



# CHANGING THE TIME OF WARFARIN ADMINISTRATION

## BACKGROUND

Warfarin is a commonly prescribed high-risk medicine that has the potential to result in significant side effects if prescription and administration are not carefully controlled.

In December 2016, a change was made to bring-forward the time of warfarin administration for patients in our hospitals to 2pm from the previous admin time of 6pm.

The reason for this change is that many doses are often prescribed late in the evening (or are missed entirely) by the on-call team instead of by the day team – the patient's usual doctors.

A baseline 13-day audit found that only 47% of patients were given warfarin before or within an hour of the planned administration time (6pm) and 14% of patients on warfarin did not have their dose prescribed by their day teams; increasing the risk of missed doses.

## THE THEORY OF CHANGE

The team behind the project established that 2pm dosing is safer for patients as warfarin is due during normal working day hours and patients are more likely to receive their dose on time.

Furthermore, day-time dosing ensures that warfarin is prescribed by the doctors who know the patient's history, usual dose and most recent INR.

## AIMS

1 - To reduce the proportion of 'out-of-hours' warfarin prescriptions through the implementation of 2pm dosing.

2 - To improve the number of inpatients receiving warfarin at the same time each day during their hospital stay.

## THE TEAM

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## MEASURES

The anticipated improvements from the planned changes included:

- Reducing the number of 'out-of-hours' warfarin prescriptions
- Reduced instances of patients requiring INR to be sent before prescribing warfarin
- Reducing the number of requests (bleeps) to prescribe warfarin made to the FY1 on-call at night

## OUTCOMES

The re-measures carried out following the change showed a significant reduction in the proportion of 'out-of-hours' warfarin prescriptions.

More patients received their warfarin dose at least before 4pm (the start of the evening on-call shift).

Patients are less likely to suffer harm from an erratic INR and more likely to experience a constant level of anticoagulation.

	Baseline	Re-Audit
Total number of 'out-of-hours' warfarin prescriptions	32	21
Patients requiring INR to be sent before prescribing warfarin (%)	19	9

