



## **Required and Elective Educational Outcomes, Goals, Objectives and Instructional Objectives for Postgraduate Year One (PGY1) Community Pharmacy Residency Programs**

### **Explanation of the Contents of This Document:**

The educational outcomes, goals, and objectives below are to be used in conjunction with the *Accreditation Standard for Postgraduate Year One (PGY1) Community Pharmacy Residency Programs*. Users of this document will want to refer to the accompanying glossary to assure a shared understanding of terms.

Each of the document's objectives has been classified according to educational taxonomy (cognitive, affective, or psychomotor) and level of learning. An explanation of the taxonomies is available elsewhere.<sup>1</sup>

The educational outcomes are divided into those that are required and those that are elective. The required outcomes, including all of the goals and objectives falling under them, must be included in the design of all programs. The elective outcomes are provided for those programs that wish to add to the required outcomes. Programs selecting an elective outcome are not required to include all of the goals and objectives falling under that outcome. In addition to the potential elective outcomes contained in this document, programs are free to create their own elective outcomes with associated goals and objectives. Each of the goals falling under the program's selection of program outcomes (required and elective) must be evaluated at least once during the resident's year.

**Educational Outcomes (Outcome):** Educational outcomes are statements of broad categories of residency graduates' capabilities.

**Educational Goals (Goal):** Educational goals listed under each educational outcome are broad sweeping statements of abilities.

**Educational Objectives (OBJ):** Resident achievement of educational goals is determined by assessment of the resident's ability to perform the associated educational objectives below each educational goal.

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<sup>1</sup> Nimmo, CM. Developing training materials and programs: creating educational objectives and assessing their attainment. In: Nimmo CM, Guerrero R, Greene SA, Taylor JT, eds. Staff development for pharmacy practice. Bethesda, MD: ASHP; 2000.

**Instructional Objectives (IO):** Instructional objectives are the result of a learning analysis of each of the educational objectives. They are offered as a resource for preceptors encountering difficulty in helping residents achieve a particular educational objective. The instructional objectives falling below the educational objectives suggest knowledge and skills required for successful performance of the educational objective that the resident may not possess upon entering the residency year. Instructional objectives are teaching tools only. They are not required in any way nor are they meant to be evaluated.

The required educational outcomes for PGY1 Community Pharmacy Practice Residencies are as follows:

*Outcome R1: Manage and improve the medication-use process.*

*Outcome R2: Provide evidence-based, patient-centered care and collaborate with other healthcare professionals to optimize patient care.*

*Outcome R3: Exercise leadership and practice management skills.*

*Outcome R4: Demonstrate project management skills.*

*Outcome R5: Provide medication and practice-related information, education, and/or training.*

*Outcome R6: Utilize medical informatics.*

Each of the educational outcomes, goals, and objectives in this document is numbered with a prefix of “R” if it is required and “E” if it is not.

<p align="center"><b>Educational Outcomes, Required for Postgraduate Year One (PGY1) Community Pharmacy Practice Residencies</b></p>
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***Outcome R1: Manage and improve the medication-use process.***

Goal R1.1: Demonstrate ownership of and responsibility for the welfare of the patient by performing all necessary aspects of the medication-use system.

OBJ R1.1.1: (Characterization) Display initiative in preventing, identifying, and resolving pharmacy-related medication-use system problems.

- Actively works to identify the potential for significant medication-related problems
- Correctly identifies the problem to be solved
- Takes initiative and seeks information to solve the problem
- Accurately identifies appropriate sources of information needed to solve the problem
- Explores logical alternative approaches to solving the problem
- Chooses most appropriate plan for solving the problem
- Appropriately assesses the results of the action taken to solve the problem
- Initiates alternative plan if the problem is not solved
- Actively pursues all significant existing and potential medication-related problems until satisfactory resolution is obtained

*Suggested assessment activity: Cumulative direct observation of practice*

*IO Explain the role of the pharmacist in preventing, identifying, and resolving pharmacy-related patient-care problems.*

*IO Explain the importance of contacting the appropriate parties when a problem is identified.*

*IO Explain the role of assertiveness in presenting pharmacy concerns, solutions, and interests.*

*IO Explain the pharmacist's obligation for absolute attention to detail in the preparation/distribution process.*

*IO Explain the interdependent relationship between operational tasks and clinical activities.*

*IO Explain the importance of follow-through of medication-use system activities.*

Goal R1.2: Identify, design, and implement quality improvement changes to the organization's (e.g., community pharmacy, corporation, health-system) medication-use system.

OBJ R1.2.1: (Comprehension) Explain the organization's medication-use system and its vulnerabilities to adverse drug events (ADEs).

- Explanation accurately describes organization's policies and procedures regarding the medication-use system.

- Explanation provides accurate definition of terms associated with adverse drug events
- Explanation of organization’s medication-use system is clear and accurate
- Explanation reflects understanding of the organization’s medication-use process as a system
- Accurately states sources of information on the design, implementation, and maintenance of safe medication-use systems
- Explanation reflects understanding of system error
- Explanation reflects understanding of human factors error
- Cites the potential contribution of automation and technology to preventing medication misadventures at the pharmacy and at the organizational levels
- Cites the potential contribution of automation and technology to the occurrence of medication misadventures at the pharmacy and organizational levels
- Accurately explains the meaning of the term “culture of safety”

*Suggested assessment activity: Resident discussion of the organization’s medication-use system and its vulnerabilities to adverse drug events*

*IO Explain the organization’s policies and procedures related to the medication-use system.*

*IO Explain the central concepts of systems theory.*

*IO Explain the concept of system error.*

*IO Explain the definitions of the various terms associated with adverse drug events (e.g., medication misadventure, medication error, adverse drug reaction, error, accident, systems error, individual error, latent error).*

*IO State sources of information on the design, implementation, and maintenance of safe medication-use systems.*

*IO Explain the potential for contribution to the occurrence of adverse drug events by the use of automation and information technology.*

*IO Explain the role that automation and information technology play in preventing adverse drug events.*

*IO Explain the potential for contribution to the occurrence of adverse drug events by things such as the pharmacy’s workflow and staff training issues.*

*IO Explain the meaning of the term “culture of safety.”*

**OBJ R1.2.2:** (Analysis) Analyze the structure (resources, equipment, staff, technology, workspace, etc.), analyze the process (procedures, methods, steps for providing services/products), and measure outcomes of the organization’s medication-use system.

- Analyses and measurements reflect clear understanding of the differences between structure, process, and outcomes

- Choices of techniques and tools for analyzing structure and process and measuring outcomes are appropriate
- Structure, process, and outcomes are accurately analyzed

*Suggested assessment activity: Examination of resident's analysis of the organization's medication-use system*

- IO Explain methods for analyzing a medication-use system's structure.*
- IO Explain how inputs to the medication-use system such as patients, staff, and environment make up its structure.*
- IO Explain methods for analyzing processes within a medication-use system (e.g., root cause analysis, failure mode and effect analysis).*
- IO Explain how the interactions between pharmacists, other health care providers, and patients constitute processes in the medication-use system.*
- IO Exercise skill in process-mapping, a type of flowchart depicting the steps in a process, with identification of responsibility for each step and the key measures.*
- IO Exercise skill in cause-and-effect diagramming.*
- IO Explain the organization's policies and procedures for handling a drug recall.*
- IO Explain methods for measuring outcomes of the medication-use system.*
- IO Explain the characteristics of a clinically significant ADE.*
- IO Explain various methods, including decision trees, for determining the significance of adverse drug events.*
- IO Explain how to categorize medication errors using one's own organization's categorization methodology.*
- IO When a clinically significant ADE is identified, report the event following the organization's policies and procedures.*

**OBJ R1.2.3: (Evaluation) Identify opportunities for improvement in the organization's medication-use system by comparing the medication-use system to relevant best practices.**

- Best practices selected for comparison are relevant
- Ideas for improvement have potential to result in significant improvements to the existing process

*Suggested assessment activity: Evaluation of resident's identification of opportunities for improvement in the organization's medication-use system from comparison with best practice*

- IO State sources of quality measures for pharmacies and pharmacists.*

- IO Explain reporting processes for quality measures.*
- IO Explain how key stakeholders, including health plans, interface with pharmacists and pharmacies to impact quality performance.*
- IO When a clinically significant ADE is identified, participate in determining the presence of any similar potential ADEs.*
- IO Participate in the community pharmacy's ongoing process for tracking and trending ADEs.*
- IO Explain how basic safety design principles such as standardization, simplification, and the employment of human factors training can minimize the incidence of error in the medication-use process.*
- IO Explain safe practices for the storage, dispensing, administration, and security of pharmaceuticals*
- IO Explain how to use information on how to design, implement, and maintain safe medication-use systems from external sources to identify opportunities for improvement in the organization's medication-use system.*

**OBJ R1.2.4:** (Synthesis) Participate in the process by which the organization identifies the need for, develops, implements, and evaluates evidence-based treatment guidelines/protocols for specific patient populations.

- The need identified is an important one for care of the organization's patient population
- Treatment guideline reflects careful consideration of systematically developed best evidence as described in *Clinical Practice Guidelines: Directions for a New Program* published by the Institute of Medicine
- Treatment guideline reflects consideration of new and emerging data
- Treatment guideline reflects consideration of the culture of the organization
- Guideline/protocol is fully implemented
- Outcome information is provided to the prescribers/providers
- Judgment of outcome information is accurate
- Judgment of outcome information gives appropriate weighting to humanistic as well as clinical and economic outcomes

*Suggested assessment activity: Review of a treatment guideline/protocol for which the resident identified the need, made significant contributions to its development, and participated directly in its assessment*

- IO Define treatment guidelines and protocols.*
- IO Explain the indications/rationale for using guidelines and protocols.*
- IO Explain guidelines/protocols as they relate to: patient care activities, provider networks, provider incentives, cost effectiveness, utilization management, quality measurement,*

*consumer incentive, accreditation, and benefit analysis (if applicable).*

*IO Explain the use of evidence-based medicine in the development of treatment guidelines/protocols.*

*IO Explain the process by which criteria for treatment guidelines/protocols are developed.*

*IO Explain effective strategies for gaining necessary commitment and approval for use of a treatment guideline/protocol.*

*IO Explain the importance of providing outcome information to the prescriber/provider as support for evaluative decisions on program continuance or revision.*

*IO Explain methods for assessing the effectiveness/impact of guidelines and protocols.*

*IO Explain the importance of assessing the clinical, economic and humanistic outcomes of treatment guidelines/protocols related to patient care.*

OBJ R1.2.5: (Synthesis) Design and implement pilot interventions to change problematic or potentially problematic aspects of the organization's medication-use system with the objective of improving quality.

- Problem identified for improvement has potential significance to the quality of the medication-use system
- Design of intervention is practical to implement
- As designed, the intervention offers an approach that can be expected to remedy or minimize the problem
- Plan for implementation is well thought out and includes meeting the concerns of all stakeholders
- Assessment of outcomes of implementation accurately reflects measurement of quality indicators

*Suggested assessment activity: Review of resident design and implementation of a medication-use system quality improvement pilot intervention*

*IO Explain the importance of continually reassessing medication-use policies.*

*IO Exercise skill in the revision of a policy or procedure when necessitated by the implementation of a change in a medication-use process.*

Goal R1.3: Prepare and dispense medications following existing standards of practice and the organization's policies and procedures.

OBJ R1.3.1: (Synthesis) Effectively utilize technology and information systems to support preparation and dispensing of medications.

- Follows established policies and procedures
- Effectively operates existing technology and information systems, including pharmacy dispensing software
- Utilizes appropriate sources of information
- Utilizes appropriate reports to assess quality of dispensing
- Identifies potential areas of improvement for the technology and information systems, both for technician and pharmacist users

Suggested assessment activity: Observation of resident's use of technology and information systems while participating in the medication distribution process.

OBJ R1.3.2: (Application) Prepare medications using appropriate techniques and following the organization's policies and procedures.

- **When required, accurately calibrates equipment**
- **Prepares medications using appropriate technique according to the organization's policies and procedures and applicable professional standards**
- **Prepares medications so they are appropriately concentrated, stable, and stored and without incompatibilities**
- **Adheres to appropriate safety and quality assurance practices**
- **Prepares labels that conform to the organization's policies and procedures**
- **Medication contains all necessary and/or appropriate ancillary labels**
- **Inspects the final medication before dispensing**

*Suggested assessment activity: Observation of preparation of a specific medication using a skills checklist specific to the preparation technique for the product being prepared that details the criteria listed*

*IO State the elements of a complete medication prescription and the essentials of legibility and accuracy.*

*IO Use effective prescriber communication techniques to secure agreement on modifications to medication prescriptions.*

*IO Document modifications to medication prescriptions according to the organization's policies and procedures. .*

*IO Explain standards of practice for the preparation of medications.*

*IO Explain the organization's quality assurance standards for the preparation of medications.*

*IO If applicable, prepare non-sterile compounded products using appropriate techniques and guidelines.*

*IO If applicable, prepare sterile compounded products using aseptic technique and observing applicable guidelines.*

*IO If applicable, prepare chemotherapeutic agents observing rules for safe handling of cytotoxic and hazardous medications.*

*IO If applicable, appraise compounded products for appropriate concentrations, rate, compatibilities, stability, clarity, coring, and storage.*



*IO Label medication products following the organization's policies and procedures.*

*IO Explain the organization's policies and procedures for maintaining the accuracy of the patient's profile.*

OBJ R1.3.3: (Application) Dispense medication products following the organization's policies and procedures.

- **The patient receives the appropriate medication(s) as ordered**
- **Ensures the integrity of medication dispensed**
- **Provides any necessary written and/or verbal counseling**
- **Patient receives medication on time**
  - **Follows HIPAA requirements**
- **Documentation of dispensing and consultation follows the organization's policies and procedures**

*Suggested assessment activity: Observation of dispensing process and review of documentation for dispensing of a specific medication*

*IO Compare and contrast the procedures used to dispense medications across the continuum of care settings.*

*IO Follow a systematic procedure for checking the accuracy of medications dispensed, including correct patient identification, correct medication, correct dosage form, correct dose, correct number of doses, correct prescriber, expiration dates, and properly repackaged and relabeled medications.*

*IO Follow procedures and standards of practice to insure the integrity of medication dispensed.*

*IO Follow appropriate policies and procedures to document patients' medication refill histories.*

OBJ R1.3.4: (Application) Provide necessary medication-use counseling to the patient or caregiver at the time of dispensing.

- **Session appropriately reflects the designed plan for patient counseling**
- **Clearly conveys the purpose of the counseling session**
- **Demonstrates skill in execution of each teaching method employed during the counseling session**
- **During the session, adjusts the instruction to appropriately accommodate the patient's or caregiver's previous knowledge of the medication literacy level and cultural factors**
- **During the session, adjusts the instruction to appropriately accommodate the patient's or caregiver's responses**
- **Assures the required information as specified in the organization's policy and procedures and/or statutory requirements is conveyed to the patient or caregiver.**
- **Assures the information or skills required are learned by the patient or caregiver before ending the session**
  - **Uses appropriate clinical decision-making skills if the need for interventions and/or referrals are discovered during the counseling session**

*Suggested assessment activity: Direct observation of resident counseling session with a specific patient and/or caregiver*

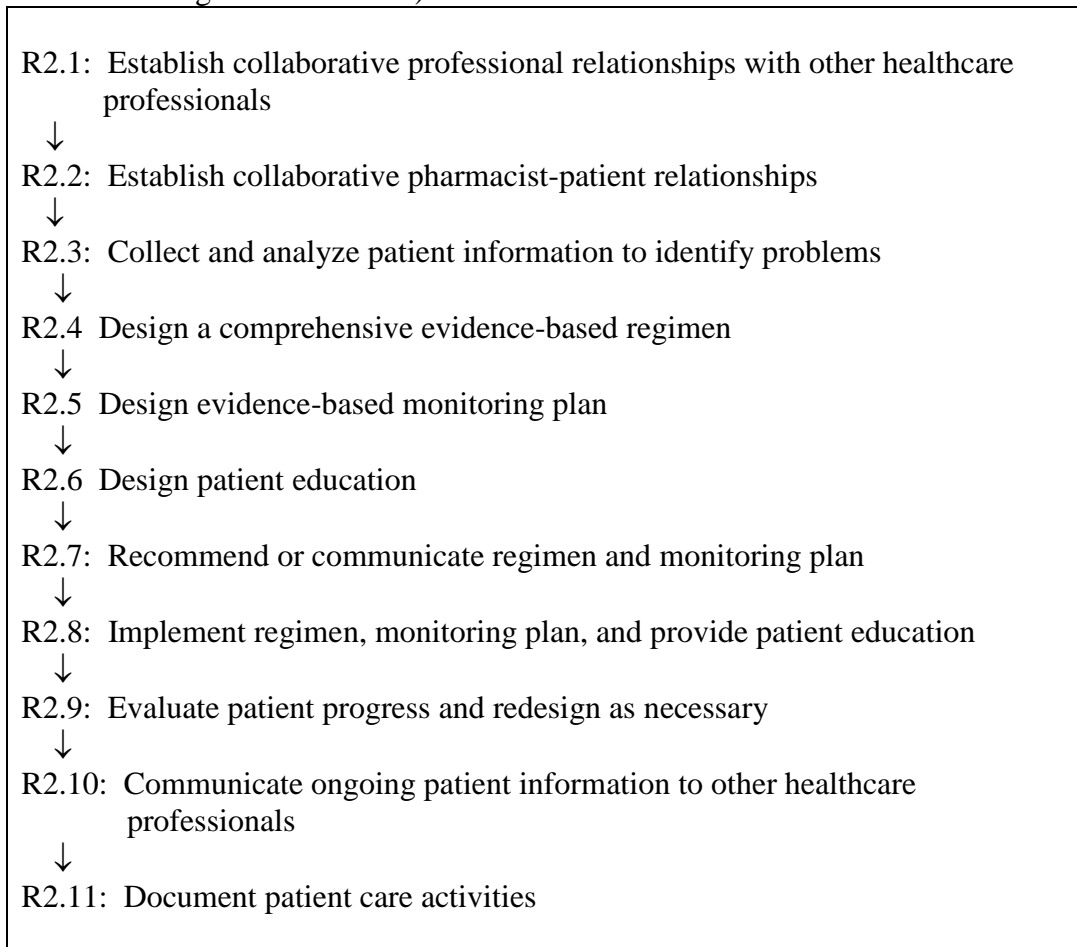
OBJ R1.3.5: (Analysis) At the time of dispensing, recommend other appropriate patient care services to help improve patient outcomes.

- Identifies appropriate patient care services (e.g. internal and external referrals, wellness/preventive care services)
- Conveys the need for/benefit of the patient care service(s)
- Accurately conveys information about the patient care service(s)
- As appropriate, implements the organization's procedure for follow-up with the patient
- Accurately assesses the appropriateness for patient care services based on the needs, desires and preferences of patients

Suggested assessment activity: Direct observation of resident recommendation of other appropriate patient care services.

***Outcome R2: Provide evidence-based, patient-centered care and collaborate with other healthcare professionals to optimize patient care.***

(This outcome involves a series of integrated, interrelated steps. These steps describe the decision processes of a novice practitioner and are presented in this way in order to facilitate teaching and evaluation.)



Goal R2.1: Establish collaborative professional relationships with other healthcare professionals involved in the care of patients.

OBJ R2.1.1: (Comprehension) Explain the process by which collaborative practice agreements are developed and implemented.

- Accurately explains the role of collaborative practice agreements in defining the scope of a community pharmacy's practice
- Accurately explains the legal/regulatory environment in which collaborative practice agreements are possible
- For a given situation, accurately identifies the stakeholders in the formation of a collaborative practice agreement
- Accurately explains strategies for establishing a collaborative practice agreement.
- Accurately explains the collaborative relationships that are necessary for successful fulfillment of the pharmacist's role in a collaborative practice.

Suggested assessment activity: Resident discussion of the development and implementation of collaborative practice agreements

*IO Explain the role of collaborative practice agreements in defining the scope of a community pharmacy's practice.*

*IO Explain the legal/regulatory environment in which collaborative practice agreements are possible.*

*IO For a given situation, identify the stakeholders in the formation of a collaborative practice agreement.*

*IO Explain strategies for establishing a collaborative practice agreement.*

*IO Explain the collaborative relationships that are necessary for successful fulfillment of the pharmacist's role in a collaborative practice.*

OBJ R2.1.2: (Synthesis) Develop a collaborative practice agreement (may be hypothetical) that could be used in the community pharmacy.

- Agreement reflects an understanding of the purpose of collaborate practice agreements
- Agreement is written in a manner that complies with state regulations
- Agreement is based on evidence-based treatment guidelines
- Agreement reflects a mutual understanding of the stakeholders
- Agreement reflects an understanding of appropriate strategies for establishing a collaborative practice agreement
- Agreement reflects an understanding of the collaborative relationships required for a collaborative practice agreement
- Agreement incorporates a practical timeline for implementation

Suggested assessment activity: Review of resident's written practice collaborative agreement.

OBJ R2.1.3: (Synthesis) Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with other healthcare professionals involved in the care of patients.

- **The relationship reflects mutual respect for the others' professional expertise**
- **The relationship reflects mutual respect for appropriate delegation of professional responsibilities in providing care for patients**
- **The relationship reflects appropriate integration of the pharmacist's care with the contributions of other members of the interdisciplinary team**
- **The pharmacist's work within the team reflects skillful application of group process skills such as negotiation, time management, conflict management, communication, and consensus building**

*Suggested assessment activities: Examination of the individual relationship between the resident and a particular physician or health care provider with whom he or she interacts when fulfilling practice responsibilities through a combination of direct observation, anecdotal records, and interviews with staff*

- IO Demonstrate knowledge of other health-care professionals' expertise, background, knowledge, and values in all interactions.*
  - IO Explain the training and expected areas of expertise of the members of the health profession or discipline with which one works.*
  - IO For each of the professionals with whom one interacts, explain that other healthcare profession's view of its role and responsibilities in collaborations on patient-centered care.*
  - IO Define a collaborative professional working relationship.*
  - IO Explain the structures and content of collaborative working relationships that are possible between the pharmacist and the physician and between the pharmacist and other healthcare professionals.*
  - IO Explain the limits that are imposed on possible collaborative relationships by the presence or absence of guidelines, legal and regulatory requirements, and organizational policies and procedures.*
  - IO Explain the limits that are imposed on possible collaborative relationships by distance and access to information.*
- IO Exercise skill in the use of group techniques to include communication, negotiation, delegation, time management, assessment of group dynamics, and consensus building.*
  - IO Explain the principles and applications of negotiation as they apply to working with other healthcare professionals.*

- IO Explain the principles and applications of delegation as they apply working with other healthcare professionals.*
- IO Explain the principles and applications of time management as they apply to working with other healthcare professionals.*
- IO Explain the principles of group dynamics and how they apply to working with other healthcare professionals.*
- IO Explain the principles of conflict management and how they apply to working with other healthcare professionals.*
- IO Explain a systematic approach to building consensus.*
- IO Explain how healthcare professionals working collaboratively develop unique communication patterns (shared language).*
- IO Explain the importance of adhering to use of a shared language among healthcare professionals.*
- IO Exercise skill in the coordination and integration of pharmacist's care with the contributions of other healthcare professionals.*

Goal R2.2: Establish collaborative pharmacist-patient relationships.

OBJ R2.2.1: (Synthesis) Formulate a strategy that effectively establishes a patient-centered pharmacist-patient relationship.

- **Pharmacist incorporates the patient's role and responsibilities in the making of care decisions**
- **Pharmacist conveys his/her role in the making of care decisions to the patient**
- **Roles and responsibilities attributed to patient and pharmacist are appropriate for a patient-centered pharmacist-patient relationship**
- **Pharmacist displays appropriate behavior to gain the respect of the patient**
- **Pharmacist displays respect for the preferences and expressed needs of the patient**
- **Relationship reflects trust from both parties**
- **Relationship reflects appreciation of cultural factors and patient's health literacy**

*Suggested assessment activities: Examination of the relationship between the resident and a specific patient in his or her care through direct observation and interviews with staff*

- IO Explain the meaning of the term "patient-centered" and the rationale for its use.*
- IO Explain the appropriate sharing of power and responsibility between the pharmacist, patient and caregivers in a patient-centered, pharmacist-patient relationship.*
- IO Explain why it is important that the pharmacist communicate with the patient in a shared and fully open manner in a patient-centered, pharmacist-patient relationship.*

- IO Explain the role of demonstrating respect for the patient's individuality, emotional needs, values, and life issues in a patient-centered, pharmacist-patient relationship.*
- IO Explain the influence that the community pharmacy's approach to continuity of care, focus on health promotion, and focus on health care maintenance can have on the establishment of the pharmacist-patient relationship.*
- IO Explain the role of cultural competence and health literacy in achieving an effective pharmacist-patient relationship, both in gathering information and in achieving patient adherence to prescribed therapy and/or prevention and health promotion strategies.*
- IO Explain how the strategy for establishing a patient-centered pharmacist-patient relationship must change as the age category of the patient (i.e., adolescent, adult, geriatric) changes.*
- IO Explain the characteristics of the rapport that must be established between the pharmacist and patient in the community pharmacy environment.*

Goal R2.3: Collect and analyze patient information to identify medication or non-medication-related problems.

OBJ R2.3.1: (Application) Effectively apply appropriate physical assessment skills employed by community pharmacists to secure needed patient-specific information.

- As appropriate, utilizes a core physical assessment reference library
- Chooses appropriate physical assessment parameters specific to individual patient needs.
- Identifies appropriate physical assessments to perform specific to individual patient needs
- Documents physical assessment parameters appropriately.

Suggested assessment activity: Direct observation of resident applying appropriate physical assessment skills with a specific patient.

- IO Identify a core physical assessment reference library.*
- IO List the pertinent physical assessments necessary to appropriately evaluate one's practice's typical patient population.*
- IO Explain the technique for executing each physical assessment required for one's own practice.*

OBJ R2.3.2: (Analysis) Collect and organize all patient-specific information (including information from the referring provider, if applicable) needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered, medication and/or non-medication, health improvement, wellness, and/or disease prevention recommendations in collaboration with other healthcare professionals.

- **Information base is thorough and complete (demographic, medical, medication therapy, immunization history, behavioral/lifestyle, social/economic, and administrative [e.g., physician/prescriber, informed consent, pharmacy], and patient's values, preferences, and goals for therapy)**

- **Information base does not contain extraneous information**

- **Sources of information are the most reliable available**

- **Utilizes a systematic process for recording information that is functional for subsequent problem solving and decision making**

*Suggested assessment activity: Audit of resident's information base for a specific patient or pharmacy department's patient information base*

*IO Identify the types of patient-specific information the community pharmacist requires to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication and/or non-medication, health improvement, wellness and/or disease prevention recommendations in collaboration with other healthcare professionals.*

*IO Explain the increased importance in the community pharmacy environment of collecting information regarding the patient's culture, literacy, emotional needs, preferences, values, and life issues in formulating evidence-based, patient-centered care decisions.*

*IO Explain circumstances in which there is increased importance for the community pharmacist to collect pharmacogenomic and/or pharmacogenetic information.*

*IO Explain unique community pharmacy environmental issues surrounding confidentiality of patient information and the impact of HIPPA regulations on the collection and safeguarding of patient-specific information.*

*IO Explain prevention, signs and symptoms, epidemiology, risk factors, pathogenesis, natural history, pathophysiology, clinical course, etiology, biopsychosocial factors, socioeconomic factors, and treatment of diseases commonly encountered in the community pharmacy environment.*

*IO Explain the mechanism of action, pharmacokinetics, pharmacodynamics, pharmacoeconomics, usual regimen (dose, schedule, form, route, and method of administration), indications, contraindications, interactions, adverse reactions, and therapeutics of medications used in the treatment of diseases commonly encountered in the community pharmacy environment.*

*IO Where known, explain the mechanism of action, pharmacokinetics, pharmacodynamics, usual regimen, indications, contraindications, interactions, adverse reactions, and therapeutics of nontraditional medications used in the treatment of community pharmacy patients. .*

*IO Integrate effective communication techniques in interviews with patients, caregivers, health care professionals, or others so that*

*the patient-specific information needed by the pharmacist for evidence-based, patient-centered care is collected.*

*IO When presented with a limited time frame visit use an interview strategy that elicits maximum pertinent information*

*IO Explain effective phone techniques to be used to obtain information for the patient database.*

*IO Explain the impact of having discontinuous or fragmented patient-care information when developing an interview strategy for patients (e.g., patient seeing multiple caregivers, last visit 6 months ago).*

*IO Distinguish the meaning of non-verbal cues in patient encounters (e.g., broken sentences in an asthmatic patient, difficult ambulation in an arthritic patient).*

*IO Determine the most reputable and credible source of required patient-specific information.*

*IO Explain strategies for getting information from unwilling or inaccessible participants.*

*IO Record required patient-specific information in a manner that facilitates detecting and resolving medication-related problems and making appropriate evidence-based, patient-centered medication therapy recommendations to prescribers.*

*IO In a setting where none exists, create an effective organizational system for recording patient-specific data.*

OBJ R2.3.3: (Analysis) Determine the presence of any of the following medication or non-medication problems, including non-adherence, in a patient's current therapy:

1. Medication used with no medical indication
2. Patient has medical conditions for which there is no medication or non-medication therapy prescribed
3. Medication or non-medication therapy prescribed inappropriately for a particular medical condition
4. Immunization regimen is incomplete
5. Current medication therapy regimen contains something inappropriate (dose, dosage form, duration, schedule, route of administration, method of administration)
6. There is therapeutic duplication
7. Medication to which the patient is allergic has been prescribed
8. There are adverse drug or device-related events or potential for such events
9. There are clinically significant drug-drug, drug-disease, drug-nutrient, or drug-laboratory test interactions or potential for such interactions
10. Medication or non-medication therapy has been affected by social, recreational, or nontraditional drug use by the patient or others



11. Patient not receiving full benefit of prescribed medication or non-medication therapy
  12. There are problems arising from the financial impact of medication or non-medication therapy on the patient
  13. Patient lacks understanding of medication or non-medication therapy
  14. Patient not adhering to medication or non-medication therapy regimen
  15. Other problems not listed above
- **All medications used with no medical indication are identified**
  - **All medical conditions for which there is not a medication prescribed are identified**
  - **All medications inappropriately prescribed for a particular medical condition are identified**
  - **All missing immunizations are identified**
  - **Everything inappropriate in the current medication therapy regimen (dose, dosage form, schedule, duration, route of administration, method of administration) is identified**
  - **All therapeutic duplications are identified**
  - **All medications in the regimen to which the patient is allergic are identified**
  - **Any presence or potential for adverse drug events that may affect outcomes of the patient is identified**
  - **Any presence or potential for clinically significant drug interactions is identified**
  - **Any interference with medical therapy by social, recreational, nonprescription or nontraditional medication use is identified**
  - **Any instance of the patient not receiving full benefit of prescribed medication therapy is identified (e.g., system failure, clinical failure)**
  - **All problems arising from the financial impact of medication therapy on the patient are identified**
  - **Any lack of patient (or caregiver) understanding of his/her medication therapy is identified**
  - **Any lack of patient adherence to medication regimen is identified**
  - **Nothing is identified as a problem that is not a problem**
  - **If medication-use problems are found, documentation exhibits the following characteristics:**
    - **Recorded in time to be useful**
    - **Follows the organization's policies and procedures, including that entries are signed, dated, timed, legible, and concise**
- Suggested assessment activity: Audit of patient's healthcare records, resident's patient information base, or pharmacy's patient information base*
- IO Explain the increased impact of psychological, cultural, and economic factors on patients' adherence to prescribed medication and/or non-medication therapy.*
- IO Explain how the patient's failure to sense importance or urgency of complying with therapy may affect adherence.*

- IO Explain factors to consider when comparing the benefits and risks of an alternative medication therapy.*
- IO Explain factors to consider when trying determining the likelihood that a reaction is occurring because of a medication.*
- IO Assess criteria for assessing the severity of an adverse drug reaction.*
- IO Explain acceptable approaches to the therapeutic management of an adverse drug reaction.*
- IO) Explain mechanisms of determining therapeutic consequence resulting from defective medications or drug products (e.g., exacerbation of asthma due to a defective inhaler).*
- IO Use a functional format to list patients' pharmacotherapy problems.*
- IO Prioritize patients' pharmacotherapy problems.*
- IO Explain varying methods of payment for medication therapy for community pharmacy patients and their effect on adherence.*
- IO Explain how the perspective of long-term management influences the prioritization of community pharmacy patients' medication and non-medication therapy problems.*
- IO Explain how the community pharmacy's priorities for patient care influence management of patients' medical problems.*

OBJ R2.3.4: (Analysis) Based on an analysis of the comprehensive patient information, prioritize a patient's healthcare needs.

- Identifies unmet healthcare needs of patient
- Needs are prioritized appropriately based on professional judgment as well as patient's values, preferences, priorities and goals

Suggested assessment activity: Audit of patient's healthcare records, resident's patient information base, or pharmacy's patient information base and direct observation of interaction with patient.

Goal R2.4: Design comprehensive evidence-based medication or non-medication, health improvement, wellness, and/or disease prevention regimens for patients.

OBJ R2.4.1: (Synthesis) Specify therapeutic goals, compatible with long-term management of the patient, incorporating the principles of evidence-based medicine that integrate patient-specific data; disease, medication and non-medication-specific information; ethics; and quality-of-life considerations.

- **Goals reflect consideration of all relevant patient-specific information including culture and preferences**
- **Goals reflect consideration of the goals of other interdisciplinary team members**
- **Goals reflect consideration of the patient's disease state(s)**
- **Goals reflect consideration of medication-specific information**
- **Goals reflect consideration of best evidence**

- **Goals reflect consideration of ethical issues involved in the patient's care**
- **Goals reflect consideration of quality-of-life issues specific to the patient**
- **Goals reflect integration of all the above factors influencing the setting of goals**
- **Goals are realistic**
- **Goals are measurable**
- **Documentation exhibits the following characteristics:**

**1. Recorded in time to be useful**

**2. Follows the organization's policies and procedures, including that entries are signed, dated, timed, legible, and concise**

*Suggested assessment activity: Audit of patient's healthcare records, resident's patient information base, or pharmacy's patient information base*

*IO Explain the use in the community pharmacy environment of evidence-based consensus statements and guidelines in the setting of patient-specific therapeutic goals.*

*IO Explain how culture influences patients' perceptions of desirable outcomes.*

*IO Explain the impact of quality-of-life issues on making decisions about therapeutic goals.*

*IO Explain ethical issues that may need consideration when setting therapeutic goals.*

*IO Explain how goals of other healthcare professionals influence the specification and prioritization of therapeutic goals.*

*IO Explain unique aspects of the patient's role in the community pharmacy setting in determining his/her therapeutic goals.*

*IO Explain the roles of disease prevention, health maintenance, and adherence to prescribed therapy in the specification of therapeutic goals.*

*IO Explain the increased influence in the community pharmacy environment of culture on patients' perceptions of desirable outcomes*

*IO Explain the realistic limits of treatment outcomes in the community pharmacy setting.*

*IO Explain how the community pharmacy environment's emphasis on long-term planning and patient continuity affects the setting of therapeutic goals.*

*IO Explain unique aspects of the patient's role in the community pharmacy environment in determining his/her therapeutic goals.*

**OBJ R2.4.2: (Synthesis) Design a patient-centered regimen, including any necessary referrals, compatible with long-term management of a patient, that meets the evidence-based therapeutic goals established for a patient; integrates patient-specific information, disease, medication and nonmedication-specific information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles.**

- **Regimen reflects the therapeutic goals established for the patient**
- **Regimen reflects the patient's and caregiver's specific needs**

- **Regimen reflects consideration of adherence to medication and non-medication regimens**
  - **Regimen is appropriate to the disease states being treated and reflects consideration of best evidence**
  - **Regimen reflects consideration of any pertinent pharmacogenomic or pharmacogenetics**
  - **Regimen reflects consideration of pertinent ethical issues**
  - **Regimen reflects consideration of pharmacoeconomic components (patient, medical, and systems resources)**
  - **Regimen reflects consideration of culture and/or language differences**
  - **Regimen adheres to the organization’s medication-use policies**
  - **Documentation exhibits the following characteristics:**
    1. **Recorded in time to be useful**
    2. **Follows the organization’s policies and procedures, including that entries are signed, dated, timed, legible, and concise**
    3. **Recommended plan is clearly presented**
- Suggested assessment activity: Audit of patient’s healthcare records, resident’s patient information base, or pharmacy’s patient information base*

*IO Explain the use in the community practice environment of evidence-based consensus statements and guidelines in the design of patient-specific therapeutic regimens.*

*IO Accurately interpret best evidence for use in the design of a patient-centered regimen for a specific patient.*

*IO Explain where and how to find the best possible sources of evidence for a specific patient case.*

*IO Explain how to conduct a search for relevant answers to a specific clinical question, including searches of resources that evaluate or appraise the evidence for its validity and usefulness with respect to a particular patient or population.*

*IO Explain how to integrate seemingly applicable findings of best evidence with clinical judgment to arrive at an optimal evidence-based regimen for a specific patient.*

*IO Explain how culture influences community pharmacy patients’ perception of disease and how this affects responses to various symptoms, diseases, and treatments.*

*IO Explain how patient-specific pharmacogenomics and pharmacogenetics may influence the design of community pharmacy patients’ medication regimens.*

*IO Explain how the community pharmacy environment’s emphasis on long-term planning and patient continuity affects the design of therapeutic regimens.*

*IO Explain procedures for acquiring medications for patients who lack adequate medical insurance coverage.*

*IO Explain how to incorporate disease prevention and wellness promotion into community pharmacy patients’ therapeutic regimens.*

*IO Explain additional concerns with compliance, cost, and route of administration when making decisions on medication regimens.*

Goal R.2.5: Design evidence-based monitoring plans for patients.

OBJ R2.5.1: (Synthesis) Design a patient-centered, evidenced-based monitoring plan for a patient's medication and/or non-medication, health improvement, wellness, and/or disease prevention regimen that effectively evaluates achievement of the patient-specific goals.

- **Parameters are appropriate measures of therapeutic goal achievement**
- **Plan reflects consideration of best evidence and appropriate standards of care**
- **Selects the most reliable source for each parameter measurement**
- **Value ranges selected are appropriate for the patient**
- **Parameters measure efficacy**
- **Parameters measure potential adverse drug events**
- **Parameters are cost-effective**
- **Measurement of the parameters specified is obtainable**
- **Plan reflects consideration of adherence to medication or non-medication therapy**
- **Plan includes strategy for assuring patient returns for needed follow-up visit(s)**
- **When applicable, plan reflects preferences and needs of the patient**
- **Documentation exhibits the following characteristics:**
  1. **Recorded in time to be useful**
  2. **Follows the organization's policies and procedures, including that entries are signed, dated, timed, legible, and concise**
  3. **Recommended plans are clearly presented**

*Suggested assessment activity: Audit of patient's healthcare records, resident's patient information base, or pharmacy's patient information base*

*IO Explain the use in the community pharmacy environment of evidence-based consensus statements and guidelines in the design of patient-specific monitoring plans.*

*IO Compare and contrast various methods for monitoring patient adherence (e.g., refill rates, questioning, return demonstration).*

*IO Determine monitoring parameters that will measure achievement of goals for a therapeutic regimen.*

*IO State customary drug-specific monitoring parameters for medical regimens commonly prescribed.*

*IO Explain the relationship between what are normal value ranges for parameters and the influence on those ranges by a given disease state.*

*IO Identify the most reliable sources of data for measuring the selected parameters.*

*IO Define a desirable value range for each selected parameter, taking into account patient-specific information.*

*IO Explain factors that should influence the frequency and timing of parameter measurements in monitoring plans.*

- IO Explain cultural and social issues that should be considered when designing a monitoring plan for a community pharmacy patient.*
- IO Explain the importance of considering what is feasible and useful when designing a monitoring plan for a community pharmacy patient.*
- IO Explain effective approaches to assuring patient return for follow-up visits in the community pharmacy environment.*
- IO Explain effective strategies for measuring adherence to prescribed medication and non-medication therapies for the community pharmacy patient.*

Goal R2.6: Design patient education for a patient's regimen and monitoring plan.

OBJ R2.6.1: (Analysis) For a specific patient accurately identify what pharmacist delivered education will be essential to the patient and/or the caregiver understanding of the patient's therapeutic plan, how to adhere to it, and the importance of adherence.

- Identifies effective methods for addressing barriers to the patient's adherence to medications
- Utilizes a systematic and educationally sound method to identify potential patient educational materials
- Selects appropriate educational materials based on patient's needs

Suggested assessment activity: Review of resident's proposed pharmacist delivered education for a particular patient.

- IO Explain strategies for convincing patients of the importance of adhering to their therapeutic plans.*
- IO Use a systematic and educationally sound method for determining when it is appropriate to use handouts or visual aids and for selecting the appropriate aid.*

OBJ R2.6.2: (Synthesis) Design an effective and efficient plan for meeting the educational needs of a specific patient including, but not limited to, providing a comprehensive list of the patient's medications, information on medication and/or non-medication therapy, adverse effects, adherence, appropriate use, handling, and medication administration.

- Plan meets the educational needs of the patient and the interdisciplinary team.
- Plan takes into account the health literacy of the patient and/or caregiver(s)
- Plan includes adequate and appropriate information about the patient's medication and/or non-medication therapy
- Plan includes adequate and appropriate information about adverse effects

- Plan includes adequate and appropriate information about adherence
- Plan includes adequate and appropriate information about appropriate use
- Plan includes adequate and appropriate information about handling
- Plan includes adequate and appropriate information about medication administration

Suggested assessment activity: Review of resident's written plan for meeting the educational needs of a specific patient

Goal R2.7: Recommend or communicate regimens and monitoring plans for patients.

OBJ R2.7.1: (Application) Recommend or communicate a patient-centered, evidence-based, medication and/or non-medication, health improvement, wellness, and/or disease prevention regimen and corresponding monitoring plan to patients and other healthcare professionals in a way that is systematic, logical, accurate, timely, and secures consensus from the patient and other healthcare professionals.

- **Recommendation is persuasive**
- **Presentation of recommendation accords patient's right to refuse treatment**
- **If patient refuses treatment, resident exhibits responsible professional behavior**
- **Creates an atmosphere of collaboration**
- **Skillfully defuses negative reactions**
- **Communication conveys expertise**
- **Communication is assertive, but not aggressive**
- **Where the patient has been directly involved in the design of the plans, communication appropriately reflects previous collaboration**
- **Medical record documentation exhibits the following characteristics:**
  1. **Recorded in time to be useful**
  2. **Follows the organization's policies and procedures, including that entries are signed, dated, timed, legible, and concise**
  3. **Recommended plans are clearly presented**

*Suggested assessment activity: Audit of patient's healthcare records, resident's patient information base, or pharmacy's patient information base where recommendation to the caregiver is done in writing; direct observation of communication process to a specific patient*

*IO Explain the right of patients to refuse a treatment.*

*IO Explain the importance of explicitly citing the use of best evidence when recommending or communicating a patient's regimen and monitoring plan.*

*IO Explain what would be a pharmacist's responsible professional behavior in the circumstance that a patient refuses a proposed treatment.*

*IO Differentiate between circumstances where documenting in the patient chart is sufficient and when communication to other healthcare professionals requires immediacy.*

Goal R2.8: Implement regimens, monitoring plans, and provide patient education for patients.

OBJ R2.8.1: (Application) When appropriate, order or conduct tests according to the organization's policies and procedures.

- Tests are appropriate
- No tests are omitted that should be included
- Excessive tests that are not clinically warranted are avoided.
- Testing procedure follows organization's policies and procedures
- Testing technique is appropriate

Suggested assessment activity: Review of resident's documentation of tests ordered and/or direct observation of resident conducting tests.

OBJ R2.8.2: (Application) Use effective patient education techniques to provide and evaluate the effectiveness of the patient education designed to meet the patients' needs and empower patients to become active participants in their care.

- Resident utilizes appropriate behavioral techniques (such as using open-ended questions, identifying non-verbal cues)
- Resident utilizes appropriate communication techniques to convey risk and benefit
- Resident ensures patient can demonstrate understanding

Suggested assessment activity: Direct observation of resident providing patient education to a particular patient

OBJ R2.8.3: (Complex Overt Response) When permissible, use skills to administer immunizations.

- Uses appropriate immunization technique
- Follows organization's policies and procedures for management and administration of immunizations
- Documents immunization appropriately

Suggested assessment activity: Direct observation of resident administering an immunization.

IO Explain the state's regulations regarding scope of practice for immunization administration.

IO Explain the clinical management and administration considerations for each type of permissible vaccine to be administered by pharmacists.

OBJ R2.8.4: (Application) When permissible, prescribe, administer, and/or monitor medications under collaborative practice agreements.



- Appropriately prescribes medication as outlined in collaborative practice agreement
- Appropriately administers medication
- Appropriately monitors medication
- Follows organization's policies and procedures
- Effectively communicates actions to physician or other prescriber responsible for the collaborative agreement

Suggested assessment activity: Direct observation of resident prescribing, administering, and/or monitoring medications under collaborative practice agreements; or review of a patient medical record for which resident prescribed, administered, and/or monitored medications.

*IO Explain the state's regulations regarding scope of practice for collaborative practice agreements.*

OBJ R2.8.5: (Application) Use a working knowledge of the organization's referral process to make any necessary patient referrals.

- **Referral is the correct option**
- **Referral is to the most appropriate category of health care professional to meet the patient's health care need**
- **Referral contains all pertinent information required by the recipient to take appropriate action**
- **Patient is part of the decision to refer**
- **Referral is made according to the organization's policies and procedures**

*Suggested assessment activities: A combination of direct observation of practice; audit of patient's healthcare records, resident's patient information base, or pharmacy's patient information base; interview of patient who has been referred; and interview of health care professional to whom the resident has referred the patient*

*IO Explain the organization's process for making a patient referral.*

*IO Explain the information needed to make an appropriate referral.*

*IO Explain a systematic process for assessing the acuity of a patient's illness.*

*IO Explain the importance of following up on patients who are referred to other health care providers.*

*IO Explain the importance of integrating follow-up information into the long-term management plan.*

Goal R2.9: Evaluate patients' progress and redesign regimens and monitoring plans.

OBJ R2.9.1: (Evaluation) Accurately assess the patient's progress toward the specified therapeutic goal(s) using all available information including information from referrals.

- **Accounts for all patient data specified in the monitoring plan**
- **Interprets each monitoring parameter measurement accurately**
- **Accounts for the patient's current status**

- Properly judges the reliability of data (e.g., timing or site of collection, differences in test sites)
  - Where monitoring data are incomplete, makes sound judgments in determining if there are sufficient data upon which to base a conclusion
  - Conclusions drawn reflect consideration of any significant trends in laboratory values or clinical endpoints
  - Conclusions drawn reflect consideration of the safety and effectiveness of the current medication therapy
  - Conclusions drawn reflect consideration of any ineffectiveness in patient counseling
  - Conclusions drawn reflect consideration of patient's adherence
  - Overall conclusions about reasons for patient's progress or lack of progress toward each stated goal is appropriate
  - Medical record documentation exhibits the following characteristics:
    1. Warrants documentation
    2. Recorded in time to be useful
    3. Follows the organization's policies and procedures, including that entries are signed, dated, timed, legible, and concise
- Suggested assessment activity: Audit of patient's healthcare records, resident's patient information base, or pharmacy's patient information base for resident's interpretation of monitoring data for a specific patient*
- IO Gather data as specified in a monitoring plan.*
- IO Determine reasons for a patient's progress or lack of progress toward the stated health care goal.*
- IO Explain the potential for decreased reliability of self-reported monitoring data.*
- IO Explain the importance of the analysis of trends over time in monitoring parameter measurements for community pharmacy patients.*
- IO Accurately assess the effectiveness of a patient-specific education program.*
- IO Explain methods for assessing the effects of patient-specific education.*

OBJ R2.9.2: (Synthesis) Redesign a patient-centered, evidence-based medication and/or non-medication, health improvement, wellness, and/or disease prevention regimen and/or corresponding monitoring plan, as necessary, based on evaluation of monitoring data and outcomes.

- **Modifications to the regimen and/or monitoring plan are appropriate** (See criteria above for building the information base, designing therapeutic regimens, and designing monitoring plans)

- **Modifications to the plan are effectively communicated to the patient, caregivers, prescriber, and other relevant health care professionals in a timely manner**
- **Conditions of urgency for communicating results to the prescriber are honored**

*Suggested assessment activity: Audit of patient's healthcare records, resident's patient information base, or pharmacy's patient information base*

*for modifications and communication of modifications to a specific patient's plan*

Goal R2.10: Communicate ongoing patient information to other healthcare professionals.

OBJ R2.10.1: (Application) Communicate accurate, timely, and pertinent medication and/or non-medication, health improvement, wellness, and/or disease prevention information to the receiving health care professional(s) when transferring a patient from one health care setting to another.

- **Includes all necessary information**
- **Information is conveyed in a timely manner**
- **Transfers information to all concerned health professionals**
- **Is available to clarify any related issues**
- **Follows organization's policies and procedures for communication**
- **If a medical record entry is made, it exhibits the following characteristics:**

1. **Warrants documentation**
2. **Recorded in time to be useful**
3. **Follows the organization's policies and procedures, including that entries are signed, dated, timed, legible, and concise**

*Suggested assessment activity: Direct observation of resident communication of continuity of care information of a specific patient and, if medical record entry is made, review of documentation of communication of information*

*IO Explain the requirements of HIPAA privacy regulations pertaining to the communication of patient information.*

OBJ R2.10.2: (Application) Ensure that accurate and timely medication-specific information regarding a specific patient reaches those who need it at the appropriate time.

- **Information conveyed at the time it is needed**
- **Information conveyed is accurate**
- **Information conveyed in a format that is usable by the receiver**
- **Information is transmitted by means that are accessible to the receiver**

*Suggested assessment activity: Review of resident's communication of patient-specific information at various stages of a patient's care*

*IO Explain the importance of effective communication of modifications of the therapeutic plan to the patient and other healthcare professionals.*

*IO Determine instances in which there is urgency in communicating the results of monitoring to other healthcare professionals.*

Goal R2.11: Document patient care activities appropriately.

OBJ R2.11.1: (Analysis) Appropriately select patient -care activities for documentation.

- **Activity selected for documentation is appropriate and relevant to patient care goals**

*Suggested assessment activity: Review of resident documentation of his or her direct patient care activities for a specific period of time*

OBJ R2.11.2: (Application) Use effective and efficient communication practices when documenting a patient -care activity.

**Appropriate documentation tool is utilized**

• Medical record documentation exhibits the following characteristics:

1. Warrants documentation
  2. Recorded in time to be useful
  3. Follows the organization's policies and procedures, including that entries are signed, dated, timed, legible, and concise
  4. Content includes pertinent subjective and objective data
  5. Assessment reflects accurate interpretation of the objective and subjective data
  6. Recommended plans are clearly presented and relate to the conclusion
- Reports of medication-related problems (e.g., ADRs, medication errors, drug interactions) adhere to the organization's policies and procedures

*Suggested assessment activity: Review of resident documentation of his or her direct patient care activities and of reports of medication-related problems for a specific period of time*

*IO Explain the characteristics of exemplary documentation systems that may be used in the community pharmacy environment.*

OBJ R2.11.3: (Application) Record patient outcomes according to the organization's policies and procedures.

- Uses appropriate documentation tools and methods
- Follows organization's policies and procedures
- Records clinically appropriate data for measuring outcomes
- Records financially appropriate data for measuring outcomes
- Records patient's preferences
- Collects and records data for humanistic outcomes

Suggested Assessment Activity: Review of resident documentation of outcomes for a particular patient

*IO Explain the characteristics of patient outcomes that should be documented.*

***Outcome R3: Exercise leadership and practice management skills.***

Goal R3.1: Exhibit essential personal skills of a practice leader.

OBJ R.3.1.1: (Characterization) Practice self-managed continuing professional development with the goal of improving the quality of one's own performance through self-assessment and personal change.

- Makes accurate, criteria-based assessments of own ability to perform practice tasks
- Routinely seeks applicable new knowledge and skills when performance does not meet expectations
- Sets realistic expectations of performance
- Regularly integrates new knowledge and skills into subsequent performances of a task to meet expectations

- **Documentation of the ability to perform a practice tasks is concise and readily interpretable by a peer**
- **Takes responsibility for work quality**
- **System for staying current with literature includes review of literature pertinent to the area of practice**
- **System for arranging and storing pertinent literature is efficient and effective**

*Suggested assessment activity: Cumulative direct observation of practice*

*IO Explain the systematic process by which professionals pursue expertise.*

*IO Formulate and adhere to an integrated system for staying current with, arranging, and storing pertinent practice-related literature.*

*IO State the literature pertinent to one's area of practice.*

*IO State sources of information outside of pharmacy that contain ideas and/or information that may be effectively applied to one's practice.*

*IO Explain the importance of storing practice-related information in an organized manner.*

*IO Explain the components of an effective self-assessment system.*

OBJ R3.1.2: (Characterization) Act ethically in the conduct of all practice-related activities.

- **When presented in practice with an ethical dilemma, chooses a course of action that reflects accepted ethical standards for pharmacists**
- **Can explain the course of ethical reasoning that led to the ethical decision made**
- **All work prepared for publication is properly attributed**

*Suggested assessment activity: Direct observation of practice when an ethical decision is required or interview with other staff regarding choice of action when ethical decision required and preceptor not present*

*IO Explain ethical/conflict of interest issues in business relationships.*

*IO Explain the system of ethical reasoning (consequentialist or nonconsequentialist) employed in arriving at a particular ethical decision.*

*IO Explain systems of ethical reasoning.*

*IO Explain ethical principles embodied in the American Pharmacists Association's Code of Ethics for Pharmacists.*

*IO Explain rules for attribution of sources of published work when preparing written documents or presentations.*

OBJ R3.1.3: (Application) Demonstrate commitment to the profession through active participation in the activities of local, state, and/or national professional associations.

- **Is a member of and activity participates in local, state, national, or international pharmacy associations**
- **In discussion offers an accurate comparison of the benefits to own practice of active participation in the array of associations at each level**

- **In discussion accurately identifies the benefits to own practice of publishing in the professional literature**

*Suggested assessment activity: Cumulative direct observation of practice*

*IO Explain the local, state, and national organizations and the activities of each that are essential to the developing pharmacy professional.*

*IO Explain why it is important to publish in the professional literature.*

*IO Explain why it is important to become actively involved in the leadership of professional associations.*

OBJ R3.1.4: (Characterization) Serve as a role model for pharmacists, pharmacy students, pharmacy technicians, and other healthcare professionals.

- Exhibits professional behavior
- Understands the need to be a positive role model
- Understands the impact their decisions and behavior have on others

Suggested Assessment Activity: Direct observation of resident's behavior

OBJ R3.1.5: (Organization) Choose and manage daily activities so that they fulfill practice responsibilities and place an appropriate priority on the delivery of patient-centered care

- **When insufficient time is available to meet all practice responsibilities, gives preference to those of the highest priority**
- **Selects appropriate daily activities**
- **Meets work responsibilities within the confines of a reasonable workday**
  - **Meets deadlines appropriately and in harmony with others**

*Suggested assessment activity: Direct observation of job performance for a specific time period*

*IO Explain an effective system for the management of one's time in professional practice.*

OBJ R3.1.6: (Comprehension) Explain the role and importance of pharmacist active engagement in the political and legislative process.

- Discussion includes roles for pharmacists in the political and legislative process
- Discussion includes the importance of active engagement in the political and legislative process
- Discussion includes national, regional, and local health care policy issues.

Suggested Assessment Activity: Resident discussion of the role and importance of pharmacist active engagement in the political and legislative process

*IO Explain current national health care policy issues.*

*IO Explain current regional health care policy issues.*

*IO Explain current local health care policy issues.*

Goal R3.2: Exhibit practice leadership in organizational and management activities.

OBJ R3.2.1: (Synthesis) Participate in the pharmacy's planning processes.

• **Actively participates in the planning process**

• **Contributions reflect understanding of effective planning principles for the type of planning engaged in**

*Suggested assessment activity: Direct observation of resident's contributions during a pharmacy planning meeting; review of any written contributions prepared by the resident*

*IO Explain the principles and application of various approaches to pharmacy planning, including the development of an organizational strategic plan.*

*IO If in the corporate pharmacy or health-system environment, explain the organization's vision and mission statements.*

*IO Explain the necessity for congruence between the corporate pharmacy or health-system and the pharmacy's vision and mission statements.*

*IO Explain the purpose of a pharmacy's vision and mission statements.*

*IO Explain the expected components of a pharmacy vision and a pharmacy mission statement.*

*IO Explain who should be involved in the writing of a pharmacy vision and a mission statement.*

OBJ R3.2.2: (Synthesis) Use knowledge of an organization's political and decision-making structure to influence the accomplishment of a practice area goal.

• **Resident obtains consensus to pursue the proposed course of action**

*Suggested assessment activity: Direct observation of the resident's strategy in achieving a practice area goal that requires management/leadership approval*

*IO Explain the importance of networking in achieving practice area and other professional goals.*

OBJ R3.2.3: (Application) Use group participation skills when leading or working as a member of a committee or informal work group.

• **When leading, keeps the group focused on meeting its purpose and responsibilities**

• **When leading, prepares an effective agenda for meeting**

• **When leading, meets the site needs for the meeting**

• **When leading, writes effective minutes or notes**

• **When leading, supplies information from the meeting to appropriate individuals**

• **When leading, uses consensus-building skills as follows:**

1. Assesses the desirability of group input
2. Identifies the type of decision needed (debatable, exploratory, negotiated, routine, emergency decisions)
3. Selects appropriate tools for group action (i.e., brainstorming, procedure setting, individual polling, etc.)
4. Provides a clear definition of the problem (What is the problem? How did we get here? What are the effects of the problem?)
5. Communicates a clear understanding of who has the responsibility for the decision
6. Uses effective communication and open-ended questions for producing ideas (What results do we want? What solutions can we think of?)
7. Selects an appropriate size of group for decision making
8. Provides a means for effectively testing different alternatives relative to the problem (What decision is best for us?)
9. Elicits ideas from others on how to make change go smoothly
10. Facilitates commitment to the decision
11. Presents an honest commitment to the group decision-making process (Who will do what by when? Where? How?)
12. Obtains agreement on the procedures and methods for decision making prior to deliberation of the issue
13. Offers ideas
14. Asks key or clarifying questions
15. Keeps the group focused on the task
16. Summarizes the discussion and decisions
  - When leading, manages group dynamics
  - When a member, participates actively and positively in the meeting
  - When a member, makes required decisions appropriately and without hesitation
  - When a member, remains focused on the main issues
  - When a member, does one's share of the work

*Suggested assessment activities: Direct observation of resident leading a committee and/or workgroup; direct observation of resident at work in a specific committee or informal work group; interview with other members of the committee or informal work group*

*IO Explain effective strategies for leading a meeting.*

*IO Explain the role of delegation for task accomplishment in effective leadership.*

OBJ R3.2.4: (Synthesis) Integrate compliance with community practice accreditation, legal, regulatory, and safety requirements into daily practice.

- Accurately assesses pharmacy's compliance with regulatory and safety requirements
- Develops an appropriate course of action to resolve any discrepancies with regulatory and/or safety requirements.
- Implements the course of action into practice.
- Appropriately follows federal, state, and local safety/practice requirements (e.g. OSHA, CLIA)



Suggested Assessment Activity: Direct observation of resident practice; review of written assessment and plan

- IO State current regulatory and safety requirements affecting community practice.*
- IO Explain the importance of these regulations and safety requirements.*
- IO Explain how the regulations and safety requirements affect community practice.*
- IO State the process by which the regulations and safety requirements are implemented.*
- IO State the agencies responsible for regulating community practice.*

OBJ R3.2.5: (Synthesis) Prioritize the work load, organize the work flow, and verify the accuracy of the work of pharmacy technical and clerical personnel involved in all community pharmacy services.

- **Needed work is accomplished in the time allotted**
- **Properly delegate work to technical and clerical personnel**
- **Work load is properly prioritized**
- **After review by the resident, all work performed by support personnel is accurate**

*Suggested assessment activity: Direct observation of the resident's use of pharmacy technical and clerical personnel during a specified time period; review of accuracy of work performed by support personnel under the direct supervision of the resident*

- IO Explain the principles of work delegation.*
- IO Explain systematic approaches to organizing and keeping track of the work of multiple participants in a given work activity.*
- IO Explain the importance of routine checks on accuracy of the work of pharmacy technical and clerical personnel or others under one's supervision.*
- IO Explain a systematic process for scheduling staff, including back-up plans for when assigned staff are not available.*

OBJ R3.2.6: (Application) Observe organizational customer service policies and procedures in the conduct of daily practice activities.

OBJ R3.2.7: (Application) Use knowledge of the principles of change management to achieve organizational, departmental, and/or team goals.

- **Assures that the practice environment is conducive to the desired change**
- **Assures that staff have the opportunity to acquire any necessary new knowledge or skills in order to accommodate the change**
- **Assures that those involved in the change are motivated to exercise their roles**
- **Follows through by monitoring the progress of the planned change**
- **Keeps others informed of progress on the implemented change**

***Suggested assessment activities: Direct observation of resident performance when tasked with a significant change to be planned and executed; review of outcome of the task/step ---success or failure of change effort***

*IO Explain the principles of change management.*

Goal R3.3: Contribute to the development, implementation, and evaluation of a new pharmacy service or to the enhancement of an existing service.

OBJ R3.3.1: (Synthesis) Generate an idea for a new service or evaluate a current pharmacy service or program to determine if it meets the stated goals.

- Accurately identifies unmet customer need
- Utilizes modeling to predict the financial outcome(s) of implementing a proposed new or enhanced product or service on meeting unmet customer needs
- Accurately identifies resources (i.e., system, facilities, and human resource) needed for developing and implementing a new or enhanced product or service.
- Accurately predicts the outcome(s) for patients of implementing a new or enhanced product or service.
- Accurately predicts financial benefit to the community pharmacy of implementing a new or enhanced product or service.

Suggested assessment activity: Evaluation or review of a resident's written plan for new service or appraisal of existing service

*IO Accurately identify unmet customer (i.e., patient or plan member; physicians and other health care providers; pharmacies; and, payers) needs.*

*IO Use modeling to predict the financial outcome(s) of implementing a proposed new or enhanced product or service on meeting unmet customer needs.*

*IO Accurately identify resources (i.e., system, facilities, and human resource) needed for developing and implementing a new or enhanced product or service.*

*IO Accurately predict the outcome(s) for patients of implementing a new or enhanced product or service.*

*IO Accurately predict financial benefit to the community pharmacy of implementing a new or enhanced product or service.*

*IO Explain the role of other healthcare professionals in meeting the needs of patients involved in disease state management programs.*

*IO Explain why and how potential shifts in market share should be factored into decisions on the marketability of a product or service.*

*IO Explain the potential barriers to acceptance of community pharmacy patient care services (e.g., medical practitioner acceptance, community attitudes, staff motivation)*

OBJ R3.3.2: (Synthesis) Develop a business plan for a new service or an enhanced service, if applicable.

- **Proposal identifies the components of a business plan that are essential to the new/enhanced service**
- **Proposal identifies necessary stake holders in the new/enhanced service**
- **Proposal identifies how to assess the effectiveness of and value of the new/enhanced service for the pharmacy, organization, and patients**
- **Proposal identifies potential revenue sources**

*Suggested assessment activity: Review of a proposal for a new or enhanced pharmacy service to which the resident has contributed*

OBJ R3.3.3: (Application) Use presentation and persuasive skills to secure approval of a plan for a new or enhanced service.

- Presentation is appropriate for audience
- Resident uses appropriate presentation and persuasive skills

Suggested assessment activity: Direct observation of resident presentation

*IO Explain how to identify the stakeholders for a specific proposal.*

OBJ R3.3.4: (Synthesis) Contribute to the development of a marketing strategy for a new or enhanced service that is integrated with the overall marketing plan.

- Strategy is integrated with the overall marketing plan
- Strategy is appropriate for target audience
- Strategy proposes appropriate method of delivery

Suggested assessment activity: Review of written marketing strategy to which resident has contributed

*IO Explain the aspects of a marketing strategy including target audience, method of delivery, and evaluation.*

*IO Explain the organization's existing marketing plan and/or business model.*

OBJ R3.3.5: (Comprehension) Explain the various mechanisms by which pharmacists can be paid for the patient care services they provide.

*IO State sources of information for public and private sector payment for pharmacist patient care services.*

OBJ R3.3.6: (Analysis) Employ an effective strategy for obtaining compensation for a new or enhanced service from appropriate potential sources of compensation.

*IO Explain the process for evaluating and/or negotiating contracts with third party payers.*

*IO Explain the use of payment codes, including for MTM and CPT, for billing for pharmacist patient care services.*

OBJ R3.3.7: (Synthesis) Implement a new or enhanced service according to the business and marketing plans.

- Follows business and marketing plans
- Incorporates team members appropriately

Assessment activity: Review of implementation process of a new or enhanced service; review of result of implementation

OBJ R3.3.8: (Evaluation) Evaluate the new or enhanced service to determine if it meets the stated goals.

- **Accurately identifies if stated goals are being met by a service or program**
- **Accurately identifies the effectiveness with which goals are being met**
- **Accurately judges the efficiency of delivery**

*Suggested assessment activity: Review of resident's written appraisal of the effectiveness of the new or enhanced pharmacy service or program*

***Outcome R4: Demonstrate project management skills.***

Goal R4.1: Conduct a practice-related project using effective project management skills.

OBJ R4.1.1: (Synthesis) Identify a topic for a practice-related project of significance for community pharmacy.

- **Choice of project is practice-related**
- **Choice of project is in alignment with pharmacy's patient care and/or operational goals**
- **Choice of project warrants investigation**
- **Project can be completed in reasonably expected timeframe**

*Suggested assessment activity: Review of resident's proposed project topic*

*IO Explain the types of resident projects that will meet residency program project requirements and timeframe.*

*IO Explain how one determines if a potential project topic is of significance in one's particular practice setting.*

*IO Explain how to conduct an efficient and effective literature search for a project.*

OBJ R4.1.2: (Synthesis) Formulate a feasible design for a practice-related project.

- **Project proposal contains all customary elements of a proposal**
- **Each proposal element contains all necessary information**
- **Project proposal includes identification of all key stakeholders who must approve**
- **Project timeline milestones, if adhered to, would result in project completion by agreed-upon date**

*Suggested assessment activity: Review of resident's project design*

*IO Explain the elements of a project proposal.*

*IO* When given a particular approved residency project, explain how to identify those individuals who will be affected by the conduct of the project and strategies for gaining their cooperation.

*IO* When given a particular approved residency project, explain how to determine a timeline with suitable milestones that will result in project completion by an agreed upon date.

OBJ R4.1.3: (Synthesis) Secure any necessary approvals, including IRB and funding, for one's design of a practice-related project.

- **Appropriate strategies designed and implemented for gaining cooperation of all stakeholders affected by conduct of the project**

- **If required, IRB approval secured**

- **If required, secures funding**

*Suggested assessment activity: Review of resident's project implementation strategy and documentation of approvals/agreements*

*IO* When given a particular proposed residency project, explain how to identify those key stakeholders who must approve that project.

*IO* Explain the components that make up a budget for a practice-related project.

*IO* Explain the role of the organization's IRB in the approval process of investigations involving human subjects.

OBJ R4.1.4: (Synthesis) Implement a practice-related project as specified in its design.

- **Project completed on time**

- **During conduct of project, project materials well-maintained for accessibility and efficient retrieval**

- **Project process appropriately documented**

- **Project materials well organized and maintained with documentation of the project's ongoing implementation**

*Suggested assessment activity: Review of resident's implementation strategy and project files*

*IO* Explain strategies for keeping one's work on a project at a pace that matches with the timeline plan.

*IO* When given a particular approved residency project, explain methods for organizing and maintaining project materials and documentation of the project's ongoing implementation.

OBJ R4.1.5: (Synthesis) Effectively present the results of a practice-related project.

- **Secures audience attention at the beginning**

- **Style of the speech is appropriate to presentation of a practice-related project report**

- **Portrays credibility**

- **Does not distract with physical mannerisms**

- **Does not distract with verbal habits**

- **Presentation is well organized**

- **Uses appropriate transitions when proceeding from one topic to another**

- **Summarizes key points at the close**

- **Appears poised**

- Uses body language to add interest
  - Pauses appropriately to emphasize points
  - Displays energy and enthusiasm
  - Accurately reads the audience's body language and adjusts the presentation accordingly
  - Answers questions with ease and confidence
- Suggested assessment activity: Direct observation of resident's presentation of completed project*

OBJ R4.1.6: (Synthesis) Successfully employ accepted manuscript style to prepare a final report of a practice-related project.

- Project manuscript utilizes appropriate manuscript style and meets criteria for writing with use of that style
- Project manuscript completed by assigned deadline

*Suggested assessment activity: Review of resident's completed project report*  
*IO When given a particular residency project ready for presentation, explain the type of manuscript style appropriate to the project and criteria to be met when using that style.*

OBJ R4.1.7: (Evaluation) Accurately assess the impact, including sustainability if applicable, of the residency project.

- Assessment accurately reflects impact on the organization
- Assessment accurately reflects consideration of all elements that would determine sustainability

*Suggested assessment activity: Review of resident's assessment of the impact and sustainability of the residency project.*

***Outcome R5: Provide medication and practice-related information, education, and/or training.***

Goal R5.1: Provide effective medication and practice-related education and/or training to groups of patients, groups of caregivers, healthcare professionals, student pharmacists, and the public.

OBJ R5.1.1: (Application) Use effective educational techniques in the design of all educational activities.

- Choice of content for instruction is based on an accurate assessment of the learners' needs
- Activities are based on behaviorally stated educational objectives
- Selection of teaching method is based on the type of learning required (cognitive, psychomotor, affective)
- Content selected for instruction is matched with the intent of the stated educational objectives
- Content of instructional materials is accurate
- Content selected for instruction is complete
- Instruction is properly organized and sequenced
- Written instructional materials are matched to the learners' reading level
- Design of instruction includes use of visual aids when appropriate

*Suggested assessment activity: Review of resident written plan and written instructional materials for delivery of a specific education or training program or other learning activity*

- IO Design instruction that meets the individual learner's needs.*
- IO When given a particular patient data base, therapeutic regimen, and monitoring plan, explain the educational needs of the patient for successful implementation of the therapeutic regimen and monitoring plan.*
- IO Explain the concept of learning styles and its influence on the design of instruction.*
- IO Explain the importance of considering the learner's reading level when designing patient education.*
- IO Write appropriately worded educational objectives.*
- IO Design instruction to reflect the specified objectives for education or training.*
- IO Explain the match between instructional delivery systems (e.g., demonstration, written materials, videotapes) and specific types of learning commonly required of patients.*
- IO Design instruction that employs strategies, methods, and techniques congruent with the objectives for education or training.*
- IO Explain effective teaching approaches for the various types of learning required of patients (e.g., imparting information, teaching psychomotor skills, inculcation of new attitudes).*

OBJ R5.1.2: (Synthesis) Design an assessment strategy that appropriately measures the specified objectives for education or training and fits the learning situation.

**• Plan for assessment will accurately measure the participants' attainment of the educational objectives**

*Suggested assessment activities: Review of resident-designed assessment instrument(s) designed to accompany a specific education or training program to assess participants' learning; review of data collected by the resident through use of the assessment instruments and the resident's conclusions about the level of achievement of learners on the stated objectives*

*IO Explain appropriate assessment techniques for assessing the learning outcomes of pharmacist-provided educational or training programs.*

OBJ R5.1.3 (Application) Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).

- Provides effective, focused direct instruction when warranted**
- Models problem solving by talking out loud about problem-solving process**
- Coaches according to the learner's current need for degree of intensity**
- Selects appropriate problem-solving situations for independent work by the learner**
- Moves with ease between the four preceptor roles as learner needs change**

*Suggested assessment activity: Cumulative direct observations of resident when engaged in practice-based teaching*

*IO Explain the stages of learning that are associated with each of the preceptor roles.*

OBJ R5.1.4 (Application) Use public speaking skills to speak effectively in large and small group situations.

- **Secures audience attention at the beginning**
- **Style of the speech is matched to its intent (persuasion, information giving, entertainment)**
- **Relates remarks to those of previous speakers (if appropriate)**
- **Portrays credibility**
- **Does not distract with physical mannerisms**
- **Does not distract with verbal habits**
- **Speech is well organized**
- **Uses appropriate transitions when proceeding from one topic to another**
- **Summarizes key points at the close**
- **Uses phrases, facts, or stories to increase audience interest**
- **Paints mental images or pictures to increase audience understanding**
- **Uses humor appropriately**
- **Appears poised**
- **Uses body language to add interest**
- **Pauses appropriately to emphasize points**
- **Displays energy and enthusiasm**
- **Accurately reads the audience's body language and adjusts the speech accordingly**
- **Answers questions with ease and confidence**

*Suggested assessment activity: Direct observation of a resident presentation to a large group; direct observation of a resident presentation to a small group*

*IO Explain techniques that can be used to enhance audience interest.*

*IO Explain techniques that can be used to enhance audience understanding of one's topic.*

*IO Explain speaker habits that distract the audience.*

*IO Use a systematic and educationally sound method for determining when it is appropriate to use handouts or visual aids and for selecting the appropriate aid.*

*IO Explain accepted conventions for the design of visual aids and handouts.*

*IO Exercise skill in the operation of audio-visual equipment.*

Goal R5.2: Provide concise, applicable, comprehensive, evidence-based, and timely responses to requests for drug information from health care providers and patients.

OBJ R5.2.1: (Analysis) Discriminate between the requesters' statement of need and the actual drug information need by asking for appropriate additional information.

- **Determines if question is patient-specific**
- **Secures appropriate background information for question type**



- **Accurately identifies request urgency**

*Suggested assessment activity: Direct observation of resident's communication process for clarification of a specific drug information request*

*IO Explain the characteristics of a clearly stated clinical question.*

OBJ R5.2.2: (Synthesis) For drug information requests that can be met by drawing upon one's memory, provide appropriate, evidence-based responses.

- **Response is accurate and based on current evidence**
- **When appropriate, source is cited**
- **When correct response is unknown, indicates appropriately and provides timely follow-up**
- **Responds confidently**

*Suggested assessment activity: Direct observation of communication of a response to a particular unanticipated impromptu drug information request that occurs during the fulfillment of regular practice responsibilities*

OBJ R5.2.3: (Synthesis) When the drug information request requires further evaluation of the literature, formulate a systematic, efficient, and thorough procedure for retrieving drug information.

- **Searches the scope of resources that are appropriate to answer the question**
- **Search strategy matches with the response time required for the request**
- **Search moves appropriately from the general to the specific**

*Suggested assessment activity: Resident discussion of his or her search strategy for a particular information request to occur at the time the strategy is formed but prior to the search itself*

*IO Explain the strengths and weaknesses of manual and electronic methods of retrieving biomedical literature.*

*IO State sources of evidence-based meta-analysis reviews.*

*IO Compare the characteristics of each of the available resources for biomedical literature.*

OBJ R5.2.4: (Analysis) When the drug information request requires further evaluation of the literature, assess the usefulness of biomedical literature gathered.

- **Selects studies that have the following characteristics:**
  1. **Sound design**
  2. **Utilize appropriate statistics and statistical inference**
  3. **Conclusions are supported by results**
- **Selects only literature that has the following characteristics:**
  4. **Currency**
  5. **Lacks bias**
  6. **Reputable source**
  7. **Pertains to the question**
  8. **Accuracy**
  9. **Appropriate referencing**

*Suggested assessment activity: Review of the resident's literature review for studies selected for inclusion for a particular drug information request*

- IO Assess the potential for bias of the author or preparer of all forms of drug information.*
- IO Determine whether a study's methodology is adequate to support its conclusions.*
  - IO Determine whether the endpoint established for a study is appropriate.*
  - IO Explain methods used to test study end point (e.g., pulmonary function studies).*
- IO Explain the effects on study outcomes of various methods of patient selection (e.g., volunteers, patients, or patients with different disease severity).*
- IO Explain the effects of various methods of blinding (e.g., double-blind, single-blind, open-research designs) on study outcomes.*
- IO Explain the effects on study outcomes of various methods of drug assay and quality assurance procedures (e.g., high performance liquid chromatography, assay coefficient of variations).*
- IO Explain the types of pharmacotherapy studies (e.g., kinetic, economic, dynamic) and the kind(s) of data analysis appropriate for each.*
- IO Explain how the choice of statistical methods used for data analysis (e.g., t test, analysis of variance) affects the interpretation of study results and conclusions.*
- IO Determine if a study's findings are clinically significant.*
- IO Explain the strengths and limitations of different study designs.*
- IO Explain how data from a study can be applied to expanded patient populations.*

**OBJ R5.2.5:** (Synthesis) When a drug information request requires further evaluation of the literature, provide evidence-based responses to drug information requests based on that evaluation.

- **Draws logical and accurate conclusions**
- **Draws conclusions that focus on answering the question**
- **Written and oral communication provides credible background to support or justify the primary theme**
- **Properly sequences ideas in written and oral communication**
- **Depth of communications is appropriate to the individual**
- **Choice of words and terms is appropriate to the individual**
- **Communication reflects the needs of the individual**
- **Length of communication is appropriate to the situation**
- **Communication conveys expertise**

*Suggested assessment activity: Direct observation of communication of a response to a particular drug information request*

**Outcome R6: Utilize medical informatics.**

Goal R6.1: Use information technology to make decisions and reduce error.

OBJ R6.1.1: (Comprehension) Explain security and patient protections such as access control, data security, data encryption, HIPAA privacy regulations, as well as ethical and legal issues related to the use of information technology in pharmacy practice.

- **Explanation includes reasons for security and patient protections of patient information**
- **Explanation includes how access control, data security, data encryption, and HIPAA privacy regulations work to ensure security of patient information**
- **Explanation includes description of ethical issues related to use of information technology in pharmacy practice**
- **Explanation includes description of legal issues related to use of information technology in pharmacy practice**

*Suggested assessment activity: Resident discussion of security and patient protections*

OBJ R6.1.2: (Comprehension) Explain the principles and uses of databases and how one analyzes the data to produce useful information.

- **Accurate conclusion drawn about the significance of information derived from statistical analysis**
- **Appropriate databases drawn upon to answer question posed**

*Suggested assessment activity: Review of analytical work performed by resident plus resident discussion of resources used in performing analysis*

OBJ R6.1.3: (Evaluation) Use electronic data and information from internal information databases and external online databases and resources for the purposes of making patient care, operational, and financial decisions.

- **Decision utilizes only valid and reliable electronic sources**
- **Only pertinent resources are utilized**
- **Decisions made are appropriate, based on data/information accessed, and integrated with other sources of information**

*Suggested assessment activity: Review of multiple resident decisions involving individuals and populations in which the resident has used electronic data and information from internal information databases, external online databases, and/or the internet*

*IO Explain the type of data collected, transmitted and stored by information systems.*

*IO Explain the impact on the quality of decision-making facilitated by information systems by the validity, reliability, and consistency of data put into the system.*

*IO Explain the use and risks of decision support tools.*

*IO Explain the sources, the benefits and potential risks of patients' drug and medical information on the Internet.*

<p style="text-align: center;"><b>Potential Elective Educational Outcomes for Postgraduate Year One (PGY1) Community Pharmacy Residencies</b></p>
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***Outcome E1: Provide public health programs for health improvement, wellness, and disease prevention to the community.***

Goal E1.1: Design and deliver education programs to the community that center on health improvement, wellness, and disease prevention.

OBJ E1.1.1: (Comprehension) Explain the pharmacist's role in public health, including specific contributions to public health efforts.

- **Accurately describes the overall role of pharmacists in public health**
- **Accurately describes specific contributions that can be made to public health by pharmacists**

*Suggested assessment activity: Discussion by resident of pharmacist's role in public health*

OBJ E1.1.2: (Application) Use effective educational techniques in the design of health improvement, wellness, and disease prevention programs for the community.

- **Topic is appropriate to the needs of the target audience**
- **Objectives are matched to the learning needs of the target audience**
- **Content development matches objectives**
- **Instruction is matched to the audiences' level of health literacy**

*Suggested assessment activity: Review of a resident-designed disease prevention and wellness promotion program*

*IO Explain the prevalent health improvement educational needs of patients.*

*IO Explain the prevalent wellness educational needs of patients.*

*IO Explain the prevalent disease prevention educational needs of patients.*

OBJ E1.1.3: (Application) Use skill in the delivery of health improvement, wellness, and disease prevention programs for the community.

- **Delivery reflects choice of appropriate educational methods**
- **Secures audience attention at the beginning**
- **Style of the speech is matched to its intent (persuasion, information giving, entertainment)**
- **Relates remarks to those of previous speakers (if appropriate)**
- **Portrays credibility**
- **Does not distract with physical mannerisms**
- **Does not distract with verbal habits**
- **Speech is well organized**
- **Uses appropriate transitions when proceeding from one topic to another**
- **Summarizes key points at the close**
- **Uses phrases, facts, or stories to increase audience interest**

- **Paints mental images or pictures to increase audience understanding**
- **Uses humor appropriately**
- **Appears poised**
- **Uses body language to add interest**
- **Pauses appropriately to emphasize points**
- **Displays energy and enthusiasm**
- **Accurately reads the audience's body language and adjusts the speech accordingly**
- **Answers questions with ease and confidence**

*Suggested assessment activity: Review of a resident-delivered disease prevention and wellness promotion program*

Goal E1.2: Design and deliver intervention programs (e.g. immunizations, health screenings, etc.) to the community that center on health improvement, wellness, and disease prevention.

OBJ E1.2.1: (Synthesis) Use effective educational techniques in the design of community intervention programs that center on health improvement, wellness, and disease prevention.

- Topic is appropriate to the needs of the target audience
- Objectives are matched to the learning needs of the target audience
- Content development matches objectives
- Instruction is matched to the audiences' level of health literacy
- Appropriate educational materials are provided
- Collaborates with other healthcare providers as appropriate
- Appropriate venue is selected, if appropriate

*Suggested assessment activity: Review of a resident-designed intervention programs that center on health improvement, wellness, and disease prevention*

*IO Explain the need for primary prevention programs (e.g., immunizations, weight loss, etc.).*

*IO Explain the need for secondary prevention programs (e.g., screening for diabetes, dyslipidemia, osteoporosis, etc.).*

*IO Explain the need for tertiary prevention programs (e.g., aspirin for post-MI patients, foot checks for diabetics, etc.).*

OBJ E1.2.2: (Synthesis) Exercise skill in the delivery of various health improvement, wellness, and disease prevention activities (e.g., immunizations, cholesterol or diabetes screening).

- Follows applicable legal and regulatory requirements
- Follows organization's policies and procedures
- Uses skill in necessary technique(s)
- Appropriately documents activities

*Suggested assessment activity: Direct observation of resident providing health improvement, wellness, and/or disease prevention activities*

- IO Explain how to implement primary prevention programs (e.g., immunizations, weight loss, etc.).*
- IO Explain how to implement secondary prevention programs (e.g., screening for diabetes, dyslipidemia, osteoporosis, etc.)*
- IO Explain how to implement tertiary prevention programs (e.g., aspirin for post-MI patients, foot checks for diabetics, etc.).*
- IO Explain the various federal, state, and local regulations regarding the safe and effective use of screening tests using blood or other bodily fluids (e.g., CLIA, OSHA's Bloodborne Pathogen Standard, etc.).*

***Outcome E2: Participate in the planning for and/or management of medical and public health emergencies.***

Goal E2.1: Participate in the planning and implementation of plans for medical emergencies.

OBJ E2.1.1: (Comprehension) Explain the pharmacist's role in the development of plans for medical emergencies at the organizational, local, state, and national levels.

OBJ E2.1.2: (Synthesis) Participate in the development or revision of organizational plans for emergency preparedness.

- **Resident contributions reflect understanding of essential needs in emergency situations**
- **Resident contributions reflect efficient deployment of resources in emergency situations**
- **Resident contributions reflect understanding of internal and external resources that would be available in emergency situations**

*Suggested assessment activity: Direct observation of resident participation in organizational planning for emergencies or review of resident's written document concerning organizational planning for emergencies*

*IO Explain the essential components of an organization's plan for emergency preparedness.*

*IO Explain who should be involved in the development of an organization's plan for emergency preparedness.*

OBJ E2.1.3: (Synthesis) Exercise skill in the delivery of staff training as specified in the organization's emergency preparedness plans.

- Utilizes appropriate public speaking skills
- Provides appropriate training materials
- Content is appropriate

*Suggested assessment activity: Direct observation of resident delivery of staff training* as specified in the organization's emergency preparedness plans

OBJ E2.1.4: (Synthesis) If needed, provide services and programs as specified in the organization's emergency preparedness plan.

***Outcome E3: Conduct pharmacy practice research.***

Goal E3.1: Design, execute, and report results of investigations of pharmacy practice-related issues.

OBJ E3.1.1: (Analysis) Identify potential practice-related issues that need to be studied.

- **Topic is relevant to pharmacy practice**
- **Topic is sufficiently focused to be manageable for study**

*Suggested assessment activity: Review of resident's written topic statement*

OBJ E3.1.2: (Application) Use a systematic procedure for performing a comprehensive literature search.

- **Literature search is comprehensive**
- **Methods used to conduct search are efficient**
- **Methods used to conduct search are effective**

*Suggested assessment activity: Review of resident literature search and resident explanation of search strategy employed*

OBJ E3.1.3: (Analysis) Draw appropriate conclusions based on a summary of a comprehensive literature search.

- **Interpretation of the literature is correct**
- **Conclusion is applicable to the requester's question**

**Suggested assessment activity: Review of written conclusions drawn by the resident from literature search**

OBJ E3.1.4: (Synthesis) Generate a research question(s) to be answered by an investigation.

- **Investigation question(s) is/are appropriate for the hypothesis**

*Suggested assessment activity: Review of resident's written investigation questions*

OBJ E3.1.5: (Synthesis) Develop specific aims and design study methods that will answer the question(s) identified.

- **Study methodology is appropriate**
- **Design is adequate to answer the questions**
- **Complexity of design is equal to executor's expertise**
- **Design specifies the type of data to be collected**
- **Obtains appropriate approvals**

*Suggested assessment activity: Review of resident's written description of investigation methodology*

OBJ E3.1.6: (Analysis) Develop a realistic timeline and budget for completing the study.

- **Study schedule identifies each step and accurately estimates the amount of time, personnel, and resources needed**
- **Budget for conducting the project is clearly articulated**
- **Investigation can be completed in the time allotted**

*Suggested assessment activity: Review of resident's written timeline and budget for completing the study*

OBJ E3.1.7: (Application) For a research study involving human subjects, successfully apply the process for securing IRB approval.

- **Appropriate strategies designed and implemented for gaining cooperation of all individuals affected by conduct of the project**
- **If required, IRB approval secured**

*Suggested assessment activity: Review of resident's project implementation strategy and documentation of approvals/agreements*

*IO Explain the ethics of research on human subjects and the role of the IRB.*

*IO Explain the steps in the IRB approval process.*

OBJ E3.1.8: (Application) Use a systematic procedure to collect and analyze data.

- **Study designs specifies a systematic procedure for data collection**
- **Data collected reflects adherence to procedure specified**

*Suggested assessment activities: Review of resident's written procedure for data collection; inspection of data collected for evidence of adherence to specified procedure*

OBJ E3.1.9: (Evaluation) Draw valid conclusions through evaluation of the data.

- **Data analysis is accurate**
- **Data analysis is efficient**
- **Conclusions are based on the results**
- **Results of statistical analysis are accurately interpreted**

*Suggested assessment activities: Review of resident's written results; review of resident's written conclusions*

OBJ E3.1.10: (Synthesis) Use effective communication skills to report orally and in writing, using accepted manuscript style, the results and recommendations of an investigation into a pharmacy practice-related issue.

- **Report is effectively written**
- **Report is effectively delivered orally**

*Suggested assessment activities: Review of resident's final written report of investigation; direct observation of resident's oral delivery of investigation*

Goal E3.2: Participate in clinical, humanistic and economic outcomes analyses.

OBJ E3.2.1: (Evaluation) Contribute to a prospective clinical, humanistic and/or economic outcomes analysis.

- **Perspective of the study is appropriate for the study's intended use**
- **Study design is appropriate for answering the research questions**
- **Data collection adheres to the plan specified in the study design**
- **Presentation of data analysis is clear and understandable**
- **Conclusions drawn are appropriate for the data collected and the analysis performed**

*Suggested assessment activity: Review of a prospective outcomes study to which the resident contributed*



- IO *Explain the principles and methodology of basic pharmaco-economic analyses.*
- IO *Explain the purpose of a prospective clinical, humanistic or economic outcomes analysis.*
- IO *Explain study designs appropriate for a prospective clinical, humanistic and economic outcomes analysis.*
- IO *Explain the technique and application of modeling.*
- IO *Explain the types of data that must be collected in a prospective clinical, humanistic and economic outcomes analysis.*
- IO *Explain possible reliable sources of data for a clinical, humanistic and economic outcomes analysis.*
- IO *Explain methods for analyzing data in a prospective clinical, humanistic and economic outcomes analysis.*
- IO *Explain how results of a prospective clinical, humanistic and economic outcomes analysis can be applied to internal business decisions and modifications to a customer's formulary or benefit design.*

OBJ E3.2.2: (Evaluation) Contribute to a retrospective clinical, humanistic, and/or economic outcomes analysis.

- **Perspective of the study is appropriate for the study's intended use**
- **Study design is appropriate for answering the research questions**
- **Data collection adheres to the plan specified in the study design**
- **Presentation of data analysis is clear and understandable**
- **Conclusions drawn are appropriate for the data collected and the analysis performed**

***Suggested assessment activity: Review of a retrospective outcomes study to which the resident contributed***

- IO *Explain the purpose of a retrospective clinical, humanistic or economic outcomes analysis.*
- IO *Explain study designs appropriate for a retrospective clinical, humanistic and economic outcomes analysis.*
- IO *Explain the types of data that must be collected in a retrospective clinical, humanistic and economic outcomes analysis.*
- IO *Explain the content and utilization of reports and audits produced by the pharmacy department.*
- IO *Explain possible reliable sources of data for a retrospective clinical, humanistic and economic outcomes analysis.*
- IO *Explain methods for analyzing data in a retrospective clinical, humanistic and economic outcomes analysis.*
- IO *Explain the impact of limitations of retrospective data on the interpretation of results.*
- IO *Explain how results of a retrospective clinical, humanistic and economic outcomes analysis can be applied to internal business decisions and modifications to a customer's formulary or benefit design.*

***Outcome E4: Exercise additional leadership and practice management skills.***

Goal E4.1: Understand the pharmacy procurement system.

OBJ E4.1.1: (Comprehension) Explain the processes and contractual relationships that form the structure of the pharmacy's medication procurement process.

- **Explanation includes an accurate description of the role of wholesalers and GPOs in the supply of medications**
- **Explanation includes an accurate description of the role of competitive contracting**
- **Explanation includes an accurate description of inventory management**
- **Explanation includes an accurate description of special procedures for unique drug entities (e.g., controlled substances, refrigerated medications)**
- **Explanation includes accurate description of issues surrounding the return or disposal of medications**

*Suggested assessment activity: Resident discussion of processes and contractual relationships for structure the medication procurement process*

*IO Explain the role of wholesalers and GPOs in the supply of medications.*

*IO Explain the role of competitive contracting.*

*IO Explain principles of inventory management.*

*IO Explain special procedure for unique drug entities (e.g., controlled substances, refrigerated medications.)*

*IO Explain issues surrounding the return or disposal of medications.*

Goal E4.2: Understand the use and management of investigational drug products (medications, devices, and biologicals).

OBJ E4.2.1: (Comprehension) Explain the purposes of involving the community pharmacy in patient use of investigational drug products.

OBJ E4.2.2: (Comprehension) Explain the principles of managing investigational drug products in the community pharmacy, including the use of protocols, regulatory requirements, and the pharmacy's policies and procedures.

- **Identifies the appropriate protocol**
- **Determines if a patient meets study criteria**
- **Confirms that an informed consent has been signed before proceeding**
- **Documents all necessary patient data**
- **Accurately follows policies and procedures for storing and dispensing**
- **Monitors the patient's progress according to the protocol**
- **Takes appropriate action toward rectifying any problem**
- **Accurately completes all documentation**

*Suggested assessment activity: Direct observation of the resident's management of the use of a specific investigational drug product*

Goal E4.3: Understand the principles of a systematic approach to staff development in pharmacy practice.

- OBJ E4.3.1: (Comprehension) Explain the steps in a systematic approach to staff development.
- OBJ E4.3.2: (Comprehension) Explain the importance of approaching staff development systematically.
- Goal E4.4: Resolve conflicts through negotiation.
- OBJ E4.4.1: (Application) Use effective negotiation skills to resolve conflicts.
- **Negotiation focuses on intended conflict**
  - **Negotiation includes consideration of the other person's position**
  - **Negotiator separates feelings about the people or the situation from the problem**
  - **Position is based on objective criteria**
  - **Opinions are expressed positively and without making accusations**
  - **Negotiator suggests options that lead to mutual gain**
  - **Settlement is acceptable to both sides**
- Suggested assessment activity: Direct observation of resident negotiating process occurring during the fulfillment of a specific practice responsibility*
- IO Explain the principles of negotiation.*
- Goal E4.5: Participate in the management of the organization's human resources.
- OBJ E4.5.1: (Synthesis) Contribute to the formulation of recruitment strategies for a specific position.
- **Describes how to determine the duties of a specific position**
  - **Discusses how to advertise for a new position, whether it is to be filled by an internal or external candidate**
  - **Discusses factors to consider when determining the individual's qualifications for a position**
  - **Discusses factors to consider when deciding to hire internally versus externally**
  - **Describes the information to be included in an advertisement for a position**
  - **Discusses the organization's policy regarding EEO/Affirmative Action**
  - **Describes how to decide where to advertise and for how long**
  - **Discusses the impact of the Americans with Disabilities Act on interviews**
- Suggested assessment activity: Resident discussion of recruitment strategies for a specific position*
- IO Explain how to determine the duties of a specific position.*
- IO Explain differences in the advertising approach for a position to be filled internally versus externally.*
- IO Explain factors to consider when determining the individual's qualifications for a position.*
- IO Explain factors to consider when deciding to hire internally versus externally.*
- IO State the information to be included in an advertisement for a position.*
- IO Explain the organization's policy regarding equal employment opportunity and affirmative action.*
- IO Explain the impact of the American Disabilities Act on interviews.*

OBJ E4.5.2: (Evaluation) Participate in the interview of candidates and recommend personnel for employment.

- **Implements the organization's policies and procedures for screening and interviewing applicants**
- **Appropriately determines how many times to interview an applicant**
- **Incorporates knowledge of what should be discussed and not discussed in an interview**
- **Appropriately determines with whom candidates should interview**
- **Appropriately determines how many candidates to interview**
- **Follows an appropriate course of action when none of the candidates interviewed is acceptable**
- **Determines an appropriate number of references to require and checks references appropriately**
- **Prepares an appropriate "offer to hire" letter**

*Suggested assessment activity: Direct observation of resident participation in the organization's process to interview and recommend personnel for a specific job opening*

*IO State the organization's policies and procedures for screening and interviewing applicants.*

*IO Explain considerations in determining how many times to interview an applicant.*

*IO State what should be discussed and not discussed in an interview.*

*IO Explain considerations in determining with whom candidates should interview.*

*IO Explain considerations in determining how many candidates to interview.*

*IO State actions to pursue when none of the candidates interviewed is acceptable.*

*IO Explain considerations of how many references to require and how to check references.*

*IO State information to be included in an "offer to hire" letter.*

OBJ E4.5.3: (Synthesis) Contribute to the orientation and training of practice area personnel.

- **Applies an understanding of the purposes of orientation and training, and the roles of the organization and of the department in orientation and training**
- **Appropriately determines the subjects that should be covered in training for a specific position**
- **Appropriately determines length of training for a specific position**
- **Appropriately determines when a new employee is sufficiently trained for his/her position**
- **Applies an understanding of the organization's probationary period**
- **Follows organization's orientation materials when providing orientation/training**

*Suggested assessment activity: Direct observation of resident participation in orientation and training for practice area personnel organization*

- IO State the purposes of orientation and training.*
- IO State the roles of the organization and of the department in orientation and training.*
- IO State the subjects that should be covered in the department's orientation.*
- IO State the subjects that should be covered in training for a specific position.*
- IO Explain how to determine the length of training for a specific position.*
- IO Explain an effective measure for determining that a new employee is sufficiently trained for his or her position.*
- IO Explain the impact of the Family Medical Leave Act and union contract on human resources policy.*
- IO Describe the organization's probationary period.*

OBJ E4.5.4: (Comprehension) Explain the components of an employee performance evaluation system.

- **Describes the performance standards for a specific position**
- **Discusses effective methods for communicating performance standards and evaluation of performance to employees**
- **Describes effective ways to measure work against performance standards**
- **Discusses the role of subjective criteria in evaluating performance**

*Suggested assessment activity: Resident discussion of the components of an employee performance evaluation system*

- IO State the performance standards for a specific position.*
- IO State effective methods for communicating performance standards and evaluation of performance to employees.*
- IO Explain effective ways to measure work against objective and subjective performance standards.*

OBJ E4.5.5: (Comprehension) Explain the principles and application of a progressive discipline process.

- **Describes the components of the progressive discipline process**
- **Describes the benefits of the progressive discipline process to the employer and the employee**

*Suggested assessment activity: Resident discussion of the principles and application of a progressive discipline process*

- IO Explain the components of the progressive discipline process.*
- IO State the benefits of the progressive discipline process to the employer and the employee.*

Goal E4.6: Contribute to the pharmacy's approach to customer service.

OBJ E4.6.1: (Application) Formulate accurate responses to patient inquiries.

- **Asks appropriate questions to clarify inquiry**
- **Response is accurate** and delivered in an appropriate and professional manner
- **Response is delivered in an appropriate and professional manner**

- **Response reflects health care literacy of patient and/or caregivers**

Suggested assessment activity: Direct observation of resident's response to a specific patient inquiry.

OBJ E4.6.2: (Application) Provide accurate descriptions of the community pharmacy's services.

OBJ E4.6.3: (Application) Apply appropriate organizational policies and procedures when responding to patient grievances.

- **Collects information required by policies and procedures**
- **Determines appropriate type of response (verbal, written, etc.)**
- **Responds in a timely manner**
- **Responds in a professional manner**
- **Response follows organization's policies and procedures**
- **Determines if escalation or referral is required**

Suggested assessment activity: Direct observation of resident's response to a specific patient grievance.

*IO Explain the importance of maintaining a customer-friendly demeanor when responding to patient complaints.*

OBJ E4.6.4: (Comprehension) Explain the key components for assuring patient satisfaction.

NO SNAPSHOT

*IO Explain the role of patient surveys in determining levels of patient satisfaction.*

OBJ E4.6.5: (Synthesis) Formulate an effective patient satisfaction survey that secures the information desired.

- Identifies appropriate issue to investigate
- Chooses appropriate method of delivery
- Chooses appropriate survey instrument
- Develops appropriate questions
- Selects appropriate patient population

Suggested assessment activity: Review of survey created by resident

*IO Explain the principles of survey instrument construction.*

OBJ E4.6.6: (Evaluation) Implement a patient satisfaction survey including the evaluation of data collected according to survey design plan.

- Implements the survey based on its design
- Collects data appropriately
- Analyzes data appropriately
- Draws appropriate conclusions

Suggested assessment activity: Review of resident's written report for a patient satisfaction survey

*IO Explain methodology for analyzing survey data.*

Goal E4.7: Balance obligations to oneself, relationships, and work in a way that minimizes stress.

OBJ E4.7.1: (Synthesis) Devise an effective plan for minimizing stress while attending to personal needs, maintaining relationships, and meeting professional obligations.

- **Sets realistic expectations for self when confronted by unrealistic expectations from others**
- **Behavior demonstrates use of stress management techniques research has proven to be effective**
- **Seeks counsel of others (e.g., mentor, preceptor, employee assistance programs) if needed**
- **Behavior reflects understanding of expectations placed on self**
- **Practices “time for self” on a routine basis**

*Suggested assessment activity: Direct observation of juggling of practice and residency obligations and of activities and relationships in personal life during a designated time period*

*IO Explain various approaches advocated for achieving balance in one's life.*

Goal E4.8: Participate in the community residency accreditation process.

OBJ E4.8.1: (Comprehension) Explain the steps involved in establishing a pharmacy residency program at a particular site.

- **Accurately identifies the resources required to establish a pharmacy residency program**
- **Accurately describes each of the steps in establishing a pharmacy residency program**
- **Accurately describes the residency accreditation process**

*Suggested assessment activity: Resident discussion of how to establish a pharmacy residency program*

*IO Explain the sources of published information to be used when establishing a residency program (i.e., accreditation regulations, accreditation standards, ASHP website, APhA website).*

OBJ E4.8.2: (Synthesis) Contribute to the organization's preparation and participation in the residency accreditation process.

- **Contribution reflects consideration of residency accreditation process**
- **Written contributions are comprehensive and concise, and prepared in a professional manner**
- **Resident interacts professionally with surveyors as applicable**
- **Assigned tasks are completed in a timely manner**

Suggested assessment activity: Direct observation of resident's contribution, to the organization's preparation and participation in the

residency accreditation process or review of written work assigned to resident to contribute to the residency accreditation process.

Goal E4.9: Maintain the appearance of a professional.

OBJ E4.9.1: (Application) Dress in attire that conveys a professional image. .

- **Stays clean and well-groomed**
- **Dresses to meet the expectations of other professionals and patients**
- **Dress meets health and safety requirements**
- **Dress conforms to the organization's dress code**

*Suggested assessment activity: Cumulative direct observation of practice*

*IO Explain guidelines for professional dress and its importance.*

*IO Explain strategies for maintaining personal self-control and professional decorum.*

***Outcome E5: Demonstrate knowledge and skills for successful community practice interface with the managed care or self-insured employer environment.***

Goal E5.1: Maintain confidentiality of patient and proprietary business information.

OBJ E5.1.1: (Application) Observe legal and ethical guidelines for safeguarding the confidentiality of patient information.

- **Handling of patient information follows ethical guidelines**
- **Handling of patient information follows legal guidelines**

*Suggested assessment activity: Cumulative direct observation of resident handling of patient information*

*IO Explain patient confidentiality issues related to data collection, transmission, and storage by pharmacy information systems and by electronic medical records.*

*IO Explain situations unique to managed care that may raise the issue of confidentiality of patient information.*

OBJ E5.1.2: (Application) Observe the organization's and the managed care or self-insured employers policy for the safeguarding of proprietary business information.

**Demonstrates understanding of differences among policies of various managed care organizations and self-insured employers**  
**Maintains confidentiality of proprietary business information**

*Suggested assessment activity: Cumulative direct observation of resident handling of proprietary business information*

*IO Explain the concept of "proprietary business information" and its importance in the conduct of business activities.*

*IO Explain the role of written policy and tacit knowledge in the development of normative procedure for the disclosure of business information.*

Goal E5.2: Understand the interrelationship of the pharmacy benefit management company, the health plan, and the delivery system functions of managed care.

OBJ E5.2.1: (Comprehension) Explain the health plan functions of managed



care, including benefit design and management, co-pay, formulary coverage, prior authorization, access, and contract negotiations (medication acquisition and/or network pharmacy).

- **Accurately explains benefit design and management**
- **Accurately explains co-pay**
- **Accurately explains formulary coverage**
- **Accurately explains prior authorization**
- **Accurately explains access**
- **Accurately explains contract negotiations**

*Suggested assessment activity: Resident discussion of health plan functions of managed care*

*IO Explain the difference between pharmacy risk and capitation.*

OBJ E5.2.2: (Comprehension) Explain the effect that the health plan has on the delivery functions of managed care.

- **Accurately explains how the health care plan affects delivery functions of managed care**

*Suggested assessment activity: Resident discussion of health care plans and delivery functions*

OBJ E5.2.3: (Comprehension) Explain the interrelationship of the health plan and the delivery system functions of managed care.

- **Accurately explains the interrelationship of the health plan and the delivery system functions of managed care**

*Suggested assessment activity: Resident discussion of the interrelationship of the health care plan and delivery system functions of managed care*

Goal E5.3: Understand marketing strategies for establishing the pharmacy as the provider of evidence-based medication therapy management for plan patients.

OBJ E5.3.1: (Comprehension) Explain unique aspects of the managed care environment that would affect the creation of a successful proposal and marketing strategy for provision of evidence-based medication therapy management for plan participants.

## **NO SNAPSHOT**

*IO Explain the appropriate audience in a managed care organization to whom to market a proposal for a medication therapy program and usual strategies for contacting these individuals.*

*IO Explain the components of a proposal for a medication therapy program that would be suitable for submission to a managed care organization.*

*IO For a specific managed care organization, explain the organization's credentialing requirements.*

OBJ E5.3.2: (Comprehension) Explain unique aspects of the self-insured employer environment that would affect the creation of a successful proposal and marketing strategy for provision of evidence-based medication therapy management for plan participants.

## NO SNAPSHOT

*IO Explain the appropriate audience in a self-insured employer organization to whom to market a proposal for a medication therapy program and usual strategies for contacting these individuals.*

*IO Explain the components of a proposal for a medication therapy program that would be suitable for submission to a self-insured employer.*

*IO For a specific self-insured employer, explain the organization's credentialing requirements.*

OBJ E5.3.3: (Comprehension) Explain the role of the human resources director/department in the decision-making process for health benefit design.

## NO SNAPSHOT

OBJ E5.3.4: (Application) Accurately calculate the return on investment (ROI) for a specific medication therapy management plan proposal for a specific managed care or self-insured employer proposal.

- Calculation includes appropriate factors
- Calculation uses accurate, timely, and appropriate data
- ROI is calculated correctly

Suggested assessment activity: Review of resident's written ROI report

OBJ E5.3.5: (Comprehension) Explain the contents of a response to a request for proposal (RFP).

## NO SNAPSHOT

### ***Outcome E6: Demonstrate skills required to function in an academic setting.***

Goal E6.1: Understand faculty roles and responsibilities.

OBJ E6.1.1: (Comprehension) Explain variations in the expectations of different colleges of pharmacy for maintaining a balance between teaching, practice, research, and service.

OBJ E6.1.2: (Comprehension) Explain faculty governance structures and how they influence decision making in the academic environment.

OBJ E6.1.3: (Comprehension) Explain the roles and influence of various academic administrative positions.

OBJ E6.1.4: (Comprehension) Explain steps in the promotion and tenure process.

Goal E6.2: Exercise teaching skills essential to pharmacy school faculty.

OBJ E6.2.1: (Synthesis) Participate in the creation of a course design that is in harmony with the college curriculum.

- OBJ E6.2.2: (Synthesis) Create an evaluation mechanism to measure learner achievement for one element of a course that reflects testing possibilities in the academic environment.
- OBJ E6.2.3: (Evaluation) Initiate the construction of a teaching/research portfolio suitable for use in applying for a faculty position.
- OBJ E6.2.4: (Application) Use skill in case-based teaching.

***Outcome E7: Create a community pharmacy drug information library.***

Goal E7.1: Identify a core library for use by community pharmacy patients that includes electronic media.

OBJ E7.1.1: (Analysis) Use knowledge of standard resources to select a core library of medication-related information for use by the pharmacy's patients.

- Identifies appropriate information for patient population based on common conditions
- Selects information based on the health literacy of the patient population
- Selects information based on the various ways patients learn
- Chooses appropriate variety/quantity of information
- Accurately reviews information for potential bias

Suggested Assessment Activity: Review of resident's selection of information

Goal E7.2: Identify a core library for use by the pharmacy's health professionals.

OBJ E7.2.1: (Analysis) Use knowledge of standard resources to select a core library of primary, secondary, and tertiary references appropriate for use by the healthcare professionals in the community pharmacy.

- **Selection covers the practice area drug information needs**
- **Selection is appropriately distributed among tertiary, secondary, and primary sources**
- **List reflects what can be reasonably acquired**

*Suggested assessment activity: Review of the list of suggested core medical and drug information resources prepared by the resident for a specific practice setting*

***Outcome E8: Participate in the organization's formulary management processes.***

Goal E8.1: Participate in the implementation and maintenance of formularies.

OBJ E8.1.1: (Comprehension) Explain the process for developing, implementing, and maintaining a formulary system.

- **Accurately identifies the components of a formulary system**
- **Accurately describes the approval process for establishing a formulary**
- **Accurately describes the role of committees in addressing formulary issues**
- **Accurately describes how formularies are revised and maintained**
- **Accurately describes the organization's procedures regarding exceptions to the formulary**

- **Accurately describes the organization’s process for making additions and deletions to the formulary**
- **Accurately describes how pharmacoeconomic principles are used in the formulary decision process**
- **Accurately describes how the organization communicates formulary decisions to prescribers**

*Suggested assessment activity: Resident discussion of the process for developing, implementing, and maintaining a formulary system in his or her organization*

- IO Identify the components of a formulary system.*
- IO Explain the approval process for establishing a formulary.*
- IO Explain the role of committees in addressing formulary issues.*
- IO Explain how formularies are revised and maintained.*
- IO Explain procedures regarding exceptions to the formulary.*
- IO Explain the process of making additions and deletions to the formulary including those resulting from drug shortages.*
- IO Explain effective methods of communicating changes to the formulary including those resulting from drug shortages.*

OBJ E8.1.2: (Evaluation) Develop formulary recommendations based on analysis of the biomedical literature and practice standards.

- **Recommendation is based on a thorough review of pertinent literature**
- **Recommendation reflects an appropriate analysis of the literature**
- **Recommendation is written in the appropriate format**
- **Recommendation is objective**

*Suggested assessment activity: Review of resident’s written formulary recommendations for a specific formulary recommendation.*

OBJ E8.1.3: (Evaluation) Make recommendations for drug class decisions based on comparative reviews.

- **Recommendation is based on a thorough review of pertinent literature**
- **Recommendation is presented in the appropriate format**
- **Recommendation is objective**

*Suggested assessment activity: Direct observation of resident presenting a medication-use policy recommendation based on a comparative review*

- IO State the elements of a comparative review.*
- IO State sources to consult in the preparation of a comparative review.*
- IO Explain the importance of including consideration of medication-use safety in the preparation of a comparative review.*

OBJ E6.1.4: (Synthesis) Participate in the implementation of the organization's formulary.

OBJ E6.1.5: (Analysis) Contribute to the customization of a formulary so that it meets the needs of a particular organization.

- **Contribution reflects needs of different patient populations**

- **Contribution reflects needs of different practice settings**
- **Recommendation(s) is/are appropriate**

**Suggested Assessment activity: Review of resident’s contributions to the customization of a formulary**

***Outcome E9: Demonstrate knowledge and skills particular to generalist practice in the home care practice environment.***

Goal E9.1: Understand the scope of services that might be provided in a typical home care practice.

OBJ E9.1.1: (Comprehension) Compare and contrast the scope of services that might be provided by a typical home care practice for a variety of health systems or stand-alone organizations.

- **Explanation of scope of services is comprehensive**
- **Explanation of nature of services is accurate**

***Suggested assessment activity: Discussion by resident of scope of home care services***

OBJ E9.1.2: (Comprehension) Explain the relationship between the scope of services offered by a home care practice and the applicable legal, regulatory, and accreditation issues.

- **Explanation accurately identifies the scope of regulatory, legal, and accreditation issues affecting home care services**
- **Accurately identifies how each of these issues affects the availability and delivery of home care services**

***Suggested assessment activity: Discussion by resident of legal, regulatory, and accreditation issues applicable to home care services***

Goal E9.2: Determine the suitability of individual patients for home care.

OBJ E9.2.1: (Analysis) Collect and organize all patient-specific information needed by the home care pharmacist to determine the suitability of individual patients for home care.

- **Accurately identifies the patient information needed**
- **Collects needed information**
- **Organizes information appropriately**

***Suggested assessment activity: Audit of resident’s information base for a specific patient or organization’s patient information base***

*IO Identify the types of information the home care pharmacist requires to determine the suitability of individual patients for home care.*

OBJ E9.2.2: (Evaluation) Assess patients’ suitability for home care.

- **All patients who are suitable for home care are selected**
- **All patients who are not suitable for home care are not selected**

***Suggested assessment activity: Audit of resident’s selection of patients as suitable for home care and of those not designated as suitable***

*IO Explain criteria for acceptance into home care.*

*IO Explain factors to consider when determining the ability and willingness of a patient or caregiver to fulfill the tasks of home care.*

*IO Explain factors to consider when evaluating a potential home care patient's psychosocial and family support.*

Goal E9.3: Understand unique aspects of providing evidence-based, patient-centered medication therapy management with interdisciplinary teams in the home care environment.

OBJ E9.3.1 (Comprehension) Explain aspects of providing medication therapy management that are unique in the home care environment.

- **Explanation accurately describes the rights and responsibilities of a home care patient.**
- **Explains effective strategies for getting information from unwilling or inaccessible participants.**
- **Explains concerns with compliance, cost, route of administration, and vascular access and medication devices when making decisions on medication regimens for home care patients.**
- **Explains how to determine whether the first dose of medication should be administered at home or in a controlled-care setting.**
- **States customary monitoring parameters for the effects of the use of access and administration devices.**
- **Explains strategies for communicating with other members on the interdisciplinary team about the home care patient.**

*Suggested assessment activity: Discussion by resident of unique aspects of providing medication therapy management to home care patients*

*IO Explain the rights and responsibilities of a home care patient.*

*IO Explain strategies for getting information from unwilling or inaccessible participants.*

*IO Explain additional concerns with compliance, cost, route of administration, and vascular access and medication devices when making decisions on medication regimens for home care patients.*

*IO Explain how to determine whether the first dose of medication should be administered at home or in a controlled-care setting.*

*IO State customary monitoring parameters for the effects of the use of access and administration devices.*

Goal E9.4: Understand unique aspects of preparing and dispensing medications for home care patients.

OBJ E9.4.1 (Comprehension) Explain aspects of preparing and dispensing medication that are unique in the home care environment.

- **Explains an effective method for selecting appropriate supplies for the patient's method of administration, access device and medication.**
- **Explains appropriate technique for care of a catheter and a catheter site.**
- **Explains procedures for administering medications used in the home care environment.**

- **Explains procedures for managing complications resulting from the administration of medications.**
- **Explains various alternative delivery methods for getting supplies and medications to the home of a home care patient.**

*Suggested assessment activity: Discussion by resident of unique aspects of preparing and dispensing medication in the home care environment*

- IO Select appropriate supplies for the patient's method of administration, access device and medication.*
- IO Explain appropriate technique for care of a catheter and a catheter site.*
- IO Explain procedures for administering medications used in the home care environment.*
- IO Explain procedures for managing complications resulting from the administration of medications.*
- IO Use knowledge of alternative delivery methods to determine the best way to get supplies and medications to the patient's home.*

Goal E9.5: Understand unique aspects of participating in the management of medical emergencies occurring in the home care environment.

OBJ E5.5.1 (Comprehension) Explain aspects of the management of medical emergencies that are unique in the home care environment.

- **Explains what constitutes a medical emergency in the home care setting.**
- **Explains differences in strategy that must be used in the management of a medical emergency that occurs in the home.**

*Suggested assessment activity: Discussion by resident of unique aspects of the management of a medical emergency occurring in the home care environment*

- IO Explain what constitutes a medical emergency in the home care setting.*

Goal E9.6: Manage the use, maintenance, and troubleshooting of medication administration equipment and medication-related equipment used in the management of home care patients.

OBJ E9.6.1: (Synthesis) Solve operational problems related to the use and maintenance of medication administration equipment and medication-related equipment used in the management of home care patients.

- **Resident appropriately identifies the problem if necessary**
- **Resident resolves problems efficiently and effectively**
- **Resident successfully performs maintenance functions**

*Suggested assessment activity: Direct observation of resident solving operational difficulties and performing maintenance of medication administration equipment and medication-related equipment; repeated for different types of equipment*

- IO Explain proper maintenance procedures for medication administration equipment and medication-related equipment used in the management of home care patients.*

*IO Devise effective troubleshooting strategies for medication administration equipment and medication-related equipment that is not working properly.*

*IO Skillfully operate medication administration equipment and medication-related equipment used in the home.*

OBJ E9.6.2: (Analysis) Participate in the development of criteria for selection of medication administration and medication-related equipment.

**• Resident contributions reflect an understanding of the equipment's capabilities and the specific needs of home care patients**

*Suggested assessment activity: Direct observation of resident participation in working sessions in which the purpose is to develop criteria for selection of medication administration and medication-related equipment*

Goal E9.7: Understand the appropriate relationship between the home care pharmacist and home care suppliers.

OBJ E9.7.1: (Comprehension) Explain the role of the home care pharmacist in establishing policies for working with the pharmaceutical industry.

**• Evidences understanding of the organization's policies for working with the pharmaceutical industry**

**• Articulates the importance of establishing policies and procedures for working with the pharmaceutical industry**

**• Accurately describes the principles put forth in the ASHP Guideline on Pharmacists' Relationships with Industry**

**• Describes an appropriate working relationship with the pharmaceutical industry, including ethical considerations**

*Suggested assessment activity: Resident discussion of the role of the home care pharmacist in establishing policies for working with the pharmaceutical industry*

*IO State the home care practice's policies for working with the pharmaceutical industry.*

*IO Explain the importance of establishing policies and procedures for working with the pharmaceutical industry.*

*IO Explain an appropriate working relationship with the pharmaceutical industry including ethical considerations.*

OBJ E9.7.2: (Comprehension) Explain the role of the home care pharmacist in establishing policies for working with the manufacturers of medication-use related equipment and supplies used in home care.

**• Evidences understanding of the organization's policies for working with manufacturers of medication-use related equipment and supplies used in home care**

**• Articulates the importance of establishing policies and procedures for working with the pharmaceutical-related equipment and supplies manufacturers**

**• Accurately describes the principles put forth in the ASHP Guideline on Pharmacists' Relationships with Industry**

**• Describes an appropriate working relationship with the suppliers of medication-use-related equipment and supplies used in home care including ethical considerations**



***Suggested assessment activity: Resident discussion of the role of the home care pharmacist in establishing policies for working with the manufacturers of medication-use-related equipment and supplies used in home care***

*IO State the home care practice's policies for working with manufacturers of medication-use related equipment and supplies used in home care.*

*IO Explain the importance of establishing policies and procedures for working with manufacturers of medication-use related equipment and supplies used in home care.*

*IO Explain an appropriate working relationship with manufacturers of medication-use related equipment and supplies used in home care, including ethical considerations.*

Goal E5.9: Appreciate the complexity of the financial environment of home care practice.

OBJ E9.8.1: (Comprehension) Explain various factors that affect the financial environment of home care practice.

- **Accurately describes how various factors affect financing home care services**

***Suggested assessment activity: Resident discussion of factors affecting the home care financial environment***

OBJ E9.8.2: (Comprehension) Explain the different types of payers in home care and the effect of that mix on the finances of the home care practice.

- **Accurately identifies payers for home care services**
- **Accurately describes how having a mix of payers affects the finances of home care**

***Suggested assessment activity: Resident discussion of home care payers and their effect on home care service financing***

OBJ E9.8.3: (Comprehension) Explain the ethical and pharmaceutical issues involved in providing home care to patients with little or no insurance coverage.

- **Explain potential ethical dilemmas that may arise when a home care patient has little or no insurance**
- **Accurately identify pharmaceutical issues for patients with little or no insurance**

***Suggested assessment activity: Resident discussion of ethical and pharmaceutical issues arising when patients have little or no insurance***

OBJ E9.8.4: (Comprehension) Explain the effect of patient mix (therapy type) on profitability.

- **Accurately explains how the mix of home care patients receiving different types of therapy affects profitability**

***Suggested assessment activity: Resident discussion of home care patient mix and profitability***

OBJ E9.8.5: (Knowledge) Identify resources for financial and reimbursement advice when working in the home care environment.

- **List of resources is complete**
- **List of resources is accurate**

***Suggested assessment activity: Resident statement of resources for financial and reimbursement advice for home care pharmacy***

Goal E9.9: Conduct ethical informational and marketing visits to payers, potential referral sources, and patients of the home care organization.

OBJ E9.9.1: (Synthesis) Formulate effective strategies for conducting ethical informational and marketing visits to payers, potential referral sources, and patients of the home care organization.

- **Strategy developed observes applicable home care business ethics**
- **Implementation of strategy is effective in achieving desired ends**

***Suggested assessment activity: Review of resident's strategy for a specific informational and marketing visit to a payer, potential referral sources, or patient of the home care organization***

*IO Explain ethical issues involved in providing information about and marketing of home care services.*

OBJ E9.9.2: (Application) Use effective presentation techniques to conduct ethical informational or marketing visits to payers, potential referral sources, and patients of the home care organization.

- **Presentation is well-organized**
- **Presentation style is suited to the audience**
- **Presentation manner is professional**

***Suggested assessment activity: Direct observation of resident conducting and informational and marketing visit to a payer, potential referral source, or patient of the home care organization***

Endorsed by the ASHP Board of Directors September 22, 2006 and supported by the APhA Board of Trustees September 15, 2006. Developed by the ASHP Commission on Credentialing and an APhA advisory panel comprised of the following community pharmacy practitioners, residency program directors, and APhA and ASHP staff: Marialice S. Bennett, R.Ph., Professor of Clinical Pharmacy, The Ohio State University; Jeffery A. Goad, Pharm.D., MPH, Associate Professor of Clinical Pharmacy, University of Southern California; Pamala S. Marquess, Pharm.D., Owner East Marietta Drugs; Matthew C. Osterhaus, R.Ph., FASCP, Owner Osterhaus Pharmacy; James A. Owen, R.Ph., Director, Clinical Services and Professional Development, Happy Harry's Inc.; Sarah C. Ray, Pharm.D., BCPS, Ambulatory Clinical Coordinator, Aurora Health Care; Kushal B. Shah, Pharm.D., Community Pharmacy Practice Resident, Virginia Commonwealth University and Buford Road Pharmacy; APhA Group Director, Practice Development and Research, Anne L. Burns, R.Ph.; ASHP Accreditation Services Division Operations Director, Bruce A. Nelson, R.Ph., M.S., and ASHP Accreditation Services Division Standards Development and Training Manager, Christine M. Nimmo, Ph.D. This document replaces the goals and objectives associated with the previous Accreditation Standard for Pharmacy Practice (with emphasis in Community Care) approved by the ASHP Board of Directors April 21, 1999 and approved by the APhA Board of Trustees May 20, 1999. The contribution of reviewers is gratefully acknowledged.

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The effective date for implementation of these educational outcomes, goals and objectives is commencing with the entering resident class of July 2007.

## Glossary

Adverse drug event (ADE) -- an injury from a medicine (or lack of an intended medicine). (ASHP. Suggested definitions and relationships among medication misadventures, medication errors, adverse drug events, and adverse drug reactions. *AJHP*, 1998; 55:165-6.)

Collaborative practice agreements – In collaborative drug therapy management, pharmacists enter agreements with physicians and other prescribers that may authorize pharmacists, for patients who have a confirmed diagnosis, to select appropriate medication therapies and regimens and adjust them on the basis of patients' responses. (American Society of Health-System Pharmacists. ASHP statement on the pharmacist's role in primary care. *Am J Health-Syst Pharm*. 1999; 56:1665-7.)

Culture -- an integrated system of learned behavior patterns that are characteristic of the members of any particular group. It is more than race or ethnicity. Culture includes race or customs, rituals, food, religion, and music; and, in addition, it includes health beliefs and practices, death and birth rituals, structure, and dynamics, social practices and beliefs that define personal space, eye contact, time orientation, and nonverbal communication behaviors. (Randall-David E. Culturally competent HIV counseling and education. Material & Child Health Clearinghouse: McLean, VA: 1994)

Cultural competency -- is more than cultural awareness or cultural sensitivity, competency implies skills and expertise to work with and within diverse cultural groups with sensitivity and effectiveness. In its most developed meaning cultural competence includes advocacy. (Randall-David E. Culturally competent HIV counseling and education. Material & Child Health Clearinghouse: McLean, VA: 1994)

Disease state management – Disease management is a system of coordinated health care interventions and communications for populations with conditions in which patient self-care efforts are significant. Disease management:

- Supports the physician or practitioner/patient relationship and plan of care;
- Emphasizes prevention of exacerbations and complications utilizing evidence-based practice guidelines and patient empowerment strategies; and
- Evaluates clinical, humanistic, and economic outcomes on an on-going basis with the goal of improving overall health.

Disease management components include: \*

- Population identification processes;
- Evidence-based practice guidelines;
- Collaborative practice models to include physician and support-service providers;
- Patient self-management education (may include primary prevention, behavior modification programs, and compliance/surveillance);
- Process and outcomes measurement, evaluation, and management;
- Routine reporting/feedback loop (may include communication with patient, physician, health plan and ancillary providers, and practice profiling).

*\*Note: Full-service disease management programs must include all six components. Programs consisting of fewer components are disease management support services.* (Disease Management Association of America. DMAA definition of disease management Accessed at <http://www.dmaa.org/definition.html> 2006 August 14.

Evidence-based medicine -- the integration of best research evidence, clinical expertise, and patient values in making decisions about the care of individual patients (Institute of medicine, 2001; Straus and Sackett, 1998). *Best research evidence* includes evidence that can be quantified, such as that from randomized controlled trials, laboratory experiments, clinical trials, epidemiological research, and outcomes research and evidence derived from the practice knowledge of experts, including inductive reasoning (Guyatt et al., Higgs et al., 2001). *Clinical expertise* is derived from the knowledge and experience developed over time from practice, including inductive reasoning. *Patient values and circumstances* are the unique preferences, concerns, expectations, financial resources, and social supports that are brought by each patient to a clinical encounter. (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academies Press; 2001.)

Home care -- Home care is the provision of specialized, complex pharmaceutical products and clinical assessment and monitoring to patients in their homes. This generally includes home infusion therapy and other injectable drug therapy and parenteral and enteral nutrition therapy. Specific pharmacist education and training, drug product admixtures and administration techniques, equipment operation and maintenance, and patient monitoring are required to ensure successful outcomes. (American Society of Health-System Pharmacists. ASHP guidelines on the pharmacist's role in home care. *Am J Health-Syst Pharm.* 2000; 57:1252-7.

Interdisciplinary team -- a team composed of members from different professions and occupations with varied and specialized knowledge, skills, and methods. The team members integrate their observations, bodies of expertise, and spheres of decision making to coordinate, collaborate, and communicate with one another in order to optimize care for a patient or group of patients. (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academies Press; 2001.)

Leadership -- leadership practices include scanning, focusing, aligning/mobilizing, and inspiring.

Scanning:

- ✓ Identify client and stakeholder needs and priorities.
- ✓ Recognize trends, opportunities, and risks.
- ✓ Look for best practices.
- ✓ Identify staff capacities and constraints.
- ✓ Know yourself, your staff, and your organization – values, strengths, and weaknesses.

Focusing:

- ✓ Articulate the organizations' mission and strategy.
- ✓ Identify critical challenges.

- ✓ Link goals with the overall organizational strategy.
- ✓ Determine key priorities for action.
- ✓ Create a common picture of desired results.

Aligning/Mobilizing:

- ✓ Ensure congruence of values, mission, strategy, structure, systems and daily actions.
- ✓ Facilitate teamwork.
- ✓ Unite key stakeholders around an inspiring vision.
- ✓ Link goals with rewards and recognition.
- ✓ Enlist stakeholders to commit resources.

Inspiring:

- ✓ Match deeds to words.
- ✓ Demonstrate honesty in interactions.
- ✓ Show trust and confidence in staff, acknowledge the contributions of others.
- ✓ Provide staff with challenges, feedback and support.
- ✓ Be a model of creativity, innovation, and learning.

(Management and Leadership Program. Leading and managing framework. Management Sciences for Health, Ballston, VA. 2004.)

Management -- management practices include planning, organizing, implementing, and monitoring and evaluating.

Planning:

- ✓ Set short-term organizational goals and performance objectives.
- ✓ Develop multi-year and annual plans.
- ✓ Allocate adequate resources (money, people, and materials).
- ✓ Anticipate and reduce risks.

Organizing:

- ✓ Ensure a structure that provides accountability and delineates authority.
- ✓ Ensure that systems for human resource management, finance, logistics, quality assurance, operations, information, and marketing effectively support the plan.
- ✓ Strengthen work processes to implement the plan.
- ✓ Align staff capacities with planned activities.

Implementing:

- ✓ Integrate systems and coordinate work flow.
- ✓ Balance competing demands.
- ✓ Routinely use data for decision making.
- ✓ Coordinate activities with programs and sectors.
- ✓ Adjust plans and resources as circumstances change.

Monitoring and Evaluating:

- ✓ Monitor and reflect on progress against plans.
- ✓ Provide feedback.
- ✓ Identify needed changes.
- ✓ Improve work processes, procedures, and tools.

(Management and Leadership Program. Leading and managing framework. Management Sciences for Health, Ballston, VA. 2004.)

Medical informatics -- the development and application of information technology systems to problems in health care, research, and education. (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academies Press; 2001.)

Medication: For the purposes of this document this term may refer to prescription medications, non-prescription (over-the-counter) medications, and herbal and/or other dietary supplements.

Medication-use system - medication use is a complex process that comprises the sub-processes of medication prescribing, order processing, dispensing, administration, and effects monitoring. The key elements that most often affect the medication use process...are...., patient information; drug information, communication of drug information; drug labeling, packaging and nomenclature; drug storage, stock and standardization; drug device acquisition, use and monitoring; environmental factors; competency and staff education; patient education; and quality processes and risk management. (Institute of Safe Medication Practices web site accessed May 31, 2005 [http://www.ismp.org/Pages/ismp\\_faq.html#Question%207](http://www.ismp.org/Pages/ismp_faq.html#Question%207).)

Patient-centered care -- identify, respect, and care about patients' differences, values, preferences, and expressed needs; relieve pain and suffering; coordinate continuous care; listen to, clearly inform, communicate with, and educate patients; share decision making and management; and continuously advocate disease prevention, wellness, and promotion of healthy lifestyles, including a focus on population health. (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academies Press; 2001.)

Pharmacy practice research – includes all forms of scholarly scientific inquiry that may be performed by pharmacy residents. Broad in scope, it may include prospective or retrospective clinical studies, pharmacokinetic or pharmacodynamic studies, outcome studies, or evaluation of some aspect of pharmacy practice (e.g., impact of a new program or service). Typically, research projects should be applied in nature, using human data, but exceptions may occur.

Professional -- the active demonstration of the 10 traits of a professional.

1. Knowledge and skills of a profession.
2. Commitment to self-improvement of skills and knowledge.
3. Service orientation.
4. Pride in the profession.
5. Covenantal relationship with the client.
6. Creativity and innovation.
7. Conscience and trustworthiness.
8. Accountability for his/her work.
9. Ethically sound decision making.

#### 10. Leadership.

(Ten marks of a professional working smart. New York, NY: National Institute of Business Management, March 11, 1991;17[5].).

Quality -- the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academies Press; 2001.)

Quality improvement -- identify errors and hazards in care; understand and implement basic safety design principles, such as standardization and simplification; continually understand and measure quality of care in terms of structure, process, and outcomes in relation to patient and community needs; and design and test interventions to change processes and systems of care, with the objective of improving quality.” (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academies Press; 2001.)