / ____ / ____ (if arranged)

Dose (and INR) history

(Include hospital doses — preferably for the last 10 days)

Date					
Dose					
INR					

Date					
Dose					
INR					

Patient authority

I hereby authorise Melbourne Pathology to obtain from my medical records all clinical information relevant to my warfarin management.

Completed by: ☐ Patient ☐ Agent*

Name _____

Signature _____ Date _____

* If agent, please provide relationship to patient (eg. carer, family member, doctor, nurse).

Your details

Name _____

Staff ID no. _____

Date _____

1. Fax this form to Warfarin Care on (03) 9287 7898
2. Place this form in the bag with the accompanying referral and specimen

Warfarin results

Patient priority

It is only important to receive dose instructions within 24 hours of your test if the result will have a major impact on your care. For more than half our patients there will be no dose change at the time of testing. However, Warfarin Care does aim to have your dose instructions available for you the day after your blood test at the latest.

Patients are NOT dosed in order of the time of day that they had their test, but in order of clinical importance. Our doctors have decided which patient episodes should take greatest priority and these patients will be dosed first. Do not expect that you will receive your test result the same day even if you are the first patient to have your blood taken in the morning.

How you will receive your dose instructions

Our dose instructions will include your warfarin dose (in milligrams per day), the weekly pattern of dosing and the date of your next test.

Every time you receive your dose instructions by telephone, you will also be asked to repeat the dose instructions and your next test date to assure us that you have understood them. We will not routinely tell you your INR result as some patients confuse this with their dose instruction. If you would like to know your INR result in addition to your dose and test date, you can ask for it at this time. Always write down your dose instruction and next test date when they are phoned to you. Use the pages provided at the end of this booklet to record all instructions.

Read all dose letters or SMS instructions thoroughly, and always check that the dose letter or SMS instruction is for the most recent test before following that instruction. If you receive your dose instruction by letter, keep the letter until your next test and if possible bring it with you to your scheduled blood test.

Communication methods

Melbourne Pathology has a variety of ways of communicating with you depending on when your next test is due, whether your dose is to change and the contact method you have designated. These may include contact by phone, SMS or letter.

If you have not received your result by phone or SMS on the day of your test, **continue the prescribed dose** and wait for your dose letter or SMS result, **UNLESS** this is your first INR test with Melbourne Pathology or you have just been discharged from hospital (see p10).

If your last test was less than 5 days ago and you have not received a phone call or SMS result after 24 hours we may not have your contact details correct, may be unable to reach you or the SMS may have failed, due to phone, carrier or SMS provider failure. Please call Warfarin Care the day **following** your test.

This table only applies to patients NOT receiving results by SMS.

Test Interval	Communication method
Next test is required in less than 7 days	We will only phone you. You will NOT receive a letter.
Next test required in 7 or more days	If your dose HAS NOT CHANGED we will only send you a letter. You will NOT receive a phone call.
Next test required in 7 or more days	If your dose HAS CHANGED you will receive a phone call and a letter.

Special information for new patients and patients recently discharged from hospital

Please have your test EARLY in the day so that we can provide you with same day results.

For new patients testing for the first time or patients testing for the first time since discharge from hospital:

- Do not take your next dose before you receive our dose instruction
- Call Warfarin Care if you have not been called by 6pm on the day of your test. State that you are a new patient or have just been discharged from hospital and have not yet received your dose instruction.

Public holidays

Collection centres are generally closed on Sundays and public holidays. Not all collection centres are open during the long holiday breaks at Christmas, New Year and Easter, and opening times may vary from year to year. In the lead-up to Christmas, all collection centres display notices about opening times and days. These are also listed at www.mps.com.au. As the holidays approach we recommend that you confirm with your preferred collection centre when it will be open.

Home visits

Home visits are only available for ill and infirm patients, as arranged through your local doctor and agreed with our service. For many patients this will only be necessary for a short time. Appointment times cannot be provided so you must remain at home on the day of your scheduled visit. If your circumstances change and you will not be home on the appointed day, please phone our home visit service on 8347 7030 so we can reschedule your visit.

What you need to know about warfarin

What is warfarin?

Warfarin is an anticoagulant or blood thinning agent that can only be monitored by a blood test.

It has been used for over 50 years, and is a very effective drug with few side-effects, provided it is carefully managed.

Warfarin slows down the clotting process by interfering with the action of Vitamin K. This vitamin is required to make several blood proteins that are needed for blood clot formation.

Warfarin is often recommended for the following conditions:

- blood clots, such as deep vein thrombosis (DVT) and pulmonary embolism (PE)
- irregular heart beat, eg. atrial fibrillation (AF)
- heart valve replacement
- other heart problems.

You may be prescribed warfarin as initial treatment, to prevent something that has not yet happened or to prevent recurrence after initial treatment (prophylaxis).

The aim of your warfarin therapy

The aim of your warfarin therapy is to maintain your INR within your recommended target range.

Your doctor advises us of the target range which is appropriate for your clinical condition. Your warfarin is most effective and least harmful in this range.

What does INR mean?

The letters INR stand for International Normalised Ratio. This ratio is calculated from your blood test and is used around the world exclusively for monitoring patients on oral anticoagulants such as warfarin.

Your INR levels are very important as they help the Warfarin Care doctors maintain the warfarin dose that is suitable for you.

- Changes in your warfarin dose will change your INR although these changes may not occur immediately
- Changes in your INR may require changes in your warfarin dose.

INR results between different laboratories may not always be identical for technical reasons. You may notice through the course of your care that your hospital INR result or a test while on holidays may differ from your usual pathology service result. This is just a limitation of this type of test. If you have concerns about discrepancies please discuss with your doctor or Warfarin Care.

What does the target range refer to?

This defines the limits between which your INR test results are intended to fall. Your doctor will decide, based on the condition for which you need warfarin, what your range should be. It will usually be 2 – 3 or 2.5 – 3.5, ie. a difference between the top and bottom of the range of 1.0 INR units.

What does this mean? Simply, an INR of 2 means your blood takes twice as long to clot as someone who is not on warfarin. An INR of 3 means your blood takes three times as long to clot, and so on. So the higher your INR, the “thinner” your blood is.

Even in the best controlled circumstances most people will only be within their target range 6 or 7 out of every 10 tests, even once they have “stabilised” on warfarin. A tight INR range is one where the difference between the top of the range and the bottom of the range is only 0.5 INR units (eg. 2.0 – 2.5 or 2.5 – 3.0) rather than 1.0 INR units. The tighter/narrower the range, the harder it can be to stay stable. Less stable patients are likely to have more frequent tests. If this is a problem we will discuss it with your doctor or you can contact them directly.

Changes to your target range can only be accepted in writing from your treating doctor.

Warfarin doses

Warfarin tablets come in limited sizes. One size does not fit all. As a result our doctors will use a combination of doses to help settle your INR into a stable range. This may mean splitting tablets and/or dividing the doses over various days of the week. Never divide any tablet apart from the 1mg tablets as inaccuracy may affect your INR. For this reason you should always have a script for 1mg tablets.

If you are having trouble with alternating doses or ½mg doses please notify Warfarin Care as this can often be accommodated in other ways.

Testing frequency

Normally there is a settling-in period when you commence warfarin therapy during which time more frequent blood tests, and perhaps changes in your dose, may be required. Eventually, most people will have a stable pattern of testing (weekly, fortnightly, monthly or every six weeks) and a stable dose of warfarin.

Taking your warfarin

Some people prefer to take warfarin in the morning and some at night. You need to establish your own routine for taking warfarin at about the same time every day. It does not matter if this varies by a couple of hours, but warfarin should always be taken in the same part of the day. Try to be consistent with meals as well: take your dose always before, always with or always after your meal. It's your choice, just keep the pattern the same.

If you take warfarin in the evening consider whether you can wait until after 6pm. That way you have more chance of knowing your test result if your dose has to change. If you take warfarin in the morning we will record this on your file so let us know by telling the staff collecting your blood.

Sometimes people will decide that they would like to change from always mornings to always evenings or vice versa. Call Warfarin Care Support on 8347 7020 to find out how to do this.

Warfarin brands

There are two different brands of warfarin available in Australia – Coumadin® and Marevan®. **These tablets are NOT the same.** Although they both perform exactly the same function, they are formulated differently and should not be interchanged. The information in this guide applies to both brands.

You should remain on the same warfarin brand unless you are requested to change by your doctor. Check you are still on the same brand each time you have your prescription filled or when you are discharged from hospital with medications.

If you change brands please contact Warfarin Care Support as you will require an earlier test.

Different formulations of warfarin are provided in some countries overseas. These may not be equivalent to Australian formulations and should not be randomly interchanged with Coumadin or Marevan. Our system does not support dosing for other forms of anti-coagulant drugs (blood thinners) apart from Coumadin or Marevan. You will need to change to one of these two brands to become part of the Warfarin Care program.

Patients requiring therapy with Dindevan need to be managed by their own doctor.

Warfarin strengths

Warfarin tablets come in different strengths (mg) as shown below. The different strengths have different colours with their strength embossed into them so that they can be easily distinguished from each other.

The tablets are scored (have a line down the middle), and can be split in half with a pill cutter if you are prescribed a half mg dose. We advise that you never cut any tablet except the 1mg tablets in half, to ensure you are taking an accurate dose.

To avoid making a dose error, make sure you are taking the correct tablet by checking both the colour and the strength.

MAREVAN



BROWN 1mg



BLUE 3mg



PINK 5mg

COUMADIN



LIGHT TAN 1mg



LAVENDER 2mg



GREEN 5mg

Warfarin storage

- Keep your warfarin out of the reach of children and pets
- Store your warfarin at room temperature away from extreme cold, heat, light or moisture.

Please note: Some tablets look very similar to warfarin, and some tablets come in containers very similar to Coumadin or Marevan containers.

These tablets may also be prescribed to patients who take warfarin, eg. digoxin (Lanoxin, Sigmamaxin) or perindopril (Coversyl). Despite improvements in packaging, we still continue to see pharmacy dispensing errors where Coversyl is substituted for warfarin and vice versa. If the colour of your tablet changes, the shape of the bottle changes, or your INR is very low without reason or remains very high despite withholding warfarin, please check the product label on the bottle by removing the dispensing label which is the label that contains your name and is stuck on by the pharmacist.

You should also check the tablets inside the bottle and compare them to the picture at the bottom of page 14. Coumadin tablets have “Coumadin” printed on them with the tablet strength number. Marevan tablets have an “M” printed on them with the tablet strength number. Coversyl is marked with the Servier logo, and has a heart symbol on the opposite side (see below).

COUMADIN



GREEN 5mg

COVERSYL



COVERSYL 10mg

Warfarin side-effects

The greatest risk with warfarin is bleeding.

Bleeding can be visible or hidden.

You should report any blood noted when you cough or vomit, blood in your urine or bowel actions, excessive bleeding with your period, increased or spontaneous bruising which occurs without injury, and black, sticky bowel actions which usually indicate blood loss from the stomach. Blood which seeps into a closed space such as your abdomen or your head may cause unexpected pain, confusion or dizziness. Contact your doctor immediately if you have new and unexpected symptoms.

Unusual side-effects of warfarin may include:

- Skin rash
- Purple toes
- Stomach upset
- Fever
- Jaundice
- Change in sense of taste
- Hair loss.

Please see your doctor if you think you may be experiencing a side-effect of warfarin.

Keeping safe on warfarin

Common sense applies:

- Be careful using sharp implements such as knives, tools and scissors
- Consider changing to an electric razor
- Use a soft toothbrush and maintain good dental hygiene to prevent gum disease
- Be gentle when blowing your nose and consider saline nasal sprays to keep your nose lining moist if you are prone to blood noses
- Take care in the garden and wear protective gloves and sturdy shoes
- Contact and extreme sports are not advised while on treatment
- Seek advice promptly if you injure yourself, particularly if you hit your head
- If you cut yourself apply firm constant pressure for at least 10 minutes. If you continue to bleed notify your doctor. You may need to have an INR test
- Wear a medical alert bracelet or medallion.

Frequently asked questions

Can I monitor my own warfarin?

There are commercial hand-held machines which some patients choose to buy to monitor and control their own warfarin. This is not a service available from Melbourne Pathology Warfarin Care and it is not appropriate for all patients. In addition to testing, someone needs to determine the dose and interval of INR testing. If you want to investigate this further, please contact your own local doctor for advice about your suitability.

Why is my dose different to my friend's?

Your warfarin dose will be specific to you because different people require different amounts of warfarin. The same amount of warfarin does not produce the same INR result in all people. It is not important whether your dose is large or small, it only matters what your INR result is.

Why does my INR level keep changing?

Some amount of INR fluctuation within and just outside the target range is expected and acceptable. It is not necessary for the dose to be changed every time the INR fluctuates minimally. Sometimes it is preferred to test earlier but keep the dose the same.

Large fluctuations, continuously low or high results and persistent trends up or down are often due to:

- Non-compliance (not taking the correct dose daily)
- Other prescribed medications
- Non-prescription therapies such as herbs and supplements
- Change in bowel habit or appetite
- Diet and weight loss
- Alcohol intake
- Exercise level
- General ill health (eg. infections, heart, thyroid and liver disease) and stress.

Things you can do to help:

- Keep us informed of all changes – if you are at all concerned don't wait until your next test to tell us
- Consider the use of a daily dosette box or Webster-pak™ to help you remember to take your warfarin and to ensure that you are taking the correct dose each day

- Take your warfarin dose at approximately the same time each day ie. morning or midday or evening
- Take warfarin in the same relationship to meals (always before, always with or always after) if you take it at meal times
- Always comply with the dose instruction provided by Warfarin Care
- Never stop taking warfarin or change the dose unless you have been instructed to do so by Warfarin Care or your doctor
- Never mix brands
- Never take a double dose of warfarin if you have missed a dose; it is better to miss a dose if you have forgotten to take it. If you remember 2 – 3 hours after the time you normally take the tablets, you may still take them
- Never take herbal remedies or supplements without discussion with a healthcare professional, pharmacist and Warfarin Care.

What happens when I have a high INR?

If your test indicates a concerning INR result you will be contacted as a high priority as soon as the result is available. You will be asked not to take any further doses until the doctor has reviewed your case.

To confirm that you are safe and to investigate why your INR is high our Warfarin Care Support staff will ask you:

- to confirm your current dose
- whether you have taken a double dose in error
- the colour of the warfarin tablets you are taking
- if the collector had trouble obtaining your blood today
- if you have vomiting, diarrhoea or are off your food
- if your alcohol intake has changed
- if you are experiencing any bruising or bleeding
- if you have changed your medications.

Management of a high INR varies according to:

- how high the INR is
- how quickly it has become high
- how high your target range is
- whether there is an explanation for the result
- whether you are currently bleeding or at risk of bleeding.

Commonly we will withhold your warfarin and wait for your INR to come down gradually.

If your INR is very high we may recommend Vitamin K treatment to lower the INR more quickly. Vitamin K is commonly given as an injection, but the solution for injection can also be given by mouth unless you have an upset stomach as the cause of the high INR. Most doctors and local pharmacies do not carry Vitamin K, so when it is required you will probably need to attend your local hospital. We will contact your doctor first, if available, or otherwise make direct arrangements with you and your local hospital for treatment.

When you experience a high INR you will need testing at short intervals until the results are acceptable again. If your INR is very high this may mean testing every 1 – 2 days until you are back into a safe range.

What if my INR is low?

Low INR results reduce the protection that warfarin provides against clots. This is most important at the start of treatment for patients with recent clots, heart valve replacement, pacemakers or cardioversion. Patients on prophylaxis (prevention) or more than one month from the start of therapy are at less risk.

Low INRs are expected at the start of therapy, after treatment interruption for procedures, or after Vitamin K reversal of high INRs. Unexpected reasons for low INRs include:

- Missed doses
- Taking less warfarin than prescribed
- Failure to attend the scheduled INR visit after your dose has been reduced
- Addition of certain drugs
- Addition of vitamins or supplemental feeding (eg. Sustagen, Ensure, Proform) and some herbal therapies
- Pharmacy error, such as wrong dose of warfarin or wrong drug dispensed (see p 15 Coversyl).

It takes 48 hours to see a significant change in your INR once you have passed the initial stabilisation phase of warfarin therapy. Your dose may be increased by a little or a lot if you are just starting treatment, slowly and progressively if you are on long term therapy, or not at all if the low INR is explained by one of the reversible points listed above.

What do I do if I take too much?

Notify Warfarin Care immediately with the details of the error, ie. how much you have taken and on what days. Do not take more warfarin until you have notified Warfarin Care Support. Be prepared, you may need an earlier test to check your INR.

What do I do if I miss a dose?

If you miss your dose and remember within 2–3 hours of the usual time that you take your warfarin, then it is OK to take that day's dose. If you remember the next day, NEVER take a catch up dose. Make sure you record any missed doses and tell the collection staff at your next visit.

If missed doses are becoming a habit, you could think about a dosette, Webster-pak™, or support of another person to help you remember. People remember their doses best when it is part of some other daily routine that doesn't change, eg. cleaning your teeth before bed.

Why do I have to test so often?

When you start warfarin it is unknown what your individual maintenance (everyday) dose will be. There will be a “dose finding” period in which you will need to be tested every 1 – 2 days and your dose may change with each test. Once your dose settles down the time between tests will progressively increase, first to twice weekly, then weekly, then fortnightly and so on. If your INR is very stable, eventually you will only be tested every 6 weeks.

Testing will temporarily increase in frequency when your INR is unstable, out of the target range, when you are in hospital or interrupt your warfarin therapy, and when you have changes to your health and medications.

If you are concerned that your tests are too frequent, and not explained by any conditions mentioned above, please ask the collection staff to note this on your questionnaire at your next test, or call the Warfarin Care Department.

Will my other medication affect my warfarin dose?

A very large number of medications prescribed by your doctor, as well as herbal medicines, will interfere with the action of warfarin. Some of these interactions are well known, but others, particularly those with herbal products, are not.

It is best to be cautious and inform your doctor as well as Warfarin Care Support before, or as soon as you start taking new medications.

Medications that have the potential to affect warfarin include:

- antibiotics (for infections)
- anticonvulsants (for fitting, pain or mood control)
- anti-inflammatory medications (for pain and arthritis)
- chemotherapy (for cancer management)
- painkillers (in large doses), including paracetamol and aspirin
- most herbal medicines
- some vitamins.

Warfarin may also be affected by treatment for:

- arthritis
- gout
- high blood cholesterol
- heart rhythm disturbance
- peptic ulcers
- weight loss.

Notify us **immediately** if you are starting or stopping the following medications:

Makes the INR go very high	Also known as
Amiodarone	Aratac, Cardinorm, Cordarone, Rithmik
Rosuvastatin	Crestor
Miconazole	Daktarin, Daktozin, Eulactol, Resolve
Sitaxentan	Thelin

Makes the INR go very low	Also known as
Carbamazepine	Tegretol, Teril
Rifampicin	Rifadin, Rymcin

Keep a written list of your current medications and bring this and your warfarin diary with you to your INR tests. Your doctor can often print your medication list out for you from their records.

Should I stay on my aspirin?

Aspirin and warfarin work to thin the blood in different ways. Blood cells and proteins work together to form a clot. Platelets are normal blood cells that act like putty to plug holes in your blood vessels to slow down bleeding. Aspirin makes platelets less sticky. Warfarin reduces some of the blood proteins that make the mesh that slows down bleeding.

There are some medical conditions and some individual patients who benefit from aspirin and warfarin prescribed together. When you start warfarin make sure the doctor prescribing it knows you are also on aspirin. You should never stop taking prescribed aspirin without the specific direction from your treating doctor.

Do I need any other treatment if my INR is low?

Patients will commonly have a brief period of treatment with blood thinners, such as Clexane (a type of heparin), while their warfarin dose is stabilised initially. In addition, some patients may need to use this medication in addition to warfarin at other times including when the INR is predicted to be low, such as when you stop warfarin for surgery, or when the INR is found to be unexpectedly low due to missed tablets, interacting medications, vitamins or supplements. This is called “bridging therapy”.

Patients with mechanical mitral valves should discuss with their doctor if it is worthwhile to keep a supply of Clexane at home for therapy if required.

Under most circumstances and for most warfarin indications, a brief interruption of warfarin therapy is not considered a problem and requires no extra treatment measures. Some individuals, particularly those with mechanical mitral valves, may warrant extra support. Determining your individual risk, the circumstances in which you might need Clexane and the level of INR that helps decide when to start and stop Clexane is the responsibility of your own doctor or specialist. Ask them if “bridging therapy” would ever be necessary for you, and create a care plan together if you can.

If you are a patient with a mechanical heart valve, we will routinely send you and your doctor a letter reminding you to discuss this care plan when you join our service.

When can I stop my Clexane?

Whether Clexane is required for your condition will be determined by your referring doctor. If it is necessary in addition to warfarin when you first start therapy, or to “bridge” a period of warfarin dose interruption, then you should continue with the injections until your INR has returned to your target range. Confirm this with the doctor who starts the Clexane therapy for you before leaving hospital or your doctor’s surgery. Do not stop just because you have used up all the injections you were initially prescribed. If unsure whether you should be continuing or stopping your Clexane therapy after warfarin is reintroduced, speak to your doctor or to Warfarin Care.

Changing to alternative oral anticoagulants

Pradaxa (dabigatran), Xarelto (rivaroxaban), Eliquis (apixaban) and Savaysa (edoxaban) are new anti-coagulant (blood thinning) medications that have different mechanisms of actions to warfarin, heparin and Clexane. Their benefits include that they can be taken orally and do not need routine monitoring. Their limitations include a short duration of effect, which is a problem if you miss tablets and can mean twice daily dosage, and the lack of a specific antidote to reverse the effects of the drug quickly.

These drugs are available on the Pharmaceutical Benefits Scheme from for certain conditions such as Deep Vein Thrombosis, Pulmonary Embolism and Atrial Fibrillation.

Just like warfarin some people will not tolerate this medication due to other side-effects, such as stomach upset.

Stopping warfarin and starting Pradaxa, Xarelto, Eliquis or Savaysa

Wait until your INR falls below 2.0 to change from warfarin to these treatments. This may take only a couple of days but will be guided by an INR result. No further INR monitoring is required after that time.

Stopping Pradaxa, Xarelto, Eliquis or Savaysa and restarting warfarin

These drugs will cause the INR to increase, particularly if the blood test is taken close to the time the drug was taken. If you are changing back to warfarin, have your test first thing in the morning and delay your morning dose of Pradaxa, Xarelto or Eliquis until your blood test is taken. Once the blood test is taken, take your medication without delay, ie. do not wait for your INR result. Alternatively, take your morning dose of Pradaxa, Xarelto or Eliquis and come for your INR test in the afternoon. There should be at least 6 hours between your dose and your blood test.

What is pre-packed medication and how can it help me?

Pre-packaging of medication is a service offered by some pharmacists, sometimes referred to as a Webster-pak™. The pharmacist will put some or all of your medication into sealed compartments that correspond to your dosing instructions. The purpose of these packs is to help you take the correct medication in the correct amount at the correct time. You will need to discuss this service with your doctor who can arrange with your pharmacy to provide your medications in pre-packed form. There are various types of pre-packaging available including pop, blister, or roll packs.

We support the use of pre-packed medications, however this service works best for patients whose INR tests are at least one week apart and when the pre-packaging is performed within 24 hours of your test. This is because sometimes your dose will be changed and the dose instruction will be different from what has already been packed. This may include the need to withhold a dose of warfarin on occasions. You should discuss with your pharmacist how this can be achieved.

We will routinely fax your results and dose to your pharmacist if you or your doctor notify us that you are receiving pre-packaged medication.

The pharmacy may charge for this service, so please ask about the costs involved.

Should I modify my diet?

No special diet exists or is required for people on warfarin. A well balanced and varied diet is essential for everyone to maintain health.

Try to stabilise your Vitamin K intake, that is, keep your intake of foods with high Vitamin K content relatively constant. Do not remove these foods from your diet, but eat them in moderation.

Foods that are highest in Vitamin K include leafy green vegetables such as spinach, cabbage, broccoli, parsley, coriander, alfalfa, all soy products and green tea. Peas and green beans are not included. In some foods like coriander the Vitamin K content can increase in cooking.

Avoid crash diets and binge eating because your warfarin dose will be adjusted to match your current eating pattern and lifestyle.

There are some situations where dietary changes are unavoidable such as:

- **Illness:** nausea and vomiting will affect your normal food and fluid intake and therefore your INR level, so please notify your doctor and Warfarin Care if these occur. If you are ill we recommend you consult your doctor as well as have an INR test.
- **Hospitalisation:** you may be on a different diet while you are an inpatient.
- **Travel:** you may eat quite a different diet when you are away.
- **Commencing a new diet or eating plan:** a change in diet such as starting a healthier eating plan to lose weight or weight loss meals, including supplements or drinks, may affect your INR. Please consult with your doctor prior to commencing any of the above.

Am I allowed to drink alcohol?

Alcohol should only ever be consumed in moderation whether or not you are on warfarin. For an individual on warfarin, whether you can safely consume alcohol is a decision that must be made in consultation with your doctor. Many patients enjoy intermittent or regular small amounts of alcohol without affecting their care. It is unsafe to binge drink both because of adverse effects to general health AND because it increases the instability of your INR. Excessive alcohol increases the risk of a high INR and bleeding. For this reason we will always ask about alcohol intake if your INR is high.

What happens when I go into hospital?

Warfarin Care will not routinely manage your warfarin therapy while you are in hospital. Warfarin Care will only manage your warfarin dose while you are in hospital at the specific request of your treating doctor and if the tests are performed by Melbourne Pathology.

We will resume managing your warfarin therapy once your treating doctor has consented and you have been discharged from hospital.

We cannot know you have been discharged unless you tell us. At discharge from hospital, you or your carer will need to phone Warfarin Care Support so that we can resume managing your warfarin therapy and arrange your next test date. Because your health and tablets have often changed during your hospital stay, an early test after discharge is essential.

It is not always possible, but is of great assistance, if you keep a record of your warfarin doses in hospital, in the same way that you do when you are at home. When you return to our care we will ask you to sign your questionnaire specifically consenting to us obtaining your doses, INRs and medication changes from the hospital where you were admitted.

What happens if I am pregnant (or planning pregnancy)?

If you are planning to become pregnant, it is critical that you discuss your intention with your referring doctor before ceasing your contraception. Warfarin can cause harm to your baby during pregnancy and delivery. If you become pregnant while on warfarin, please contact your doctor immediately. Warfarin can be taken while breast-feeding.

I have a condition called polycythemia. Is that a problem?

Some patients have illnesses that increase the number of red blood cells, the oxygen carrying component of the blood. These patients have too little plasma, the fluid component of the blood that helps makes the blood clot. This can affect the accuracy of the INR result. When we are notified of this diagnosis by your doctor we will provide special tubes for the collection staff to use for your INR tests.

What do I do if I am bruising or bleeding?

More frequent bruising is common while on warfarin and may be increased by other medications such as aspirin, Clopidogrel (Plavix, Isocover), anti-inflammatory drugs and prednisolone. If you have **extensive** or **spontaneous** bruising (not resulting from trauma) you must contact your doctor, as well as informing us at your next test.

Bleeding is not common in the absence of trauma. Spontaneous bleeding is always a concern and must be reported directly to your doctor. This may be due to a high INR, and an INR test is recommended even if this means testing earlier than was originally directed. You can attend for a test at any of our collection centres during routine opening hours.

Bleeding from the nose is very commonly reported and is almost always due to trauma from excessive blowing, rubbing or picking. This can be reported at your next test. Moistening the nose with saline sprays or other appropriate lubricants can sometimes help.

Why have I received a late letter?

Late letters are automatically generated weekly if you have not attended for your next test within an acceptable time of the due date. These are intended as a reminder of the importance of testing to maintain your health and safety.

If you fail to attend after receiving weekly warnings for 3 weeks, we assume you are no longer choosing to participate in the Warfarin Care program. Both you and your doctor will receive a discharge letter and you will need to contact your own doctor for further dose instructions.

You may receive a late letter in error if you have been on holidays or in hospital and have not notified us of your change of circumstance. Do not ignore these letters but contact us immediately so that we can amend your file.

If you have received a late letter or a discharge letter and you wish to continue in the program, please attend your collection rooms or contact us for a home visit (if eligible) so that we can resume your care.

Can I go to any collection centre?

You must continue to attend a Melbourne Pathology collection centre if we are to remain involved in your warfarin care. It is preferred that you attend the same collection centre each time so that your paperwork is received ahead of your attendance, but you can attend any of our collection centres rather than miss a test if you are closer to another centre on the day. The staff at the collection rooms will call and ask for your paperwork to be faxed.

What if I don't want to pay for Warfarin Care?

You have choice as to your involvement in our program. Alternatives to enrolment include:

- Having your own doctor manage your warfarin control
- Changing to a drug which does not need monitoring (eg. Pradaxa, Xarelto, Eliquis, aspirin, clopidogrel). Your individual medical conditions will dictate whether an alternative drug is appropriate and safe for you.

Please note that PBS funding is only available for these newer drugs in a limited range of conditions.

- Warfarin management through an alternative private pathology provider.

Please discuss these options with your referring doctor without delay so that your care is not compromised. We will continue to take your blood test (INR) and provide your result directly to your doctor until alternative arrangements are made. It will be your doctor's responsibility to guide your dose. We are of course happy to readmit you to our program at any future point in time should you reconsider and wish to return.

Receiving your warfarin results by SMS

Melbourne Pathology patients or their carers can elect to receive warfarin dose instructions and INR test results via SMS. No phone queues, no waiting for a letter, just an SMS.

How do I enrol to receive SMS notification?

If you would like to register for this service please ask for an information brochure from your collector, fill in the attached form and return it to our Warfarin Care Department via mail, by fax or by handing it to a staff member at one of our collection centres. Please allow up to one week for registration. Once you are registered, you will receive a test SMS to your nominated mobile phone number. We can only send SMS notifications to one nominated mobile number. Our SMS notification is purely optional. If you prefer, you can receive your notification via the current contact method of phone call and/or letter depending on your results.

What do I do once I receive my SMS notification?

Once you or your carer receives an SMS notification, you **MUST** reply YES to confirm that you have read and understood the message. You must do this on each and every occasion you receive our instructions by SMS. If you do not respond to the SMS notification within 48 hours, you will either be sent a letter or receive a phone call from Warfarin Care to explain your INR result, dosage instructions and next test date.

If you repeatedly fail to respond to your SMS notifications we may contact you to clarify any problems. If appropriate we will change your designated contact method to either letter or phone call, depending on your results.

Please note you will no longer receive a phone call or a letter with your dose instruction when you are registered for SMS notification unless Warfarin Care deems it necessary.

What if I forget to respond YES?

If you do not respond to your SMS within 48 hours, you will either be sent a letter or receive a phone call from Warfarin Care to explain your dosage and next test date. Our system will also record a “non-response”. If you repeatedly fail to respond to your SMS notifications we will contact you to clarify any problems. If appropriate we will change your designated contact method to either letter or phone call, depending on your results.

What if I don't understand the SMS?

If you do not understand your SMS notification or are unsure about your dose instructions please phone Warfarin Care on 8347 7020 as soon as possible.

Why is it so important for me to reply YES?

Your reply is automatically registered in our system to indicate that the notification has been sent and received successfully. In addition, because of the importance to your health and safety, Melbourne Pathology needs to ensure that you have read and understood your dose instructions and are aware of your next test date. It is important for your health that you take the appropriate dose of warfarin every day, so if you do not understand your dose instructions please contact Warfarin Care immediately.

Please note: there is only automated receipt of the YES message. These responses are acknowledged by a computer, not a person. Please do not attempt to send any other information to the Warfarin Care Department by return text.

What if I don't receive an SMS on the day of my test?

Following your test, please make sure your phone is charged and on so that you can receive your notification. Receiving an SMS (either from us to you or return SMS from you to us) is reliant on an independent SMS distributor, your mobile service provider and the service coverage for the nominated mobile phone. If there is insufficient mobile service coverage there may be a delay or even a failure to receive your SMS. Melbourne Pathology aims to provide your result and dose within 24 hours of your test. If you do not receive an SMS within this period, please take your currently prescribed dose and phone Warfarin Care on 8347 7020 if more than 24 hours has passed without notification.

What happens if my result is abnormal or too high?

If your result is concerning to our doctors and poses a risk to your health you may receive a phone call from Warfarin Care staff in addition to your SMS notification if you haven't already responded to your SMS.

What if my nominated mobile phone number changes?

It is your responsibility to contact Warfarin Care on 8347 7020 as soon as you or your carer change the nominated mobile number or any other contact details. If you have any questions about the SMS service please phone Warfarin Care on 8347 7020.

Procedures and surgery

Many patients have a need for procedures from time to time. These may include dental work, removal of skin lesions, gastroscopy/colonoscopy, cataract surgery, replacement of pacemakers and other major surgery.

It is your responsibility to alert any doctor you visit for treatment that you are taking warfarin. You may also wish to wear or carry some form of medical alert bracelet or medallion, stating you are taking warfarin.

You must inform Warfarin Care as soon as possible if you have a booked procedure so that we can communicate it to our Warfarin Care doctors.

Each person needs to be assessed individually for the risks of stopping or reducing the dose of warfarin for these procedures. This can only be done by your managing doctors. Discuss whether your warfarin needs to change around the time of a procedure with your doctor or the specialist who started your warfarin (eg. cardiologist or haematologist). Don't leave it to chance or to one or two days prior to the procedure.

Most people without complex heart conditions or recent clots can safely interrupt warfarin for short periods. Some people, particularly those with mechanical heart valves, may need to make special arrangements. We are happy to consult with and guide your referring doctors but we cannot change your care without their consent.

Warfarin patients who are booked for dermatological or dental surgery do not need to fear serious bleeding after the procedure. Multiple studies have shown that the risk is not increased in warfarin patients who undergo skin excisions or dental procedures.

Sometimes your target range has to be changed to accommodate planned procedures. Warfarin Care is unable to manage patients who require a non-standard target range or a specific target range before surgery. During this period, you will need to consult your treating doctor for your dose instructions.

Temporarily stopping warfarin

If your doctor directs you to temporarily stop warfarin, there are two possible reports that will be sent to you and your doctor by Melbourne Pathology:

1. If you have already stopped when you come for your test, and your INR is coming down or already low, we will issue the report "Temporary dose interruption. Please follow referring doctor's instructions."
2. If you are due to stop your warfarin between this test and your next scheduled visit, you will be issued with a dose and next test date which reflects your current INR. Continue to follow your doctor's advice and cease warfarin when they indicate you should.

If you stop taking your warfarin, please notify your local collection centre if you are not going to attend your scheduled visit.

We will resume managing your warfarin therapy once your treating doctor has instructed you to return to the program.

It is your responsibility to phone Warfarin Care Support to recommence management of your warfarin therapy and arrange your next test date. DO NOT WAIT for us to contact you. We do not know when you are discharged or your period of care has finished. We rely on you and your doctor to inform us when you are ready to return to our care.

Herbal products and warfarin

Patients often ask us about herbal medicines, vitamins and dietary supplements, and we recognise that many patients seek out these products with a view to optimising their health. Unfortunately, it is very difficult to predict interactions between warfarin and these products, as there is often a lack of information about many herbal products. You should also bear in mind that “natural” does not necessarily mean “safe”.

We recommend that you seek advice from your doctor or pharmacist and/or thoroughly research the herbal products yourself.

If you wish to use herbal products, choose products from local, reputable companies whose products list the following information on the package:

- the herb’s common and scientific names
- name and address of the manufacturer
- batch and lot number
- expiry date
- dosing guidelines
- potential side-effects and interactions
- details of how quality is assured.

Avoid products containing more than one herb, and look for products with a specified amount of active ingredient. Such products are generally more reliable, effective and economical and may not have such a variable effect on your warfarin control.

As a precaution, you should have an INR test 3 to 5 days after commencing any herbal medicines, vitamins or dietary supplements. Side-effects may take 2 – 4 weeks to become apparent, so it is important to keep us and your doctor informed of any changes.

Many of the following products have an effect similar to aspirin and can cause bruising and bleeding. You should avoid:

- *Ginkgo biloba*
- garlic supplements
- danshen (*Salvia miltiorrhiza*)
- Echinacea purpurea
- ginger supplements
- ginseng (*Panax spp*)
- St John's wort
- kava kava
- feverfew
- devil's claw (*Harpagophytum procumbens*)
- papaya supplements
- celery seed oil
- quinine/cinchona.

Some herbs contain warfarin-like substances and may interact with warfarin. For this reason you should avoid:

- chamomile
- dong quai (*Angelica sinensis*)
- fenugreek
- horse chestnut
- red clover
- sweet clover
- sweet woodruff.

Soy and soy-based products, green tea and herbal teas made with tonka beans may affect your warfarin levels because of their high Vitamin K content.

Coenzyme Q10 is structurally similar to Vitamin K and has been reported to interfere with warfarin activity (reducing the INR in some patients).

Bromelain should be avoided as it may increase the activity of warfarin.

Iron, magnesium and zinc may bind warfarin and decrease its absorption.

We suggest you take warfarin and products containing iron, magnesium or zinc at least two hours apart.

Travel and testing:

Information for warfarin patients on holiday

If you have recently advised us of your intention to travel, we recommend you take the following with you:

- A copy of your dose history
- A referral to cover any testing that you may require

Both of these can be provided to you by our Warfarin Care Administration, if given sufficient notice, and can be either sent to your address by regular mail, emailed if you have provided your email details in advance, or faxed.

If you are travelling within Victoria, interstate or overseas and are not attending a Melbourne Pathology collection centre, Warfarin Care can still provide you with your dose instructions, however you will be charged a non-refundable administration fee of \$25 per test. This fee is still applicable if your INR is done through another Sonic Healthcare laboratory.

If you would like Melbourne Pathology to provide a warfarin dose:

- On the day your test is performed, please email warfarincare@mps.com.au or call the Warfarin Care Department on (03) 8347 7020 or 1300 550 804 (toll free) to let us know when and where the test was taken.
- When you make contact with Warfarin Care, you will be asked the same questions you are asked at your regular attendance about your dose, general health and medications.
- Once the hard copy of the INR result is received from the pathology company you attended, your result will be sent to our dosing doctors who will determine your updated warfarin dose and next test date.
- Call Warfarin Care again the day after your test to receive your dose instruction. If you are registered to receive your test results by SMS or have requested an email response, you will receive a text message or email with the instruction.

If you intend to correspond with Melbourne Pathology by email only, email the Warfarin Care Department at warfarincare@mps.com.au before you leave for further information.

If you choose not to be managed by the Melbourne Pathology Warfarin Care Department while you are travelling, you will need to make alternative arrangements with your own doctor or a doctor at your destination.

It is still important that you notify us of the duration of your impending absence to prevent us sending late letters or automatic discharge from the program due to unexplained non-attendance. Even if we are not providing your dose for you, we still recommend you carry the dose history letter and printed referral as a reference.

For any queries, please contact Melbourne Pathology Warfarin Care

Phone (03) 8347 7020

Fax (03) 9287 7898

General advice about testing overseas

We advise you to consult your own doctor before departure to discuss managing your warfarin therapy while you are away.

The following is general advice about testing overseas and as stated above, you should always consult your doctor prior to your departure and follow their instructions.

International travel will inevitably cause changes to your diet, activity level and your 'waking and sleeping' cycle. Most international travel from Australia involves significant changes in time zones. After arriving at your destination it may take a few days to settle into the new time zone, meals and the new pattern of daily life.

We advise you to continue to take your warfarin at your usual time. That is, if you take your warfarin at 6pm at home then continue to do this at your destination according to the local time. DO NOT attempt to keep taking your dose on Australian time, as this can lead to confusion and missed doses.

For general safety Warfarin Care recommends you test during the first week unless your doctor advises you otherwise.

Our holiday letter will provide you with your recent INR results and doses. Keep this letter with you as it can be helpful if you have tests at your destination.

You should also carry a letter from your GP outlining your clinical history, current medical problems and all your current medications. Show this letter to any health professional you consult while you are away.

Immunisations and Malaria prophylaxis

If injections or malarial prevention are required for your destination country, please discuss with your doctor any potential interactions these may have with your warfarin in advance.

Costs

Some overseas countries have a reciprocal arrangement with the Australian Government allowing Australian citizens access to free medical care while visiting that country.

Check with Medicare prior to your departure to find out if this applies to your destination.

You should enquire about what costs are involved when arranging appointments and requesting testing.

Testing in Canada and the United States of America can be very expensive.

General guidelines for overseas travellers:

- Test within 3 – 5 days if you commence antibiotics
- Keep your medication with you at all times – DO NOT put your medications in your checked luggage.

Test within a week if:

- you change time zones
- you change your dose
- new medications are started
- you change from Australian manufactured warfarin to an overseas brand.

On your arrival home:

- notify Warfarin Care Support of your return
- inform us of your recent INR results and doses
- arrange your next test date with us, usually within the first week.

Patient self-assessment questionnaire

The purpose of this questionnaire is to assess how much you know about warfarin, now that you have read the information enclosed in this booklet.

Please tick the correct answer(s). *There may be more than one correct answer.*

Question 1

Warfarin is monitored by:

- a) a urine test
- b) a blood test
- c) no monitoring is required

Question 2

Warfarin acts against:

- a) Vitamin D
- b) Vitamin C
- c) Vitamin K

Question 3

You should take your warfarin:

- a) at any time
- b) at approximately the same time every day
- c) only when you feel like it

Question 4

You should tell us, as well as your doctor, when you experience:

- a) unexplained bruising, nose bleeds and bleeding gums
- b) unusual hunger or thirst
- c) blood in your urine
- d) blood in your bowel motions
- e) diarrhoea and/or vomiting
- f) changes to your medication

Question 5

Large amounts of Vitamin K are found in:

- a) potatoes, tomatoes, rice
- b) leafy green vegetables
- c) raw cabbage, broccoli, green tea
- d) chicken, fish, red meat

Question 6

If you forget to take a dose of warfarin, you should:

- a) take a catch up dose
- b) miss it, but tell us at your next test

Answer True or False to the following questions:

Question 7

An increase in your alcohol intake can be dangerous while you are on warfarin.

☐ True ☐ False

Question 8

While on warfarin, it's OK to take aspirin or other anti-inflammatory drugs without consent from your doctor.

☐ True ☐ False

Question 9

It is not necessary to alert allied health professionals in a hospital emergency ward that you are taking warfarin.

☐ True ☐ False

Question 10

Women should not attempt to get pregnant while on warfarin.

☐ True ☐ False

If you got any of these answers incorrect it may indicate you need to be provided with more education about warfarin for your continued safe care. Further education can be provided by your own doctor, our Warfarin Care Support staff or our Warfarin Care doctors.

Answers to the patient self-assessment questionnaire:

Q1: b; **Q2:** c; **Q3:** b; **Q4:** a, c, d, e, f; **Q5:** b, c; **Q6:** b; **Q7:** True; **Q8:** False; **Q9:** False; **Q10:** True.

Websites of interest

Melbourne Pathology www.mps.com.au

www.anticoagulation.com.au

The information on this web page has been collated and written by members of the UMORE research group's anticoagulation team, assisted by funding from the Australian Government Department of Health and Ageing as part of the Fourth Community Pharmacy Agreement Grants Program, managed by the Pharmacy Guild of Australia.

The Australian Medical Journal www.mja.com.au

Use full text search on keyword 'warfarin' to find:

Warfarin reversal: Consensus guidelines on behalf of the Australasian Society of Thrombosis and Haemostasis

Anticoagulation Forum www.acforum.org

A useful website for patients travelling overseas in the USA or Canada; it lists the locations of testing clinics.

NPS Medicineservice www.nps.org.au (Anticoagulant Medicines)

Full web address:

www.nps.org.au/heart-blood-and-blood-vessels/anti-clotting-medicines/for-individuals/anticoagulant-medicines

[illegible]

Warfarin Care Support

For all enquiries regarding the management of your warfarin therapy, contact Warfarin Care Support on:

(03) 8347 7020

Warfarin Care Support Fax Number:

(03) 9287 7898

Warfarin Care Support office hours are:

Monday to Friday 9am – 8pm

Saturday 11am – 7pm

(Closed Sundays and public holidays)

For your dose instructions contact the Results Department on:

(03) 8347 7010 or **1300 550 804** if calling from outside of Melbourne

Results Department office hours are:

Monday to Saturday 8am – 10pm

Head Office and Central Laboratory

Melbourne Pathology
103 Victoria Parade
Collingwood Victoria 3066

Enquiries	9287 7700
Results	8347 7010
Helpdesk	9287 7799
Warfarin Care phone	8347 7020
Warfarin Care fax	9287 7898
www.mps.com.au	

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