

Pharmaceutical Care Introduction and Impact

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Objectives

- Introduce & define the concept of pharmaceutical care
- Define 4 key outcomes and a systematic process of achieving them irrespective of practice setting
- Understand the pharmacist's responsibilities and roles to provide pharmaceutical care.
- Document activities and quantitative value.

Background Reading & References

- Cipolle RJ, Strand LM, Morley PC. **Pharmaceutical Care Practice: The Clinician's Guide**, 2nd Ed. New York: McGraw-Hill, 2004. Chapters 1 & 2
- Koda-Kimble MA et al Applied Therapeutics – The Clinical Use of Drugs 9th edition 2008 Lippincott Williams & Wilkins. Chapter 1.
- **Opportunities and responsibilities in pharmaceutical care.** Am J Hosp Pharm. 1990 Mar;47(3):533-43.

Why are we learning this?

- How scientific knowledge (pharmacology, therapeutics) and clinical skills (measuring blood pressure, glucoses, drug information) is applied to individual patients
- Core component of pharmacy practice, must be learned & practiced

Pharmaceutical Care Defined

- Pharmaceutical care is a patient-centered practice in which the practitioner assumes responsibility for a patient's drug-related needs and is held accountable for this commitment

Definition of Pharmaceutical Care

Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life. These outcomes are (1) cure of a disease, (2) elimination or reduction of a patient's symptomatology, (3) arresting or slowing of a disease process, or (4) preventing a disease or symptomatology.

Pharmaceutical care involves the process through which a pharmacist cooperates with a patient and other professionals in designing, implementing, and monitoring a therapeutic plan that will produce specific therapeutic outcomes for the patient. This in turn involves three major functions: (1) identifying potential and actual drug-related problems, (2) resolving actual drug-related problems, and (3) preventing potential drug-related problems.

Pharmaceutical care is a necessary element of health care, and should be integrated with other elements. Pharmaceutical care is, however, provided for the direct benefit of the patient, and the pharmacist is responsible directly to the patient for the quality of that care. The fundamental relationship in pharmaceutical care is a mutually beneficial exchange in which the patient grants authority to the provider and the provider gives competence and commitment (accepts responsibility) to the patient.

The fundamental goals, processes, and relationships of pharmaceutical care exist regardless of practice setting.

Pharmaceutical Care - What

- Optimize all* of patients drug therapy
 - * prescription, nonprescription, herbal, traditional
 - Achieve better patient outcomes and improve quality of life
 - In cooperation & coordination with patient & their other healthcare providers

Pharmaceutical Care - How

- Patient care process
 - Assess needs
 - Identify problems / opportunities
 - Develop care plan
 - Implement plan
 - Evaluate for efficacy & safety

Drug – Related Needs

1. Medication is appropriate
 - There is a clinical indication for each medication
 - All conditions that can benefit from drug therapy has been identified
2. Medication is effective
 - Most effective drug is being used
 - At sufficient dosage to achieve goals

Drug – Related Needs 2

3. Medication is safe
 - There are no adverse reactions being experienced
 - There are no signs of toxicity
 4. Patient compliant
 - Willing and able to take the medication as intended
- *If criteria met, therapy is appropriate*
 - *If not we are responsible for fixing it!*

Outcomes - Oriented

- Set goals for efficacy and safety, and monitor for achievement

Efficacy	Safety
HbA1C	Hypoglycemia
Blood Pressure	Hypotension, HR
Tmax	Rash, allergy
Pain	Bone marrow suppression

- Prevent adverse events or poor outcomes
 - Drug interaction management

Pharmacists as Practitioner

- We are not physicians
- Distinctive responsibility for optimal drug therapy.
- Apply medical evidence and literature to an individual patient in collaboration with other healthcare professionals.

The Need

- Exponential increase in number of medications and associated information
 - Overwhelms not only patients but HCP
- Patients more educated & involved in care
- More complex therapy
- More expensive with nominal differences in efficacy & safety

The Application

- Transcends practice setting
 - Ambulatory care, long-term care, hospital , clinic
 - Basic level (standard of care) for all patients regardless of specific disease states, # of drugs...
 - Should be provided by all pharmacist for all patients
 - Higher level of service may require a specialist (ID)

The Context

- Practitioner + Patient = A Practice
 - Regardless of setting (community vs hospital)
- You are responsible to that patient for their drug therapy
 - Patients may have many other healthcare providers (HCP).
 - You focus on drug therapy & help reconcile drug therapy plan between all HCP & the patient

Pharmacotherapy Workup

- Major focus of class & lab
- Systematic, structured, rational process
- Similar to other HCP but uniquely focused on pharmacotherapy
- Identify, resolve & prevent problems with indication, efficacy, safety or compliance
- Application of knowledge to patient care

The Basic Questions

- Is the patient's problem caused by drug therapy
- Can the patient's problem be treated with drug therapy

The Process

- Assessment
- Care Plan
- Follow-up

Process 2

- Assessment
 - Meet patient
 - Establish relationship, determine individual needs & medication experience (beliefs & practices)
 - Gather information
 - What information is needed, best sources
 - Analyze
 - Are drug therapy needs being met?
 - Is the patients problem being caused by drug therapy
 - Can the patient's problems be treated with drug therapy
- Indication, effectiveness, safety & compliance*

Process 3

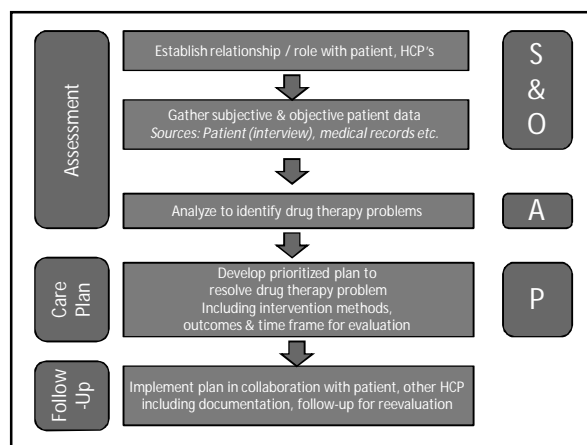
- Care plan
 - Establish goals including time frame to achieve
 - Base on medical literature, corroborated with patient
 - Select interventions / alternative therapies to resolve and drug-therapy problems
 - May include pharmacotherapy, lifestyle modifications...
 - Schedule follow-up evaluation

Process 4

- Follow-up
 - Collect subjective & objective data related to achievement of outcomes (efficacy & safety) including compliance
 - Assess / compare data to goals set with patient
 - Document assessment and updated care plan
 - Schedule follow-up evaluations

SOAP format

- Subjective
 - In the patient's own words: reason for visit, symptoms, past treatments etc
- Objective
 - Physical examination, laboratory results, diagnostic tests, pill counts. Measurable
- Assessment
 - Brief, complete description of problem, diagnosis
- Plan
 - Detailed description of further workup, treatment, education, monitoring and follow-up relative to assessment



Assessment (S & O, A)

- Meeting & interviewing the patient
 - Establishes professional relationship
 - Gather information (patient, disease & drug)
 - Knowledge, attitudes & patterns of medication use
 - Disease & drug therapy history
 - History of allergies, adverse drug reactions
 - Height & Weight
 - Medications including dose, route, frequency & reason
 - Perceived efficacy, side effects & adherence
 - Non-prescription medication use
 - Pregnancy potential, social issues

Assessment (S & O, A)

- S & O
 - Chief complaint, history of present illness, past medical history, past social history including diet
 - Physical exam: vital signs & review of systems
 - Laboratory examinations (CBC, BMP)
 - Radiology and other diagnostic studies

Assessment

- Identifying Drug Therapy Problems
 - Indicated, effective, safe, compliant
 - Unnecessary drug (no indication)
 - Needs additional drug therapy
 - Ineffective drug
 - Dosage too low
 - Adverse drug reaction including interactions
 - Dosage too high
 - Noncompliance (including cost)
 - Cause?

Care Plan (P)

- Prioritized, with first being most important
- Organized by medical condition
- Each with 3 steps / components
 - Establish goals (parameter, value & timeframe)
 - Outcome is what actually happens
 - Individualized interventions
 - Change medication regimen, patient education...
 - Time frame and measures for evaluation

Follow-up (P)

- Repeat assessment and compare to current plan
 - Gather S&O information as indicated in plan from prior encounter
 - Compare outcomes to goals for indication, efficacy, safety & compliance.
 - Reformulate plan in collaboration with patient

Documentation

- If you didn't document it, it didn't happen...
 - Provides record to refer back to
 - Rationale for regimen including individual issues such as adverse effects, compliance...
 - Evidence of actions and services
 - Billing
 - Job justification

Collaboration with other HCP

- Focus on patient's needs, common goals
- Understand and respect each-others roles
- Respect authority & group norms
- Communicate efficiently, objectively & effectively
- Always uphold your professionalism & credibility.
- Be a team player and help out