

ASHP Guidelines on a Standardized Method for Pharmaceutical Care

Need for a Standardized Method

The purpose of this document is to provide pharmacists with a standardized method for the provision of pharmaceutical care in component settings of organized health systems. Since the introduction of the pharmaceutical care concept¹ and the development of the ASHP Statement on Pharmaceutical Care,² considerable variation in pharmacists' provision of pharmaceutical care has been noted. ASHP believes pharmacists need a standardized method for providing pharmaceutical care.

This document describes a standardized method based on functions that all pharmacists should perform for individual patients in organized health systems. The use of this method would foster consistency in the provision of pharmaceutical care in all practice settings. It would support continuity of care both within a practice setting (e.g., among pharmacists on different work shifts caring for an acutely ill inpatient) and when a patient moves among practice settings (e.g., when an inpatient is discharged to home or ambulatory care). Further, a standardized method would establish consistent documentation so that patient-specific and medication-related information could be shared from pharmacist to pharmacist and among health professionals.

The need to identify the functions involved in pharmaceutical care and the critical skills necessary to provide it was discussed at the San Antonio consensus conference in 1993.³ Functions for the provision of pharmaceutical care were identified by the practitioner task force of the Scope of Pharmacy Practice Project.⁴ Those functions have been defined in more detail in the pharmacotherapy series of the ASHP Clinical Skills Program.⁵⁻⁹

These Guidelines are not specific to any practice setting. ASHP believes this standardized method can be used in acute care (hospitals), ambulatory care, home care, long-term care, and other practice settings. Functions can be tailored as appropriate for a given practice setting. It is recognized that the degree of standardization and tailoring appropriate for a given work site will depend on the practice environment, the organization of services (e.g., patient-focused or department-focused), working relationships with other health professionals, the health system's and patient's financial arrangements, and the health system's policies and procedures. ASHP believes the use of the systematic approaches encouraged by these guidelines will assist pharmacists in implementing and providing pharmaceutical care in their work sites.

Functions of Pharmaceutical Care

ASHP believes that a standardized method for the provision of pharmaceutical care should include the following:

- Collecting and organizing patient-specific information,
- Determining the presence of medication-therapy problems,
- Summarizing patients' health care needs,
- Specifying pharmacotherapeutic goals,
- Designing a pharmacotherapeutic regimen,
- Designing a monitoring plan,

- Developing a pharmacotherapeutic regimen and corresponding monitoring plan in collaboration with the patient and other health professionals,
- Initiating the pharmacotherapeutic regimen,
- Monitoring the effects of the pharmacotherapeutic regimen, *and*
- Redesigning the pharmacotherapeutic regimen and monitoring plan.

These major functions have been adapted, in part, from the pharmacotherapy series of the ASHP Clinical Skills Program and the final report of the ASHP Model for Pharmacy Practice Residency Learning Demonstration Project.

Collecting and Organizing Pertinent Patient-Specific Information. Information should be collected and used as a patient-specific database to prevent, detect, and resolve the patient's medication-related problems and to make appropriate medication-therapy recommendations. The database should include the following sections, each containing specific types of information to the extent that it is relevant to medication therapy:

Demographic

Name
Address
Date of birth
Sex
Religion and religious affiliation
Occupation

Administrative

Physicians and prescribers
Pharmacy
Room/bed numbers
Consent forms
Patient identification number

Medical

Weight and height
Acute and chronic medical problems
Current symptoms
Vital signs and other monitoring information
Allergies and intolerances
Past medical history
Laboratory information
Diagnostic and surgical procedures

Medication therapy

Prescribed medications
Nonprescription medications
Medications used prior to admission
Home remedies and other types of health products used
Medication regimen
Compliance with therapy
Medication allergies and intolerances
Concerns or questions about therapy
Assessment of understanding of therapy
Pertinent health beliefs

Behavioral/lifestyle

Diet
 Exercise/recreation
 Tobacco/alcohol/caffeine/other substance use or abuse
 Sexual history
 Personality type
 Daily activities

Social/economic

Living arrangement
 Ethnic background
 Financial/insurance/health plan

Objective and subjective information should be obtained directly from patients (and family members, other caregivers, and other health professionals as needed). A physical assessment should be performed as needed. In addition, information can be obtained by reviewing the patient's health record and other information sources.

Information in the patient's health record should be understood, interpreted, and verified for accuracy before decisions are made about the patient's medication therapy. With access to the patient's health record comes the professional responsibility to safeguard the patient's rights to privacy and confidentiality. The Privacy Act of 1974,¹⁰ professional practice policies,^{11,12} and policies and procedures of organized health systems provide guidance for the pharmacist in judging the appropriate use of patient-specific information.

The patient (as well as family members, caregivers, and other members of the health care team as needed) should be interviewed. This is necessary for the pharmacist to establish a direct relationship with the patient, to understand the patient's needs and desired outcome, to obtain medication-related information, and to clarify and augment other available information. Pharmacists in many practice settings, including ambulatory care, may need to perform physical assessments to collect data for assessing and monitoring medication therapy.

Information, including clinical laboratory test results, gathered or developed by other members of the health care team may not be in the patient's health record. Therefore, to ensure that the patient information is current and complete, other sources should be checked. Other sources may include medication profiles from other pharmacies used by the patient.

Although it is ideal to have a comprehensive database for all patients, time and staffing limitations may necessitate choices regarding the quantity of information and the number of patients to follow. Choices could be determined by the health system's policies and procedures, by clinical care plans, or by disease management criteria in the patient's third-party health plan.

Systems for recording patient-specific data will vary, depending on pharmacists' preferences and practice settings. Electronic documentation is recommended. Some information may already be in the patient's health record. Therefore, when authorized, the additional information gathered by the pharmacist should be recorded in the patient's health record so that it can be shared with other health professionals. Abstracted summaries and work sheets may also be useful.

Determining the Presence of Medication-Therapy Problems. Conclusions should be drawn from the integration of

medication-, disease-, laboratory test-, and patient-specific information. The patient's database should be assessed for any of the following medication-therapy problems:

- Medications with no medical indication,
- Medical conditions for which there is no medication prescribed,
- Medications prescribed inappropriately for a particular medical condition,
- Inappropriate medication dose, dosage form, schedule, route of administration, or method of administration,
- Therapeutic duplication,
- Prescribing of medications to which the patient is allergic,
- Actual and potential adverse drug events,
- Actual and potential clinically significant drug–drug, drug–disease, drug–nutrient, and drug–laboratory test interactions,
- Interference with medical therapy by social or recreational drug use,
- Failure to receive the full benefit of prescribed medication therapy,
- Problems arising from the financial impact of medication therapy on the patient,
- Lack of understanding of the medication therapy by the patient, and
- Failure of the patient to adhere to the medication regimen.

The relative importance of problems must be assessed on the basis of specific characteristics of the patient or the medication. Checklists, work sheets, and other methods may be used to determine and document the presence of medication-therapy problems. The method should be proactive and should be used consistently from patient to patient.

Summarizing Patients' Health Care Needs. The patient's overall needs and desired outcomes and other health professionals' assessments, goals, and therapy plans should be considered in determining and documenting the medication-related elements of care that are needed to improve or prevent deterioration of the patient's health or well-being.

Specifying Pharmacotherapeutic Goals. Pharmacotherapeutic goals should reflect the integration of medication-, disease-, laboratory test-, and patient-specific information, as well as ethical and quality-of-life considerations. The goals should be realistic and consistent with goals specified by the patient and other members of the patient's health care team. The therapy should be designed to achieve definite medication-related outcomes and improve the patient's quality of life.

Designing a Pharmacotherapeutic Regimen. The regimen should meet the pharmacotherapeutic goals established with the patient and reflect the integration of medication-, disease-, laboratory test-, and patient-specific information; ethical and quality-of-life considerations; and pharmacoeconomic principles. It should comply with the health system's medication-use policies, such as clinical care plans and disease management plans. The regimen should be designed for optimal medication use within both the health system's and the patient's capabilities and financial resources.

Designing a Monitoring Plan for the Pharmacotherapeutic Regimen. The monitoring plan should effectively evalu-

ate achievement of the patient-specific pharmacotherapeutic goals and detect real and potential adverse effects. Measurable, observable parameters should be determined for each goal. Endpoints should be established for assessing whether the goal has been achieved. The needs of the patient, characteristics of the medication, needs of other health care team members, and policies and procedures of the health care setting will influence the monitoring plan.

Developing a Pharmacotherapeutic Regimen and Corresponding Monitoring Plan. The regimen and plan developed in collaboration with the patient and other health professionals should be systematic and logical and should represent a consensus among the patient, prescriber, and pharmacist. The approach selected should be based on consideration of the type of practice setting, its policies and procedures, practice standards, and good professional relations with the prescriber and patient. The regimen and monitoring plan should be documented in the patient's health record to ensure that all members of the health care team have this information.

Initiating the Pharmacotherapeutic Regimen. Depending on the regimen and plan, the pharmacist could, as appropriate, implement all or portions of the pharmacotherapeutic regimen. Actions should comply with the health system's policies and procedures (e.g., prescribing protocols) and correspond to the regimen and plan. Orders for medications, laboratory tests, and other interventions should be clear and concise. All actions should be documented in the patient's health record.

Monitoring the Effects of the Pharmacotherapeutic Regimen. Data collected according to the monitoring plan should be sufficient, reliable, and valid so that judgments can be made about the effects of the pharmacotherapeutic regimen. Changes in patient status, condition, medication therapy, or nonmedication therapy since the monitoring plan was developed should be considered. Missing or additional data should be identified. Achievement of the desired endpoints should be assessed for each parameter in the monitoring plan. A judgment should be made about whether the pharmacotherapeutic goals were met. Before the pharmacotherapeutic regimen is adjusted, the cause for failure to achieve any of the pharmacotherapeutic goals should be determined.

Redesigning the Pharmacotherapeutic Regimen and Monitoring Plan. Decisions to change the regimen and plan should be based on the patient's outcome. When clinical circumstances permit, one aspect of the regimen at a time should be changed and reassessed. Recommendations for pharmacotherapeutic changes should be documented in the same manner used to document the original recommendations.

Pharmacist's Responsibility

An essential element of pharmaceutical care is that the pharmacist accepts responsibility for the patient's pharmacotherapeutic outcomes. The same commitment that is applied to designing the pharmacotherapeutic regimen and monitoring

plan for the patient should be applied to its implementation. The provision of pharmaceutical care requires monitoring the regimen's effects, revising the regimen as the patient's condition changes, documenting the results, and assuming responsibility for the pharmacotherapeutic effects.

References

1. Hepler CD, Strand LM. Opportunities and responsibilities in pharmaceutical care. *Am J Hosp Pharm.* 1990; 47:533–43.
2. American Society of Hospital Pharmacists. ASHP statement on pharmaceutical care. *Am J Hosp Pharm.* 1993; 50:1720–3.
3. Implementing pharmaceutical care. Proceedings of an invitational conference conducted by the American Society of Hospital Pharmacists and the ASHP Research Foundation. *Am J Hosp Pharm.* 1993; 50: 1585–656.
4. Summary of the final report of the Scope of Pharmacy Practice Project. *Am J Hosp Pharm.* 1994; 51:2179–82.
5. Shepherd MF. Clinical skills program pharmacotherapy series module 1. Reviewing patient medical charts. Bethesda, MD: American Society of Hospital Pharmacists; 1992.
6. Mason N, Shimp LA. Clinical skills program pharmacotherapy series module 2. Building a pharmacist's patient data base. Bethesda, MD: American Society of Hospital Pharmacists; 1993.
7. Mason N, Shimp LA. Clinical skills program—module 3. Constructing a patient's drug therapy problem list. Bethesda, MD: American Society of Hospital Pharmacists; 1993.
8. Jones WN, Campbell S. Clinical skills program pharmacotherapy series module 4. Designing and recommending a pharmacist's care plan. Bethesda, MD: American Society of Hospital Pharmacists; 1994.
9. Frye CB. Clinical skills program pharmacotherapy series module 5. Monitoring the pharmacist's care plan. Bethesda, MD: American Society of Hospital Pharmacists; 1994.
10. PL 93-579. 5 U.S.C.A. 552a (88 Stat. 1896).
11. ASHP guidelines for obtaining authorization for documenting pharmaceutical care in patient medical records. *Am J Hosp Pharm.* 1989; 46:338–9.
12. Principles of practice for pharmaceutical care. Washington, DC: American Pharmaceutical Association; 1995.

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