

REQUIRED COMPETENCY AREAS, GOALS, AND OBJECTIVES FOR POSTGRADUATE YEAR TWO (PGY2) HEALTH-SYSTEM PHARMACY ADMINISTRATION AND LEADERSHIP RESIDENCIES

Introduction:

A PGY2 health-system pharmacy administration and leadership residency builds upon PGY1 residency graduates' competence in the delivery of patient-centered care and in pharmacy operational services to prepare residents who can assume high level managerial, supervisory, and leadership responsibilities. Areas of competence emphasized during the program include safe and effective medication-use systems, quality assurance and improvement, the management of human resources, the management of financial resources, use of technology, and advanced leadership. The residency lays the foundation for continued growth in management and leadership skills.

Upon graduation, residents are prepared for a clinical or operational management/supervisory role in a variety of work settings.

Definitions:

Competency Areas: Categories of the residency graduates' capabilities.

Competency areas are classified into one of three categories:

Required: Five competency areas are required (all programs must include them and all of their associated goals and objectives).

Additional (for program): Competency area(s) that residency programs may choose to use (in addition to the five required areas) to meet program-specific program needs. Additional competency areas also include those developed by individual programs.

Elective (for specific residents): Competency area(s) or specific goals and objectives within the competency area(s) selected optionally for specific resident(s).

Educational Goals (Goal): Broad statement of abilities.

Educational Objectives (Objectives): Observable, measurable statements describing what residents will be able to do as a result of participating in the residency program.

Criteria: Examples that describe competent performance of educational objectives. Since the criteria are examples, they are not all required. Criteria may be referenced to provide feedback to residents in communicating their current performance, while engaging in professional and educational activities, to illustrate opportunities for improvement.

Activities: The Standard requires that learning activities be specified for each educational objective in learning experience descriptions. Activities are what residents will do to learn and practice the skills described in objectives. Activities are the answer to the question, "What can residents do, in the context of this learning experience, that will provide the kind of experiences necessary to achieve the educational objective?" (compare and contrast activities with criteria by referring to the definition of criteria immediately above). Specified activities should match the Bloom's Taxonomy learning level stated in parentheses before each objective.

Example:

Objective R1.1.2: (Applying) Interact effectively with patients, family members, and caregivers.

Learning activity:

Provide education to patients regarding proper medication use and administration, adherence, and possible adverse drug effects for all new medications initiated during clinic appointments.

- Interactions are respectful and collaborative.
- Uses effective communication skills.
- Shows empathy.
- Empowers patients to take responsibility for their health.
- Demonstrates cultural competence.

COMPETENCY AREA R1: Clinical and Operational Management

Goal R1.1: Identify patient care service opportunities.

Objective R1.1.1: (Evaluating) Based on one's assessment of the scope of the pharmacy's current services, identify any service opportunities.

Criteria:

- Demonstrates understanding of the scope of pharmacy services that an organization should provide.
- Appropriately addresses organizational goals and identifies metrics related to those goals.
- Develop a vision for the pharmacy enterprise.
- Recommend changes or additions to address the assessed service opportunities.

Goal R1.2: Participate in the development and coordination of medication-use policy improvement initiatives.

Objective R1.2.1: (Understanding) Develop an understanding of the formulary systems.

Criteria:

- Demonstrates understanding of how formularies are established, approved, revised, and maintained.
- Demonstrates understanding of the roles on committees and effectively addresses formulary issues.
- Explains strategies used by pharmaceutical manufacturers and sales representatives to influence drug formularies.
- Summarizes procedures regarding exceptions to the formulary.
- Mitigates the impact of a drug shortage(s) and communicates changes.
- Executes strategies for assuring successful implementation and adherence to formulary policies (e.g., therapeutic substitution, guideline development).

Objective R1.2.2: (Evaluating) Based on an assessment of the adequacy of the pharmacy's current system for inventory control, make any needed recommendations for improvement.

- Demonstrates understanding of the principles of inventory control, including cycle counts, audits, physical inventory, turnover rate, handling return of merchandise, drug recalls, and days-on-hand.
- Compares and contrasts various software programs and technologies used to support inventory control systems.
- Describes characteristics of an effective drug recall policy and procedure for pharmaceuticals and drug samples.
- Determines impact of the pharmaceutical return process.
- Explains strategies for ensuring the integrity of the supply chain.
- Summarizes how the counterfeiting of medications is achieved and strategies for preventing counterfeited medications in the U.S. drug supply.
- Explains the meaning of the term "pedigree" as it relates to medications.
- Explains processes by which medications in U.S. appear on the black market.
- Assesses effectiveness of current methods for detecting drug diversion in organizations.
- Determines management strategies for drug shortages

Objective R1.2.3: (Evaluating) Based on an assessment of the pharmacy's policies and procedures for the disposal of medications, make any needed recommendations for improvement (i.e. regulatory, financial, environmental impact).

Criteria:

- Demonstrates understanding of regulations involved in the disposal of medications.
- Evaluates handling of hazardous drugs and makes recommendations to meet current standards.
- Evaluates handling of controlled substances and determines if modifications are needed to improve the security of controlled substances.
- Assess compliance and impact of the pharmaceutical waste stream.

Goal R1.3: Participate in assuring pharmacy compliance with internal and external compliance requirements, including legal, regulatory, safety, and accreditation requirements.

Objective R1.3.1: (Applying) Participate in a departmental assessment to assure compliance with applicable legal, regulatory, safety, and accreditation requirements.

Criteria:

- Identifies all of the legal, regulatory, safety, and accreditation requirements affecting pharmacy.
- Explains the requirements for conduct of an ASHP-accredited pharmacy residency.
- Examines how the department's regulatory management systems integrate with the organization's overall management for achieving compliance.

Objective R1.3.2: (Evaluating) Develop effective strategies for reporting internal and external quality data.

Criteria:

- Explains the pharmacy's role in assuring compliance.
- Evaluates factors that impact the quality of performance.
- Compares sources of quality standards.
- Explains the meaning of commonly used quality indicators.
- Explains sources of internal and external data and criteria for measuring compliance.
- Knows the quality standards pertinent to pharmacy.
- Determines the current state of compliance with the quality standards.
- Review and discuss literature and known solutions on effective compliance strategies.
- Recommends improvement initiative to address quality or compliance concern.
- Share pharmacy's viewpoint with internal and external customers when appropriate to discussion.

Goal R1.4: Understand and evaluate the medication distribution process.

Objective R1.4.1: (Understanding) Understand pharmacy's medication use systems.

- Demonstrates understanding of the principles underlying a safe medication distribution system.
- Summarizes the principles for management and control of:
 - unit-dose medications.
 - sterile product preparation.
 - chemotherapy and other hazardous substances.
 - controlled substances.
 - investigational drugs.

- medication samples.
- take-home medications.
- medication repackaging.
- drug compounding.
- self-administered medications.
- home infusions.
- non-formulary medications.
- pumps.
- emergency medication supplies.
- pharmaceutical waste.
- Specialty medication.
- Community/Retail medication.

Objective R1.4.2: (Evaluating) Evaluate pharmacy's medication use systems to assure practice is safe and effective.

Criteria:

- Demonstrates understanding of advantages and disadvantages of various medication distribution systems.
- Demonstrates understanding of how principles for management and control of medications may differ among various settings (e.g., inpatient care units, ambulatory clinics, procedural areas, operative suite, retail/outpatient/specialty pharmacy, mail order).
- Demonstrates understanding of medication distribution activities that can effectively be performed by pharmacy technicians.
- Demonstrates understanding of medication storage requirements and who should have authorized access to medications.
- Demonstrates understanding of strategies used within the organization for routine review and management of non-formulary medication use.

Objective R1.4.3: (Creating) Based on assessment of the pharmacy's medication use systems, contribute any needed recommendations for improvement.

Criteria:

 Recommends or implements an improvement based on the assessment of the medication use system).

Goal R1.5: Design a plan and manage the daily safe and effective use of technology and automated systems.

Objective R1.5.1: (Analyzing) Analyze pharmacy information technology workflow to assure safe and efficient patient care.

- Assesses daily pharmacy technology workflow.
- Compares current policies and procedures for a particular piece of technology or automated system against current best practices and make recommendations for needed improvement.
- Explains mechanisms, techniques and strategies of clinical decision support for pharmacists that can improve the safety and cost-effectiveness of patient care.
- Determines new sources of medication error that may follow technology implementation.
- Explains pharmacy management responsibilities relating to information systems and technology.

- Explains the importance of ensuring that information systems and data sources are integrated across the organization to facilitate appropriate medication use.
- Explains advances and limitations in technology, hardware and software available to pharmacists and other health care professionals in the pursuit of improving patient care.
- Determines if improvements are effective for the purpose they are designed to address.
- Explains how pharmacy automation and technology fits within the organization.
- Evaluate critical factors for assessing the functions, benefits, and constraints relative to safety and effectiveness of available technology and automation systems.
- Explains the relative effectiveness of the following automated systems in terms of their ability to reduce medication errors: centralized pharmacy dispensing robotics, centralized carousel dispensing technology, unit based automated dispensing cabinets, CPOE, bar code medication administration (BCMA), and "smart" IV infusion pump technology.
- Explains the characteristics of an effective program of alerts for a medication order entry system.
- Explains developing technology to assist in the delivery and monitoring of patient care in a virtual world.

Objective R1.5.2: (Creating) Design and implement an improvement related to the use of information technology and automated systems.

Criteria:

- Completes an accurate evaluation of the current use of technology and automated systems.
- Evaluates emerging technology and automation systems for the tasks of the medication-use system.
- Identifies the resources that would be needed to design, build, validate, and implement a specific piece of new technology or automation system.
- Effectively implements and assesses the impact of the technological improvement.
- Considers the pharmacy department and institution's strategic plan and operational statement.
- Identifies key stake holders to develop and improve technology.
- Determines goals and metrics of success, including key milestones.
- Effectively assesses the technological options and the impact on pharmacy, using appropriate indications of productivity, safety, and quality metrics.
- Effectively addresses the human factors and change management challenges of recommendation.
- Incorporates the importance of developing a long-term pharmacy information technology and automation plan, that fits with the organization's plan.
- Includes appropriate components of a project plan for the implementation of new technology and automation systems.

COMPETENCY AREA R2: Quality, Safety and Process Improvement

Goal R2.1: Apply methods for measuring and improving internal and external customer satisfaction with pharmacy services.

Objective R2.1.1: (Applying) Participate in an assessment of customer satisfaction with a specific aspect of pharmacy services.

Criteria:

 Demonstrates understanding of the concept of "service mentality" and its role in the pharmacy environment.

- Demonstrates understanding of the principles of survey research.
- Participate in the development of an effective survey tool.
- Utilize proper methodology for analysis of survey data.
- States sources of research literature on customer satisfaction, applicable to the health care environment.
- Demonstrates understanding of metrics nationally (e.g., STARS, HCAHPS, CGCAHPS, other performance metrics).
- Recommends, or implements and demonstrates improvement (a change based on the assessment).

Goal R2.2: Participate in coordination of a safety oversight program.

Objective R2.2.1: (Applying) Participates in medication safety oversight programs.

Criteria:

- Effectively addresses medication safety issues.
- Effectively participates in systematic processes of root causes.
- Effectively participates in a failure mode and effects analysis.
- Effectively participates in compiling, analyzing and communicating data and reports related to adverse drug events.

Objective R2.2.2: (Evaluating) Lead a root cause analysis, gap analysis, or other safety assessments based on a significant patient safety event.

Criteria:

- Accurately identifies and measures a problem.
- Develops an effective action plan.
- Identifies an appropriate solution.
- Effectively implements the action plan.
- Effectively evaluates the results of the action plan.

Objective R2.2.3: (Creating) Participate in the development or revision of the pharmacy's quality improvement plan or policy.

Criteria:

- Ensures quality improvement plan integrates appropriately with the organization's quality initiatives and effectively uses the organization's process for improving quality.
- Demonstrates understanding of current quality improvement methodologies and tools, including the applicability of each.
- Effectively participates in the development of a proposal for improvement of a specific area of pharmacy services, including identification of an area for improvement, addresses key stakeholders and assesses different options in the integration of the service.
- Outlines metrics to measure, to determine success.
- Evaluates metrics and analyzes results to improve the quality and/or productivity of the pharmacy.

COMPETENCY AREA R3: Finance and Budgeting

Goal R3.1: Utilize productivity measurement in operational decision-making.

Objective R3.1.1: (Analyzing) When given a productivity report, draw appropriate conclusions.

Criteria:

- Locates and uses productivity reports appropriately and is able to describe and utilize the elements included correctly.
- Assesses information, key metrics and statistics, and explains potential conclusions.
- Confirms conclusions by investigating other resources to ensure making appropriate assessments.
- Effectively utilizes an internal and external benchmarking and productivity system to make management decisions.
- Compares and contrasts of internal and external benchmarking correctly.
- Distinguishes and provides examples of meaningful pharmacy benchmarking metrics.
- Applies benchmarking metrics appropriately to pharmacy patient care services.
- Utilizes effectively an internal and external benchmarking and productivity system to make management decisions.

Goal R3.2: Monitor and manage operating and capital budgets.

Objective R3.2.1: (Analyzing) Participates in the operating budget process for a selected aspect of the pharmacy's activities.

Criteria:

- Includes appropriate contents in an operating budget.
- Appropriately exercises the pharmacy department's responsibilities in the budget process.
- Demonstrates understanding of the organization's budget cycle.
- Uses an appropriate process for establishing an operating budget.
- States sources of information for constructing an operating budget.
- Outlines a strategy for presenting a budget to senior administration.
- Demonstrates understanding of the organization's process for making new personnel requests.

Objective R3.2.2: (Analyzing) Participate in a capital budget process for a selected aspect of the pharmacy's activities.

Criteria:

- Demonstrates understanding of appropriate contents in a capital budget.
- Applies effective strategies for securing major and minor capital resources.
- Demonstrates understanding of the role of return on investment (ROI) analysis in obtaining new capital requests.
- Understand the relationship of the operating budget and capital budget, including depreciation expenses based on clinical equipment replacement processes.

Objective R3.2.3: (Analyzing) Participate in the monitoring of financial performance and explanation of variances.

- Demonstrates understanding of how pharmacy's financial goals are developed by the organization.
- Demonstrates understanding of the pharmacy's financial performance goals.
- Demonstrates understanding of financial performance auditing systems.
- Demonstrates understanding of pharmacy budget monitoring reports, data they contain, and their relationship to each other.
- Effectively uses strategies for routine monitoring of the financial performance of a pharmacy department.

 Demonstrates understanding of the importance of budget variance reporting and taking actions to correct variances.

Goal R3.3: Demonstrate understanding of the pharmacy revenue cycle and the implications for pharmacy.

Objective R3.3.1: (Understanding) Explain the pharmacy revenue cycle and its impact on pharmacy practice.

Criteria:

- Explains the concept of payment denials and claims reconciliation and its link to pharmacy revenue cycle management.
- Explains the concepts and processes of claim adjudications, retail Rx audit recovery programs, and DIR fees.
- Explains the concept of payor mix and its link to pharmacy revenue cycle management.
- Explains the concept of coding and its link to pharmacy revenue cycle management.
- Explains the concept of price setting, the chargemaster, and its link to pharmacy revenue cycle management.
- Describes the difference between gross revenues and net revenues.
- Explains various strategies for maximizing revenue capture and recovery.
- Describes pharmacy reimbursement, including evolving reimbursement models and implications for pharmacy.

Goal R3.4: Develop strategies to ensure access to medication and implement cost reduction strategies.

Objective R3.4.1: (Understanding) Demonstrates understanding of societal forces that influence rising costs for medications and the provision of pharmacy services.

Criteria:

- Understands legislative influences on costs (e.g. 340B, eligibility, program requirements).
- Explain how to address disparities and ensure access to medications.
- States sources of information on various patient assistance programs, including eligibility and program requirements.
- Explains strategies for cost-justifying the existence of a pharmacy-run patient drug assistance program within a health-system.
- Demonstrates understanding of the different components of a medications assistance program (e.g., manufacturer assistance, benefits investigations, prior authorizations, copay assistance).

Objective R3.4.2: (Understanding) Review the process of negotiating contracts with vendors.

- Demonstrates understanding of the relationships between the manufacturers of medications, group purchasing organizations (GPOs), wholesalers, and pharmacy departments.
- Demonstrates understanding of laws and rules related to discriminatory pricing and regulations/laws (e.g., anti-kick-back, anti-trust).
- Demonstrates understanding of language in legal agreements (e.g., indemnification).
- Demonstrates understanding of the concept of bundling relative to contracting.
- Demonstrates understanding of the concept of, chargebacks, market share, rebates, channeling, contract rebates, cost minus, and classes of trade.
- Demonstrates understanding of the typical bidding process for the purchase of pharmaceuticals.

- Demonstrates understanding of the importance of effective contract analysis, impact on the organization, as well as skills related to optimization of wholesale distribution agreements.
- Demonstrates understanding of methods that group purchasing organizations use to evaluate multisource drugs and vendor bid responses.

Objective R3.4.3: (Creating) Design and implement a cost reduction or inventory management initiative. Criteria:

- Demonstrates understanding of the pharmacy department's role in resource utilization throughout the organization.
- Summarizes the literature on the value of clinical pharmacists in managing the total cost of care.
- Uses a proactive approach to monitoring drug expense.
- Effectively uses strategies for minimizing the cost of pharmaceutical waste.
- Identifies operational and medication-use cost reduction opportunities in the pharmacy department.

COMPETENCY AREA R4: Human Resource Management

Goal R4.1: Contribute to an overall plan for the organization and staffing of the pharmacy.

Objective R4.1.1: (Evaluating) Determine and recommend the staff requirements that match an area of the department's scope of services.

Criteria:

- Analyzes hours and days of operation when making decisions about staffing needs.
- Demonstrates understanding of the effect of state regulations on staffing decisions.
- Considers the implications (legal, operational, political) of staffing below and above the minimum in each service area of the pharmacy.
- Evaluate and demonstrates understanding of the elements of a staffing plan.
- Apply the principles and application of productivity measurement.
- Considers human resources management policies and employee benefits when making decisions about staffing needs.
- Uses appropriate methods to analyze variances between budgeted and actual personnel utilization.
- Recommend staffing changes to optimizes departmental staffing that remains within budget and is based on productivity statistics.

Goal R4.2: Conduct recruitment and hiring activities.

Objective R4.2.1: (Creating) Use knowledge of the organization's customary practice to write or revise a job description for a pharmacy position.

Criteria:

- Follows the organization's format for writing job descriptions.
- Effectively determines the duties of a specific position.
- Writes a job description, or revises an existing one, that meets the organization's requirements.
- States sources of prototype pharmacy job descriptions.

Objective R4.2.2: (Applying) Participate in recruitment and hiring for a particular pharmacy position. Criteria:

- Demonstrates understanding of factors to consider when deciding to hire internally versus externally.
- Demonstrates understanding of differences in the advertising approach for a position to be filled internally versus externally.
- Demonstrates understanding of appropriate information in an advertisement for a pharmacy position, effective strategies for marketing the position, and follows the organization's policy regarding equal employment opportunity and affirmative action.
- Evaluates job candidates for interviews.
- Effectively uses behavioral interviewing techniques.
- Follows laws governing interviewing and hiring.
- Conducts hiring interviews that elicits information helpful for making a hiring decision.
- Follows the organization's and department's policies and procedures for screening and interviewing applicants.
- Collaborates in determining how many candidates to interview.
- Collaborates in determining how many times to interview an applicant.
- Demonstrates understanding of with whom candidates should interview.
- Appropriately determines what should be discussed and not discussed in an interview.
- Demonstrates understanding of actions to pursue when none of the candidates interviewed is acceptable.
- Demonstrates understanding of how many references to require and how to check references.
- Draws appropriate conclusions about an interviewee's potential fit for a position.
- Demonstrates understanding of factors to consider when determining the individual's qualifications for a position.

Goal R4.3: Participate in the departmental performance management system.

Objective R4.3.1: (Applying) Supervise the work of pharmacy personnel.

Criteria:

- Demonstrates understanding of different roles and responsibilities.
- Develops and communicates the goals of the unit or department and strategies for achieving them.
- Establishes suitable goals, action plans, and timelines.
- Develops and clearly explains performance expectations.
- Effectively provides ongoing guidance and support to the employee.
- Observes performance and provide timely and objective feedback.
- Models the role for direction and development.
- Evaluates work load and work patterns and reassigns as needed.

Objective R4.3.2: (Creating) Compose and deliver an employee's performance appraisal.

Criteria:

- Defines appropriate goals in performance appraisals.
- Uses effective ways to measure work against objective and subjective performance standards.
- States the performance standards for a specific position and evaluates employee performance.
- Uses effective methods for documenting and communicating performance standards and evaluation of performance to employees.
- Gives effective feedback in the conduct of performance appraisals.

Objective R4.3.3: (Applying) Participate in the organization's progressive discipline process or participate in a progressive discipline case or scenario, if not available.

- Demonstrates understanding of the components of the progressive discipline process.
- Demonstrates understanding of the benefits of the progressive discipline process to the employer and the employee.
- Participate in a progressive discipline process (or scenario if situation not available).

Goal R4.4: Understand how to design and implement plans for maximizing employee engagement and enhancing employee satisfaction and retention.

Objective R4.4.1: (Understanding) Explain supportive evidence and the organization's strategy regarding employee satisfaction and engagement and effective tactics for recognizing and rewarding employees.

Criteria:

- States sources of published research on employee satisfaction and retention.
- Explains the difference between the terms "employee satisfaction" and "employee engagement".
- Discusses different types of rewards.
- Reviews and discusses literature on motivation of employees.
- Explains effective strategies for recognizing and rewarding employees.
- Explains how employee wellbeing and resilience skills are related to engagement and retention.

Goal R4.5: Understand labor and contract management principles.

Objective R4.5.1: (Understanding) Explain laws affecting various aspects of human resources management and the role of unions in organizations, and their impact on human resources management.

Criteria:

- Explains laws affecting wages, family leave, disabilities, the Civil Rights Act, and equal employment opportunity.
- Understand the role unions play within an organization and the interaction between a union and an organization.
- Describe how collective bargaining agreements are created, updated, and maintained.

COMPETENCY AREA R5: Leadership

Goal R5.1: Demonstrate the personal leadership qualities and commitments necessary to advance the profession of pharmacy.

Objective R5.1.1: (Creating) Create a professional development plan with the goal of improving the quality of one's own performance through self-assessment and personal change.

- Demonstrates understanding of the process by which professionals pursue expertise.
- Appropriately selects and uses formal self-assessment tools and demonstrates understanding of the components of an effective self-assessment process.
- Uses an effective process for staying current with, arranging, and storing pertinent practice-related literature.

- Identifies literature pertinent to one's area of practice.
- Identifies sources of information outside of pharmacy that contain ideas and/or information that may be effectively applied to one's practice.
- Summarizes positive and negative attributes of various journals and online resources pertinent to pharmacy administration.
- Effectively addresses work-life balance issues and personal well-being.
- Creates a personal vision statement that reflects commitment to the advancement of the profession of pharmacy.
- Includes appropriate contents in a personal vision statement.
- For one's own personal vision statement, define actions that would be required of one to attain the vision.
- Ensure one's own vision statement is consistent with the vision of the organization.

Goal R5.2: Demonstrate personal, interpersonal, and professional skills.

Objective R5.2.1: (Applying) Demonstrate sensitivity to the perspective of the patient, caregiver, or health care colleague in all communications.

Criteria:

- Adjusts one's communications according to the level of health literacy of the patient.
- Effectively manages situations in which communications are challenging, including the use of active listening.
- Effectively applies skills in cultural competence.
- Effectively uses communication strategies that are appropriate for patients who are non-English speakers or who are impaired.
- Appropriately modifies communication strategies to accommodate an individual's personal characteristics.
- Appropriately adjusts one's communications for the specific category of health professional (e.g., nurses, physicians, respiratory therapist, etc.).

Objective R5.2.2: (Applying) Demonstrate respect for differences of opinion.

Criteria:

- Includes people with differing opinions in organizational and departmental planning.
- Explains the importance of being open to differences of opinion.
- Effectively uses strategies for listening to people who have different opinions.

Objective R5.2.3: (Applying) Demonstrate enthusiasm and passion for the profession of pharmacy.

- Exude enthusiasm in discussions and interest in profession and learning.
- Participate in professional opportunities that allow passion turned into action (e.g. lobbying, state and national committees, pharmacy student education and development, etc.).
- Engages in positive discussions with external customers on the opportunities and strength of pharmacy.
- Establishes sustained active participation in relevant professional associations.
- Establishes an effective professional network.
- Advocates for the pharmacy profession by effectively communicating its value to others.

Objective R5.2.4: (Applying) Demonstrate ability to manage, prioritize, and execute on assigned responsibilities and tasks.

Criteria:

- Effectively uses verbal techniques that enhance listening to others.
- Uses time management skills effectively.
- Effectively avoids procrastination.
- Accurately describe and assess the use of various leadership styles and emotional intelligence in oneself and others.
- Effectively lead committees, including the conduct of meetings.
- Makes effective management decisions that align with the organization's goals and priorities.
- Demonstrate effective delegation strategies.
- Manage around others timelines

Objective R5.2.5: (Applying) Evidence integrity in professional relationships and actions.

Criteria:

- Demonstrates understanding of ethical dilemmas that may confront the pharmacy leader.
- Demonstrates understanding of processes of ethical reasoning.
- Demonstrates understanding of ethical principles embodied in the American Pharmacists Association Code of Ethics for Pharmacists.
- Effectively uses ethical reasoning (e.g., consequentialist or non-consequentialist) in arriving at a particular ethical decision.

Goal R5.3: Demonstrate business skills required to advance the practice of pharmacy.

Objective R5.3.1: (Applying) Communicates effectively orally and in writing.

Criteria:

- When speaking, speaks clearly and distinctly in grammatically correct English.
- When writing, uses correct English grammar, punctuation, spelling, and style.
- Communicates at the level of complexity appropriate for the intended audience.
- Communicates effectively with a wide range of audiences.

Objective R5.3.2: (Creating) Contribute to the development of a business plan for a new or enhanced pharmacy service or program.

- Accurately identifies unmet customer (i.e., patient, physicians, and other health care providers) needs.
- Uses the organization's desired format for a proposal for a new or enhanced pharmacy service.
- Demonstrates understanding of the components of a new service (e.g., disease state management program).
- Demonstrates understanding of the role of other healthcare providers in meeting the needs of patients involved in a new service (e.g., disease state management programs).
- Identifies the stakeholders for a specific proposal.
- Uses modeling to predict the financial outcome(s) of implementing a proposed new or enhanced service on meeting unmet customer needs.
- Accurately predicts system and human resource needs for developing and implementing a new or enhanced service.
- Accurately predicts the outcome(s) for patients of implementing a new or enhanced service.

- Effectively uses pharmacy databases when developing a new service (e.g., disease state management programs).
- Demonstrates understanding of why and how potential shifts in market share should be factored into decisions on the marketability of a service.
- Justifies new services using return on investment (ROI) analyses.
- Effectively prepares an ROI template.
- Effectively uses the steps in calculating a ROI.
- Calculates a break-even point.
- Effectively determines net present value (NPV).
- Effectively determines the internal rate of return (IRR).

Objective R5.3.3: (Applying) Use effective conflict management skills.

Criteria:

- Demonstrates understanding of how negotiation skills are employed in human resource management situations.
- Effectively uses negotiation techniques in contract negotiations.
- Employ established tools for conflict management including crucial conversations, crisis management, active listening skills, emotional intelligence, facilitation, and reflection.
- Participate in conflict management situation maintaining respect and confidence of parties involved.

Goal R5.4: Demonstrate political skills and organizational credibility.

Objective R5.4.1: (Creating) Lead departmental and/or interdisciplinary teams in the design, implementation, and/or enhancement of the organization's medication-use process.

Criteria:

- Demonstrates understanding of the potential contributions to the achievement of a safe and effective medication-use system.
- Represent the pharmacy perspective on an interdisciplinary team, participating in the redesign of a selected aspect of the organization's medication-use system.

Objective R5.4.2: (Analyzing) When developing a program with multiple stakeholders and/or when confronted with a barrier to the accomplishment of a particular project, analyze the organizational environment, including its structure, network of resources, and politics, to determine a strategy for achieving success.

- Demonstrates understanding of the organizational structure including the function of each of its departments and key individuals.
- Engage key stakeholders at all levels of the organization to ensure alignment and to establish a sustainable accountability structure.
- Effectively uses networking skills in barrier removal.
- Identifies key stakeholders of a given project.
- Uses effective skills in persuasion when appropriate.
- Demonstrates understanding of the types of persuasive arguments that are potentially effective with external customers, pharmacists, health care providers, health-system executives, and decisionmakers
- Identifies formal and informal medical staff leaders and how they can help achieve a goal.

Objective R5.4.3: (Applying) Determine senior administrator (e.g., CEO, COO, CFO, president, vice president) expectations of the pharmacy's leaders.

Criteria:

- Identifies sources of information that can be used to determine administrator expectations.
- Uses effective relationship-building strategies to maximize success in working with senior leadership.

Objective R5.4.4: (Applying) Present to an appropriate audience an explanation of the role and importance of pharmacist active engagement and advocacy in the political and legislative process.

Criteria:

- Demonstrates understanding of current national, regional, and local health care policy issues.
- Advocate for the organization as it relates to the organization's strategic vision.
- Mentor others to engage in the legislative process.
- Actively advocates for professional challenges in legislative arenas.

Goal R5.5: Demonstrate ability to conduct a quality improvement or research project.

Note: Ideally, objectives R5.5.1-R5.5.6 will be addressed through residents working on one quality improvement or research project; however, if this is not possible, all objectives must be addressed by the end of the residency year and can be addressed through work on more than one initiative.

Objective R5.5.1: (Analyzing) Identify and/or demonstrate understanding of a specific project topic related to a quality improvement, healthcare pharmacy administration, or a topic for advancing the pharmacy profession.

Criteria:

- Appropriately identifies or understands problems and opportunities for improvement or research projects.
- Conducts a comprehensive literature search and draws appropriate conclusions.
- Determines an appropriate research question or topic for a practice-related project of significance to patient care that can realistically be addressed in the desired time frame.
- Uses best practices or evidence-based principles to identify opportunities for improvements.
- Accurately evaluates or assists in the evaluation of data generated by health information technology or automated systems to identify opportunities for improvement.

Objective R5.5.2: (Creating) Develop a plan or research protocol for a practice quality improvement, healthcare pharmacy administration topics, or related topics for advancing the pharmacy profession.

- Develops specific aims, selects an appropriate study design, and develops study methods to answer the research question(s).
- Applies safety design practices (e.g., standardization, simplification, human factors training, lean principles, FOCUS-PDCA, other process improvement or research methodologies) appropriately and accurately.
- Plan for improvement includes appropriate reviews and approvals required by department or organization and addresses the concerns of all stakeholders.
- Applies evidence-based and/or basic pharmacoeconomic principles, if needed.
- Develops a feasible design for a prospective or retrospective clinical or outcomes analysis project that considers who or what will be affected by the project.
- Identifies and obtains necessary approvals, (e.g., IRB, quality review board, funding) and responds promptly to feedback or reviews for a practice-related project.

- Acts in accordance with the ethics of research on human subjects, if applicable.
- Implements the project as specified in its design.
- Plan design is practical to implement and is expected to remedy or minimize the identified challenge or deficiency.

Objective R5.5.3: (Evaluating) Collect and evaluate data for a practice quality improvement or research project related to healthcare pharmacy administration or for a topic for advancing the pharmacy profession.

Criteria:

- Collects the appropriate types of data as required by project design.
- Uses appropriate electronic data and information from internal information databases, external
 online databases, appropriate Internet resources, and other sources of decision support, as
 applicable.
- Uses appropriate methods for analyzing data in a prospective and retrospective clinical, humanistic, and/or economic outcomes analysis.
- Develops and follows an appropriate research or project timeline.
- Correctly identifies need for additional modifications or changes to the project.
- Applies results of a prospective or retrospective clinical, humanistic, and/or economic outcomes analysis to internal business decisions and modifications to a customer's formulary or benefit design as appropriate.
- Uses continuous quality improvement (CQI) principles to assess the success of the implemented change, if applicable.
- Considers the impact of the limitations of the project or research design on the interpretation of results.
- Accurately and appropriately develops plans to address opportunities for additional changes.

Objective R5.5.4: (Applying) Implement a quality improvement or research project related to healthcare pharmacy administration or for a topic for advancing the pharmacy profession.

Criteria:

- Plan is based on appropriate data.
- Effectively presents plan (e.g., accurately recommends or contributes to recommendation for operational change, formulary addition or deletion, implementation of medication guideline or restriction, or treatment protocol implementation) to appropriate audience.
- Demonstrates appropriate assertiveness in presenting pharmacy concerns, solutions, and interests to external stakeholders.
- Gains necessary commitment and approval for implementation.
- Follows established timeline and milestones.
- Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties.
- Outcome of change is evaluated accurately and fully.

Objective R5.5.5: (Evaluating) Assess changes, or need to make changes, based on the project.

- Evaluate data and/or outcome of project accurately and fully.
- Includes operational, clinical, economic, and humanistic outcomes of patient care, if applicable.
- Uses continuous quality improvement (CQI) principles to assess the success of the implemented change, if applicable.
- Correctly identifies need for additional modifications or changes based on outcome.

- Accurately assesses the impact of the project, including its sustainability, if applicable.
- Accurately and appropriately develops plans to address opportunities for additional changes.

Objective R5.5.6: (Creating) Effectively develop and present, orally and in writing, a final project or research report suitable for publication at a local, regional, or national conference (the presentation may be virtual).

Criteria:

- Outcome of change is reported accurately to appropriate stakeholders(s) and policy-making bodies according to departmental or organizational processes.
- Report includes implications for changes to or improvement in pharmacy practice.
- Report uses an accepted manuscript style suitable for publication in professional literature.
- Oral presentations to appropriate audiences within the department and organization, or to external
 audiences, use effective communication and presentation skills and tools (e.g., handouts, slides) to
 convey points successfully.

Goal R5.6: Lead a designated area or program within pharmacy services.

Objective R5.6.1: (Applying) Perform management functions for a designated area or program within pharmacy services (e.g., prior authorization team, IV room, internal audit function, distribution system, dispensing pharmacy, patient care services).

- Demonstrates understanding of the principle of span of control and how it affects the achievement of the pharmacy mission.
- Demonstrates understanding of the principles of empowerment and delegation and how they affect the achievement of goals in organizations.
- Uses appropriate available data in making management decisions.
- Use appropriate management skills to function effectively as a manager of a designated pharmacy service area.

Approved by the ASHP Commission on Credentialing on August 12, 2018. Endorsed by the ASHP Board of Directors on September 28, 2018.

The design group comprised the following pharmacy administration and leadership practitioners, residency program directors, and ASHP staff: Michael Alwan, Pharm.D., M.S., BCPS, Director of Pharmacy, University of Washington Medical Center, Northwest Hospital; Alison Apple, M.S., B.S., Director, Inpatient Pharmacy at Penn Medicine, University of Pennsylvania Health System, Contract Lead Surveyor, Accreditation Services, ASHP; Daniel M. Ashby, M.S., FASHP, Chief Pharmacy Officer, Johns Hopkins Health System; Samantha Bochenek, Pharm.D., MBA, BCPS, Director, Infusion Pharmacy Services, Director, Specialty Pharmacy Residency, UK HealthCare; Philip W. Brummond, Pharm.D., M.S., Director of Pharmacy, Froedtert & The Medical College of Wisconsin; James A. Cattin, M.S., RPh, Director of Pharmacy, Eastern Maine Medical Center; Charles E. Daniels, B.S. Pharm, PhD, FASHP, Chief Pharmacy Officer, UC San Diego Heath; Stephen J. Davis, Pharm.D., M.S., CPPS, Pharmacy Operations Manager, Residency Program Director, Texas Children's Hospital; Lynn Eschenbacher, Pharm.D., MBA, FASHP, Residency Program Director, National Director of Pharmacy Operations, The Resource Group/Ascension Health, St. Louis; Leigh (DeMarco) Fritz, Pharm.D., M.S., Surgical Services Manager of Pharmacy Services, Residency Coordinator, Huntsman Cancer Hospital and University of Utah Health, Salt Lake City; Vincent Jackson, Vice President, Pharmacy Service Group HealthTrust, HealthTrust/University of Tennessee College of Pharmacy; Jamie S. Kalus, BCPS (AQ CV), Director, PGY1 Residency Program, Pharmacy Administration, Henry Ford Hospital, Detroit; Carolyn G. Kowalchik, RPh, M.S., Central Region Pharmacy Director, Intermountain Medical Center Inpatient Pharmacy, Salt Lake City; Mary-Haston Leary, Pharm.D., M.S., BCPS, Clinical Manager, Analytics, Outcomes, and Impact, UNC Medical Center; Daniel A. Lewis, Pharm.D., MBA, BCPS, Pharmacy Manager, Heart and Vascular Institute, Cleveland Clinic; Karla M. Miller, Pharm.D., BCPP, Director of Pharmacy, HCA Management Services/University of Tennessee College of Pharmacy; John Pastor III, Pharm.D., FASHP, System Director of Pharmacy, Residency Program Director, Fairview Health Services and the University of MN Medical Center; Heidi A. Pillen, Pharm.D., Director of Pharmacy, Clinical Services & Medication Use Policy, Beaumont Health; Linda S. Tyler, Pharm.D., FASHP, Director of Pharmacy, Residency Program Director, University of Utah Health; Meghann Voegeli, Pharm.D., M.S., Pharmacy Director, Inpatient Pharmacy Operations and Pediatric Services; Residency Coordinator, University of Wisconsin Health; Robert J. Weber, Pharm.D., RPh, M.S., BCPS, FASHP, FNAP, Director of Pharmacy, Residency Program Director, Ohio State University Wexner Medical Center, Assistant Dean, College of Pharmacy; Samaneh T. Wilkinson, Pharm.D., M.S.; Director of Pharmacy and Ambulatory Care Services, Residency Program Director, University of Kansas Health System; Marialice S. Bennett, RPH, FAPHA, Professor Emeritus, Ohio State University College of Pharmacy, Accreditation Services Associate, Lead Surveyor, Accreditation Services, ASHP; Katrin S. Fulginiti, B.S. Pharm., MGA, Director, Operations, Accreditation Services, ASHP; Eric M. Grace, M.S.T., B.A., Director, Standards Development and Training, Accreditation Services, ASHP. The contribution of reviewers is gratefully acknowledged.

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All single-year PGY2 Health-System Pharmacy Administration and Leadership residency programs must implement these educational Competency Areas, Goals and Objectives for the 2019-2020 residency year; starting July 1, 2019, there is no option to delay.

For combined programs, the following applies:

- 2018 2020 residents who were enrolled in a combined PGY1 Pharmacy/PGY2 Health-System Pharmacy
 Administration and Leadership residency program will continue use of the 2008 educational Competency
 Areas, Goals and Objectives until graduation.
- 2019 2021 residents who will be enrolled in a combined PGY1 Pharmacy/PGY2 Health-System Pharmacy
 Administration and Leadership residency program, will be required to use these educational Competency
 Areas, Goals and Objectives.