



**Royal
Pharmaceutical
Society**
of Great Britain

***PRINCIPLES OF SAFE AND APPROPRIATE
PRODUCTION OF MEDICINE
ADMINISTRATION CHARTS***

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Principles of safe and appropriate production of Medicine Administration Charts

The pharmacist will use their professional judgement to ensure the Medicine Administration Record (MAR) chart produced is safe, accurate, current and fit for purpose and meets all regulatory requirements for the particular country in which they are working

In relation to production of a MAR chart this means:

- The pharmacy should have a Standard Operating Procedure (SOP) in place for the production of MAR charts which ensures:
 1. The MAR chart is individual to the person and reflects the items which are still being currently prescribed and administered
 2. The MAR chart is clear, indelible, permanent and contains product name, strength, dose frequency, quantity, and any additional information required.
 3. The MAR chart incorporates a method to ensure that any changes made after production are evident. (dated, signed and indicates who has made the change)

Pharmacists involved in the production of MAR charts are reminded of the principles of the 'Code of Ethics for Pharmacists and Pharmacy Technicians' and 'Professional Standards and Guidance Documents' that supplement the Code of Ethics (available at www.rpsgb.org.uk/protectingthepublic/ethics). Particular attention should be paid to standard one 'Make the care of patients your first concern' and standard seven 'Take responsibility for your working practices'.

Purpose of the MAR chart:

MAR charts are the formal record of administration of medicine within the care setting and may be required to be used as evidence in clinical investigations and court cases. It is therefore important that they are clear, accurate and up to date.

Pharmacists should be aware that once a care service starts to fill in details on a MAR chart the record becomes a confidential administration record which should only be shared with others (including the pharmacist) with the patient, or their representative's, permission.

Good practice principles

At all times, pharmacists should use their professional judgement and balance risk and benefit to the individual person they are supplying the MAR chart for.

Pharmacists should always act in the best interests of patient safety in accordance with their Code of Ethics. Pharmacists should be prepared to support and justify (on the basis of patient safety) any decision they make which does not fall within the scope of published best practice guidance.

Most MAR charts include the name and address of the supplying pharmacy. When a pharmacy offers provision of MAR charts to care services they should ensure that the care service is supplied with clear instructions as to the way these documents are designed to be used to record medication. This is of particular relevance when a pharmacy changes the design of the MAR chart or when a care service moves to a new pharmacy supplier

Principle 1:

The MAR chart is constructed on the basis of the current prescription together with information about repeat prescriptions for PRN medicines. Changes to MAR charts should only be made after communication from or with the prescriber.

This is dependent on the care setting operating a robust repeat prescribing / ordering procedure, which is compatible with pharmacy procedures. The care setting's procedures should allow enough time for ordering and delivery of medicines, especially if ordering Controlled Drugs (CDs) as these may take longer. This should also include enough time to produce the MAR chart based on the current prescription rather than previous history or Patient Medication Record (PMR).

Changes are not made solely on the basis of information provided by the patient or a representative / carer of the patient (including the staff members of a care home).

Principle 2:

The MAR chart should include all prescribed externally applied medicines

Important details are how much to apply and when to apply. The MAR chart should include all external medicines that are still being applied by a carer, whether prescribed that month or not .

Principle 3:

When a medicine is prescribed for as required (PRN) administration or as directed (UD) clarity is sought from the prescriber for clear directions and these directions are added to the chart

As much information as possible should be included about the dose, frequency of administration and indicators for use.

Principle 4:

The pharmacy and care service should have robust systems in place to ensure timely removal from the MAR chart of items no longer prescribed or administered.

This is of particular relevance to topicals, surgical sundries, dressings, SIP feeds and acute prescriptions.

Principle 5:

When a medicine is included in a MAR chart as two or more differing strengths for administration at differing times of the day, these should be placed next to each other on the same MAR chart.

This will help to minimise errors at the point of administration.

Principle 6:

When medicine formulations are changed, for example from a tablet to a liquid version, the pharmacist should ensure that the original item is removed from all future MAR charts for that person.

Errors in care homes have occurred when discontinued medicines were included in a MAR chart and the service had not disposed of the medicine previously supplied.

Principle 7:

Care should be taken to ensure that MAR charts contain clear instructions for medicines that when taken in combination can cause patient harm.

This is particularly relevant for products containing paracetamol.

Principle 8:

When a new prescription is issued mid-cycle for a long term medicine, ideally a new chart will be produced and the product included in subsequent MAR charts when the next cycle commences.

Care is needed when the new prescription is a change of dose or frequency of dose of a medicine already dispensed. There must be liaison with the care service to ensure that the directions on the in-use MAR chart are cancelled.

Principle 9:

When a new prescription is issued mid-cycle for an acute medicine a new MAR chart is produced that will cover the entire treatment period.

Stop dates should be clearly stated where appropriate

Principle 10:

Where a pharmacy produces a MAR chart which contains 'codes' to explain why a medicine is not administered, they should ensure that care workers are informed of the purpose and meaning of each code.

The code 'offered PRN, not required' when a person does not have the capacity to express whether or not they want a medicine is not appropriate

Principle 11:

MAR charts should provide the facility for care workers to record additional notes and exceptions.

This is usually on the reverse of the recording sheet.

Principle 12:

The pharmacist should use their professional judgement and liaise with the care service to include the appropriate times of administration for each medicine on the MAR chart.

It may be helpful to consider the use of 'breakfast, lunch, tea-time and bedtime' rather than specific times such as 08:00, 12:00. For care services that operate a 'drug round' approach, the time may only indicate when the round commenced and will not realistically indicate when the person received their medicines.

Particular care is needed to ensure that instructions are clear for medicines such as antibiotics, analgesics, anti-parkinson drugs etc so that they are given at regular intervals throughout the day; and for medicines that must be given at a specific time before or after food.

Electronic documentation

Care settings and pharmacies can make use of new technologies to replace paper MAR chart documentation with electronic systems to record medication administration. Any such system employed in the care setting or in the pharmacy needs to ensure that the process for medication administration follows the methodology of the six "R's":

- Right patient
- Right drug
- Right dose
- Right formulation
- Right route
- Right to refuse

The system employed also needs to ensure that the principles of MAR charts as outlined above, are embedded into the software as appropriate.

Care setting staff should be able to add medication to the electronic MAR chart if emergency medication is provided by a prescriber or supplied from a pharmacy that does not use electronic MAR charts. This manual entry would need to be highlighted and extra care taken when such medicines are actually administered to the patient.

Any changes to recorded activity or amendments to recorded data needs to be auditable and allow an auditor to identify who changed the data, when the data was changed and what the data change was.

Electronic systems must ensure that in the event of a failure of the system a back up method for recording medicine administration exists. Any electronic system needs to fully comply with relevant legislation including the Data Protection Act.