

4. Hospital and community pharmacies

As FIP is the international professional organisation of pharmacists, this paper emphasises the role of the pharmacist in ensuring and increasing patient safety. The main principles to achieve this apply to all pharmacies, in hospitals or in the community. Special attention has to be given to the interfaces of integrated care.

Following the analysis of current safety practices, suggestions for an optimal safety culture in hospital and community pharmacies are discussed. This discussion will also include suitable approaches and techniques, such as the implementation of drug use reviews and the establishment of pharmacies as centres of pharmacovigilance as well as communication with patients.

One of the most error-prone parts of care is when patients are admitted to and discharged from hospital. Often the hospital does not know all the drugs and doses the patient is on, and when the patient goes back into the community their local doctor and pharmacist do not know which drugs the hospital has changed, and why. These errors have a high potential to cause harm because the errors get into the patient's record and are made repeatedly.

It is important that systems are developed on admission to hospital and at discharge which improve patient safety. At admission the pharmacist can check that the prescription is correct. On discharge they can help influence the information that goes to the doctor, the patient, and their pharmacist. Ideally, this information would explain the changes in the patient's regime so that everybody is clear what the patient should be taking.

Therefore, a goal for the Patient Safety Working Group should be to study and provide insights into how patient safety advances can be transferred to the community under a continuity of care and information model.

4.1. Hospital pharmacies

Patient safety practices in hospital settings are perhaps the most studied and reported on of all patient care environments. This is due in part to the fact that hospitals are semi-controlled environments in which patients constantly reside during the course of their treatment. Patient care in hospitals is provided by a group of health professionals and staff that all practice within the boundaries of the hospitals, which in theory should facilitate better communication between physicians, nurses, pharmacists, patients, and family members.

Medication error detection is enhanced in hospitals due to the fact that the outcomes (good or bad) from therapy are observable while the patient is hospitalised. Reporting of errors for the sake of improving safety and quality can be standardised to ensure that practitioners and organisations are learning from mistakes and taking the necessary corrective actions.

Medication use in hospitals is a complex endeavour which comprises 80-100 distinct steps, from prescribing to administration. However, the ability to identify safety problems and implement standardised mechanisms to prevent patient harm should still be enhanced by the controlled medication use environment that exists in hospitals. Theories associated with the performance of complex systems would likely point to the potential number of complex and unique interactions that can take place between humans and technology, demonstrating that the ongoing potential for accidents to occur is still very high in hospitals.

An important consideration should be on how to translate and transfer safety practices from the hospital to the outpatient setting with emphasis being placed on communication between patient care providers, patients, and family members. The concept of teamwork should be considered primary and paramount to effective patient care. Effective and highly reliable mechanisms to share medication and diagnostic information about patients should also be carefully considered.

4.2. Community pharmacies

Community pharmacies are easily accessible for patients. Due to their function within the drug distribution process and given that the patient is registered in a pharmacy of his or her choice, a pharmacy receives information about medicines prescribed to a patient by different physicians as well as about those the patient purchases on his or her own expense. The community pharmacy is therefore in an excellent position to safeguard patient safety through a pharmacy-based systematic review and individualised optimisation of a patient's drug use in close cooperation with the prescribing doctor. The purpose of this review is to achieve definite therapeutic outcomes with regards to symptoms, therapeutic efficiency and the patient quality of life. This process is usually referred to as "pharmaceutical care." It requires the development of standardised care protocols as well as a systematic documentation of the care process and its outcome, including the medication history and the medication profile, which allows the detection of drug related-problems.

Error reporting systems and approaches

A necessary element to successful patient safety improvement activities is a robust error reporting system which allows health care professions and others to report actual and potential errors in a standardised fashion. Error reporting should be encouraged for quality improvement, and practitioners should never be punished for submitting information. Regardless of whether the error reporting system is computerised or paper-based, standardised mechanisms

need to be developed to ensure that information about errors is complete from the reporter and can be analyzed using a standardised taxonomy of errors, of which one example is the taxonomy developed by the U.S. National Coordinating Council for Medication Error Reporting and Prevention.¹⁴

The goal for any error reporting system is quality improvement. Ideally, error reporting systems should be developed to allow reports from practitioners, patients, and others across the continuum of care, which includes community, hospital, long-term care, home care, behavioural health, and other health care settings. Data should be quickly aggregated and analyzed by trained analysts and information on improving patient safety and quality should be shared with all stakeholders in a rapid and efficient fashion. Error reporting systems can also be designed to assist with pharmacovigilance activities. An example of a system that allows reporting of errors and adverse drug reactions is the MedWatch System maintained by the U.S. Food and Drug Administration.¹⁵

In summary, a necessary precursor for any successful patient safety and quality improvement endeavour is the development of a non-punitive—voluntary—error reporting system.

Automatic checks for drug-related problems

Automatic checks for drug-related problems are only possible when certain patient characteristics (allergies, contraindications, age, gender and other characteristics relevant for the effect of a given medicine) are saved for an individual patient. Done systematically, these checks result in

- avoiding double prescription
- reducing medication errors, including contraindications and dosing problems

- detecting compliance problems
- considering genetic polymorphisms prior the application of the medicine

As these automatic checks depend on the quality of software programmes, they must be updated on a regular basis and extended with regard to the services they offer (Figure 2).

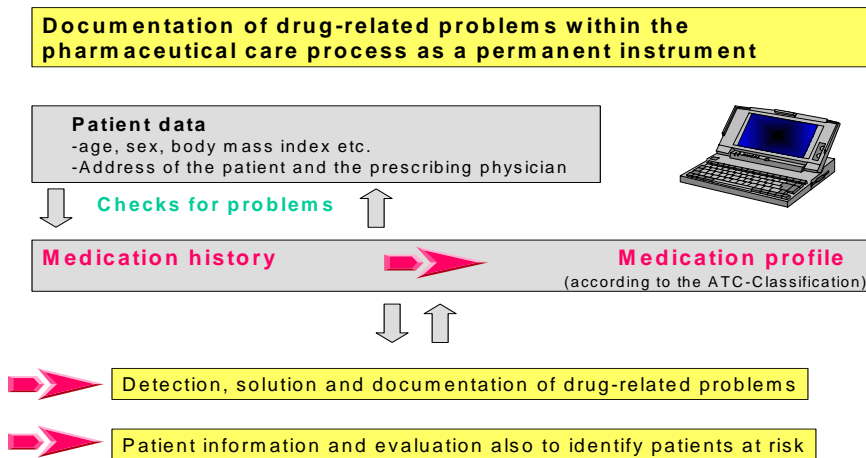


Figure 2. Documentation of drug-related problems within the pharmaceutical care process as a permanent instrument.

Software programmes improve data entry and thus data quality controlled by the menu. Linked together they provide a powerful database for a continuous data evaluation with regard to the achieved therapeutic outcome as well as on an aggregated, pharmacoepidemiological level.

All knowledge drawn from the software-supported process must finally be transmitted to the patient by appropriate information and counselling. Only if the patients understand the information they are given can they behave and act accordingly. The more capable everyone is of understanding the issues that

relate to their health the more they will be able to take responsibility for their own health – whether taking the right course of medication or knowing what a good diet is. The greater the increase in health literacy, the more patients will be able to exercise the choices increasingly open to them in health systems.¹⁶

4.3. Communication with the patient

To have the capacity to exercise greater control over their health, people need information, knowledge, and understanding. These give people confidence and a will to assert control. People also need to have the skills to be able to identify their information needs, know possible sources or avenues for finding out information, be able to read and understand relevant information, and evaluate their options. The issue is complex, in that other factors have to be taken into account. These factors include people's psychological and emotional states, especially in terms of the seriousness and stage of their illnesses and their level of preparedness, which can understandably affect the ability to absorb information.

An examination of the literature reveals the following barriers that patients can encounter in obtaining information about their health needs and possible treatments:

- patients having to ask for information, instead of it being offered unsolicited, and being made to feel they have little right to do so;
- health professionals being – or appearing to be – pressed for time, and not providing sufficient opportunity in consultations for patients to ask all the questions they want answered;
- patients not being given enough time in advance to think about what information they need;
- information being provided in ways that are unclear or incomprehensible to individual patients, or presented at a time when patients are unable to fully take it in;

- patients not being given adequate information about possible treatment options, or what these might involve, including potential side-effects.

These general issues have to be taken into consideration when pharmacists communicate with patients. Adapting the way suitable information is provided to the individual needs and capabilities of a patient is crucial for ensuring a safe use of medicines by the consumer when professional advice is no longer directly available.

Experience in many countries proves that patients with no or little need of additional information and those who require an extensive talk should be separately dealt with in the pharmacy.

Pharmacists also have to be aware of the fact that patients increasingly get their information from the Internet. It may be crucial for patient safety that pharmacists start to talk about this with their patients in order to learn what they have understood and to be able to discuss dubious information from a professional point of view.