
Introduction to Medicines Management

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INTRODUCTION

The term 'medicines management' has become increasingly popular over the last 10 years, but what exactly does it mean? The NHS National Prescribing Centre (NPC) provides the following definition:

A system of processes and behaviours that determines how medicines are used by patients and by the NHS.

(NPC, 2001, p. 5)

This encompasses all activities necessary to select, purchase, deliver, prescribe, administer, store and review medication (Audit Commission, 2001). Pharmacies have provided specific components of medicines management services for many years. However, the responsibility for medicines management services is not only held by pharmacists but also shared with other health-care professionals and the patients themselves.

So it is true to say that medicines management is not a new concept but an evolving concept, emphasising patient-focused care and services that help deliver that care.

LEARNING OUTCOMES

At the end of this chapter, the reader will be able to:

- Discuss the importance of medicines management.
- Discuss the context of medicines management in the UK.
- List the elements of medicines management.
- Outline medicines management and health service governance procedures.
- Discuss the impact of medicines management on patient safety.

- ❑ List the success factors for improving medicines management.

IMPORTANCE OF MEDICINES MANAGEMENT

Medication is by far the most common form of medical intervention, and at least 20% of Primary Care Trust (PCT) funds are spent in this area (NPC, 2001). Most patients are given medication on discharge from hospital, and up to 40% of nurses' time is spent administering medications (Audit Commission, 2001). Four out of five people over 75 years take a prescription medicine, and 36% are taking four or more [Department of Health (DH), 2001].

The prime driver for medicines management is to enhance the overall standard of patient care and to ensure safe and effective use of medicines. Obviously, this is very good news for the patient, but additional improved treatment outcomes can have a knock-on effect in other areas of the health service. The English National Service Framework (NSF) for older people states that medicines are implicated in 5–17% of hospital admissions in this patient group, and whilst in hospital 6–17% of older people experience adverse reactions to medicines (DH, 2001). More recently, a review of patients readmitted to hospital in this age group identified that 38% of readmissions were related to medications (Witherington *et al.*, 2008). Many of these incidents could be avoided if better medicines management systems were in place.

Evidence on medicine taking indicates that 50% of people with chronic conditions may not be taking medicines as intended (DH, 2001). This includes essential medicines for life-threatening conditions such as anti-hypertensive treatment for high blood pressures and anti-rejection treatment post organ transplantation.

Medicines management is also essential to control the NHS drugs bill. New drugs and formulations, changes in demographics and government policies, along with increased patient expectations have caused the drugs bill to rise year on year. If medicines are managed properly, for instance through rational prescribing and effective waste control measures, the NHS can save money, which can then be used more effectively on other treatments. Integrated processes for medicines management also

enable local policies to be developed for the introduction of high-cost drugs, for which there is no National Institute for Clinical Excellence (NICE) guidance. The ongoing cost implications of these medications have an impact across health services, hence policies need to be developed in consultation with a range of stakeholders.

A DH review of adverse events (*An Organisation with a Memory*) identified that around 10 000 NHS hospital patients a year experience adverse effects related to medicines and 20% of all clinical negligence litigation relates to hospital medication errors (DH, 2000). The Audit Commission (2001) identified that medication errors cost the NHS £500m each year and, more importantly, medication errors are responsible for about 20% of the deaths that are due to adverse events in hospital.

THE CONTEXT OF MEDICINES MANAGEMENT IN THE UK

National context

The modernisation programme for the NHS includes an important agenda to improve medicines management. There are a number of key documents (Appendix 1.1) that embrace medicines management and provide broad objectives to improve the use of medicines within the NHS.

The services provided by the NHS are changing to meet national expectations and the expectations of service users and carers. Changes in medicines management is a key part of this process.

Medicines management makes a significant contribution to the Care Quality Commission Annual Health Check and Standards for Better Health (for more information, see www.cqc.org.uk/publications.cfm?fde_id=679, accessed 4 November 2009). It features in several domains but largely within the safety domain to 'keep patients, staff and visitors safe by having systems to ensure that medicines are handled safely and securely'.

Standards for medicines management are also included in the primary care Quality Outcomes Framework (QOF) and form part of the General Medical Services contract (www.bma.org.uk/employmentandcontracts/independent_contractors/quality_outcomes_framework/focusQOF0308.jsp, accessed 22 June 2009).

Indicator points for medicines management, against which funding is provided to GP practices, include the following:

- The practice possesses the equipment and in-date emergency drugs to treat anaphylaxis.
- There is a system for checking the expiry dates of emergency drugs on at least an annual basis.
- The number of hours from requesting a prescription to availability for collection by the patient is 72 hours or less (excluding weekends and bank/local holidays).
- A medication review is recorded in the notes in the preceding 15 months for all patients being prescribed four or more repeat medicines.

National initiatives have been translated into specific benchmarks in many areas, see, for example, the benchmarking policy for medicines management at Eastern and Coastal Kent PCT at www.eastkentcoastalpct.nhs.uk/search/?q=medicines+management+benchmarking+policy).

Local context

The current focus for medicines management within an NHS Trust is the Drug and Therapeutics Committee. This committee meets every month and is chaired by a consultant biochemist who works closely with the Director of Pharmacy to plan the agenda. The committee is accountable to the Clinical Governance Committee and via the Medical Director to the Trust Board. Information and decisions from the committee are communicated via the Medicines Information Bulletin and EnLine.

A Medication Safety Group, made up of doctors, pharmacists and nurses from across the Trust, examines clinical incidents involving medication and makes recommendations to reduce the frequency of these incidents.

The Chief Pharmacist sits on the Clinical Effectiveness Subgroup to ensure that medicines-related aspects of NICE guidance are implemented and on the Executive Board to ensure that medicines and their use are accounted for when Trust-wide decisions are made. The Chief Pharmacist and Chair of the Drug and Therapeutics Committee also represent the Trust on a Countywide Prescribing Group with a wider health community role.

ELEMENTS OF MEDICINES MANAGEMENT

Medicines management includes the selection, procurement, delivery, prescription, dispensing and administration of medicines. The NPC (2008) has developed a flowchart to illustrate how these processes intersect (see Figure 1.1).

Selection and procurement

Decisions about which drugs will be available for clinicians to prescribe and where the drugs will be purchased are taken at Trust level. The medicines management pathway (Figure 1.1) is one tool that is used by commissioners of health services to assess the prescribing and medicines implications of a new clinical pathway (for example, an NSF or a new pathway for managing a particular disease). The potential impact of raising public health awareness (for example, sexual health and smoking cessation campaigns) on prescribing practices is also considered as part of an integrated medicines management system.

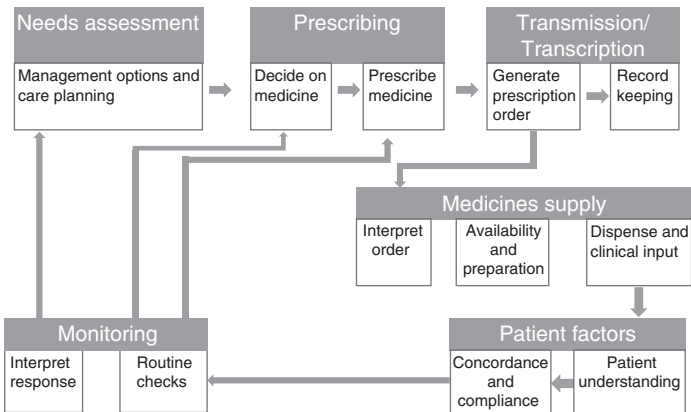


Fig 1.1 Medicines management pathway. From 'Moving towards personalising medicines management: improving outcomes for people through the safe and effective use of medicines' (April 2008). Copyright National Prescribing Centre, reproduced by permission.

Handling

Medicines must be stored according to specific instructions; details for all medications can be found in the electronic Medicines Compendium (see www.emc.medicines.org.uk), including summaries of product characteristics (SPCs) and patient information leaflets. SPCs are written and updated by pharmaceutical companies, in accordance with a mandatory proforma, and are approved by the UK or European medicines licensing agency.

Prescription

Regular review of prescribing practices is recommended as good practice and is rewarded as part of the QOF funding for patients receiving repeat prescriptions. To take an example from mental health, such a repeat prescribing review would include the following questions in discussion with the service user:

- Are the medicines making a positive difference? Is the service user feeling better?
- What side effects are being experienced?
- What are the options for addressing these?
- What healthy living options, such as diet, physical activity, alcohol reduction and smoking cessation, might be appropriate?
- Is the service user having problems remembering to take the medication? If so, what 'concordance' support can be arranged, such as the use of monitored dosage systems in the form of blister packs, medication reminder charts or tablet boxes showing days of the week and times of day?

(NIHME National Workforce Programme, 2008)

Administration

An integrated approach to medicines management provides greater opportunity to identify and manage problems related to medication administration. For example, regular review of drug incidents highlights particular ward environments or times of day when medication administration is more problematic. The development of integrated electronic systems for medication management, including medication administration, is discussed in Chapter 5.

MEDICINES MANAGEMENT AND HEALTH SERVICE GOVERNANCE PROCEDURES

The growing complexity and cost of medicines have led to the recognition that medicines management is a crucial aspect of clinical and financial governance in NHS Trusts, as highlighted in the following documents:

- *Clinical Negligence Scheme for Trusts (CNST)* (NHS Litigation Authority, 2005): Two standards relate directly to medicines management and encompass a variety of areas.
- *Building a Safer NHS for Patients – Improving Medication Safety* (DH, 2004): Medicines management systems are highlighted as the most important facility in assuring patient safety in relation to medicines. The report emphasises the controls necessary to reduce errors in prescribing, dispensing and administering medicines.
- *A Spoonful of Sugar* (Audit Commission, 2001): This report describes medicines management as ‘a strategic issue fundamental to the way hospitals work, to the quality of patient care and to the delivery of the NHS Plan’. The central role of pharmacists is recognised, and Trust boards are asked to ensure adequate investment in pharmacy services.
- *An Organisation with a Memory* (DH, 2000): This document emphasises the role of medicines management in reducing risks related to the use of medicines.

THE IMPACT OF MEDICINES MANAGEMENT ON PATIENT SAFETY

As previously identified, medication errors are an important factor in adverse events in health care. There is evidence that this trend is rising (Audit Commission, 2001; NPSA, 2007), with ‘severe harm’ from medication reported in research studies reaching as high as 9% of hospital inpatients (NPSA, 2007, p12). It is acknowledged that reported medication incidents are the tip of the iceberg; however, in the 18 months between January 2005 and June 2006, just under 60000 medication incidents were reported to the National Patient Safety Agency, mostly occurring in hospital (NPSA, 2007).

A number of factors have been identified that may contribute to the extent of medication incidents and errors; these are discussed in Chapter 7, along with strategies to reduce medication error.

KEY SUCCESS FACTORS FOR IMPROVING MEDICINES MANAGEMENT

The NPC has identified 10 key success factors for improving medicines management (NIMHE National Workforce Programme, 2008):

1. Involving and listening to patient and carers.
2. Clear leadership.
3. Multidisciplinary approach.
4. Medicines management objectives aligned to organisational priorities.
5. Local medicines management leader.
6. Effective communication.
7. Medicines management champions.
8. Focus on measuring outcomes, not activity.
9. Protected time.
10. Shared learning and networking.

The emphasis in these success factors is firmly on communication between patients, clinicians, pharmacists and Trust boards.

CONCLUSION

This chapter has provided an introduction to medicines management. The importance of medicines management, together with its context in the UK, has been discussed. The elements of medicines management have been listed. Medicines management and health service governance procedures have been outlined, together with their impact on patient safety. Success factors for improving medicines management have been listed.

APPENDIX 1.1 RELEVANT NATIONAL STRATEGIES AND DOCUMENTS

Department of Health (2000) The NHS Plan

Department of Health (2000) Pharmacy in the Future – Implementing the NHS Plan

- Department of Health (2000) *An Organisation with a Memory – Report of an expert group on learning from adverse events (including the formation of the NPSA)*
- Audit Commission (2001) *'A Spoonful of Sugar'*
- Department of Health (2001) *National Service Framework for Older People*. The Stationery Office, London
- Department of Health (2003) *Medicines Management Framework in NHS Hospitals*. DH, London
- Department of Health (2003) *A Vision for Pharmacy in the New NHS*. DH, London
- Department of Health (2004) *Building a Safer NHS for Patients – Improving Medication Safety*. DH, London
- Department of Health (2004i) *National Standards, Local Action: Health and social care standards and planning framework 2005/06–2007/08*. DH, London
- Department of Health and Department for Education and Skills (2004) *National Service Framework for Children, Young People and Maternity Services*. DH, London
- Healthcare Commission *Assessment for Improvement. The annual health check*
- Measuring What Matters* (2005)

REFERENCES

- Audit Commission (2001) *A Spoonful of Sugar: Medicines Management in NHS Hospitals*. Audit Commission, London.
- Department of Health (DH) (2000) *An Organisation with a Memory: Report of an Expert Group on Learning from Adverse Events in the NHS Chaired by the Chief Medical Officer*. The Stationery Office, London.
- Department of Health (DH) (2001) *Medicines and Older People – Supplement to the National Service Framework for Older People*. The Stationery Office, London.
- Department of Health (DH) (2004) *Building a Safer NHS for Patients – Improving Medication Safety*. DH, London.
- National Patient Safety Agency (NPSA) (2007) *Safety in Doses: Medication Safety Incidents in the NHS*. The fourth report from the Patient Safety Observatory (PSO/4). NPSA, London.
- National Prescribing Centre (NPC) (2001) *Modernising Medicines Management. A Guide to Achieving Benefits for Patients, Professionals and the NHS*. NPC, London.

- National Prescribing Centre (NPC) (2008) Moving towards personalising medicines management: improving outcomes for people through the safe and effective use of medicines. Available at www.npc.co.uk/mm/publications.htm?type=:medicines [accessed on 4 November 2009].
- NHS Litigation Authority (2005) *CNST General Clinical Risk Management Standards*. NHSLA, London.
- NIMHE National Workforce Programme (2008) *Medicines Management: Everybody's Business*. DH, London.
- Witherington EMA, Pirzada OM, Avery AJ (2008) Communication gaps and readmissions to hospital for patients aged 75 years and older: observational study. *Qual Safety Health Care* 17(1): 71–75.