

REQUIRED COMPETENCY AREAS, GOALS, AND OBJECTIVES FOR POSTGRADUATE YEAR ONE (PGY1) PHARMACY, COMMUNITY-BASED, MANAGED CARE, AND VETERINARY PHARMACY RESIDENCY PROGRAMS

Introduction

The Postgraduate Year One (PGY1) Competency Areas, Goals, and Objectives (CAGOs) have gone through a process of harmonization across the pharmacy residency practice environments, to streamline the required educational experiences, knowledge, and skills residents must demonstrate and achieve for successful completion of a PGY1 residency. The CAGOs outlined in this document are for use in conjunction with the *ASHP Accreditation Standard for Postgraduate Year One (PGY1) Pharmacy Residency Programs (Pharmacy, Community-Based, Managed Care, and Veterinary Pharmacy)*. The four competency areas (Patient Care, Practice Advancement, Leadership, Teaching and Education) and their associated goals and objectives are required and must be included in all programs.

Each objective has been classified according to educational taxonomy and appropriate level of learning. An explanation of the taxonomies is available elsewhere.^{1,2} Objectives are achieved through the completion of activities. The Standard requires that specific activities be developed that match the Bloom's Taxonomy learning level for each objective.

The use of criteria-based evaluations is required by the Standard for both formative and summative assessments. Preceptors may develop their own criteria to assess resident performance, identify areas requiring performance improvement, and meet the intent of the Standard.

1. Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York, Toronto: Longmans, Green.

2. 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.

Definitions of Educational Terminology

Competency Areas: Categories of resident(s) knowledge, capabilities, and skillsets. The four PGY2 competency areas (Patient Care, Practice Advancement, Leadership and Management, Teaching and Education) and their associated goals and objectives are required and must be included in all programs.

Educational Goals (Goal): Broad statement of desired outcomes.

Educational Objectives (Objective): Observable, measurable statements describing what residents will achieve by completing activities in a residency program.

Criteria: Statements that describe competent performance, behaviors, or skills related to the educational objective. Multiple criteria are provided to align with the activities developed by programs.

Activities: Activities are what residents will do to learn and practice the skills described in objectives. Learning activities must be developed by each residency program, for each educational objective in the learning experience descriptions. Activities should match the taxonomy learning level stated in parentheses before each objective.

COMPETENCY AREA R1: Patient Care

Goal R1.1: Provide safe and effective patient care services following JCPP (Pharmacists' Patient Care Process).¹

Objective R1.1.1: (Analyzing) Collect relevant subjective and objective information about the patient.

Criteria:

- Uses a systematic and organized approach to gather and verify information from appropriate sources (e.g., existing patient records, the patient, caregivers, other healthcare professionals).
- Evaluates medication list and medication-use history for prescription and nonprescription medications; including but not limited to dietary supplements, illicit and recreational substances, non-traditional therapies, immunizations, allergies, adverse drug reactions, and medication adherence and persistence.
- Collects relevant health data including medical and social history, health and wellness information, laboratory and biometric test results, physical assessment findings, and pharmacogenomics and pharmacogenetic information, if available.
- Determines patient lifestyle habits, preferences and beliefs, health literacy, health and functional goals, socioeconomic factors, and/or other health-related social needs that affect access to medications and other aspects of care.
- Determines missing objective information and performs appropriate physical assessment, orders laboratory tests, and/or conducts point of care testing, as applicable.

Objective R1.1.2: (Evaluating) Assess clinical information collected and analyze its impact on the patient's overall health goals.

Criteria:

- Determines appropriateness, effectiveness, and safety of each medication.
- Interprets clinical information appropriately as part of assessment.
- Identifies unmet healthcare needs of the patient.
- Identifies medication therapy problems accurately.
- Includes health-related social needs and considers social determinants of health (SDOH) as part of assessment.
- Considers preventive health strategies as part of assessment.
- Accurately applies evidence-based medicine and guidelines to individual patient care which reflects patient's values, preferences, priorities, understanding, and goals.

Objective R1.1.3: (Creating) Develop evidence-based, cost effective, and comprehensive patient-centered care plans.

Criteria:

- Chooses and follows the most appropriate evidence and/or guidelines.
- Addresses medication-related problems and optimizes medication therapy, in alignment with pertinent medication-use policies.
- Addresses health-related social needs and other social determinants of health (SDOH) as part of the care plan.
- Addresses preventive health strategies as part of the care plan.
- Engages the patient in shared decision making, as appropriate.

¹ Joint Commission of Pharmacy Practitioners. *Pharmacists' Patient Care Process*. May 29, 2014. Available at: <https://jcphp.net/wp-content/uploads/2016/03/PatientCareProcess-with-supporting-organizations.pdf>.

- Sets realistic and measurable goals of therapy for achieving clinical outcomes in the context of patient's overall healthcare goals, understanding, preferences, priorities, and access to care.
- Identify when a patient requires an alternate level or method of care.

Objective R1.1.4: (Applying) Implement care plans.

Criteria:

- Appropriately initiates, modifies, discontinues, or administers medication therapy, as authorized.
- Ensures timely completion of medication orders, prescriptions, and/or medication coverage determinations that are aligned with pertinent medication-use policies to optimize patient care.
- Determines and schedules appropriate follow-up care or referrals, as needed, to achieve goals of therapy.
- Engages the patient through education, empowerment, and self-management.
- Engages other team members, as appropriate.

Objective R1.1.5: (Creating) Follow-up: Monitor therapy, evaluate progress toward or achievement of patient outcomes, and modify care plans.

Criteria:

- Reassesses all medications for appropriateness, effectiveness, safety, and patient adherence through available health data, laboratory and biometric test results, and patient feedback.
- Evaluates clinical endpoints and outcomes of care including progress toward or the achievement of goals of therapy.
- Identifies appropriate modifications to the care plan.
- Establishes a revised care plan in collaboration with other healthcare professionals, the patient, and/or caregivers.
- Communicates relevant modifications to the care plan to the patient, caregivers, and other relevant healthcare professionals, as appropriate.
- Modifies schedule for follow-up care or referral as needed to assess progress toward the established goals of therapy.

Objective R1.1.6: (Analyzing) Identify and address medication-related needs of individual patients experiencing care transitions regarding physical location, level of care, providers, or access to medications.

Criteria:

- Routinely identifies patients who are experiencing care transitions.
- Effectively participates in obtaining or validating a thorough and accurate medication history.
- Conducts a thorough and accurate medication reconciliation.
- Identifies potential and actual medication-related problems.
- Provides medication management, when appropriate.
- Considers the appropriateness of medication therapy during care transitions.
- Evaluates cost, availability, coverage, and affordability of medication therapy.
- Takes appropriate actions on identified medication-related problems, including steps to help avoid unnecessary use of healthcare resources.
- Provides effective medication education to the patient and/or caregiver.
- Identifies appropriate resources for patients in transition and makes appropriate connections or referrals to resolve issues.
- Follows up with patient in a timely manner, as appropriate.
- Provides accurate and timely follow-up information when patients transfer to another facility, level of care, pharmacists, or provider, as appropriate.

Goal R1.2: Provide patient-centered care through interacting and facilitating effective communication with patients, caregivers, and stakeholders.

Objective R1.2.1: (Applying) Collaborate and communicate with healthcare team members.

Criteria:

- Adheres consistently and appropriately to the Core Principles & Values for Effective Team-based Health Care.²
- Follows the organization's communication policies and procedures.
- Demonstrates appropriate skills in negotiation, conflict management, and consensus building.
- Interacts collaboratively and respectfully.
- Advocates for the patient.
- Chooses an appropriate form of communication with team members based on type and urgency of information, recommendation, and/or request.
- Recommends or communicates patients' regimens and associated monitoring plans to relevant members of the healthcare team clearly, concisely, persuasively, and timely.

Objective R1.2.2: (Applying) Communicate effectively with patients and caregivers.

Criteria:

- Uses optimal method(s) to interact, in-person and/or virtually, with patients and caregivers including any accommodations to alleviate specific barriers to communication (e.g., patient-friendly language, language services, assistive technology, visual aids).
- Addresses communication barriers during telehealth interactions, as applicable.
- Interacts in a respectful, collaborative, empathetic, and personalized manner.
- Follows the organization's communication policies and procedures.
- Uses appropriate motivational interviewing techniques and open-ended questions to facilitate health behavior change.
- Considers non-verbal cues and adjusts delivery, when needed.
- In addition to an oral summary, provides a written summary of recommended medication-related changes and other pertinent educational materials and available resources, as appropriate.

Objective R1.2.3: (Applying) Document patient care activities in the medical record or where appropriate.

Criteria:

- Selects appropriate information to document.
- Documents services provided, actions taken, interventions performed, referrals made, and outcomes achieved, as applicable.
- Documents in a timely manner.
- Follows the organization's documentation policies and procedures.
- Documents appropriately to support coding, billing, and compensation.
- Ensures security of Protected Health Information (PHI) throughout the documentation process.

Goal R1.3: Promote safe and effective access to medication therapy.

Objective R1.3.1: (Applying) Facilitate the medication-use process related to formulary management or medication access.

² Mitchel et al. Core Principles & Values of Effective Team-Based Health Care. Available at: [VSRT-Team-Based-Care-Principles-Values.pdf \(nam.edu\)](https://www.vamc.org/VSRT-Team-Based-Care-Principles-Values.pdf)

Criteria:

- Facilitates changes to medication therapy considering access, cost, social determinants of health (SDOH) or other barriers.
- Prioritizes formulary medications, as appropriate.
- Evaluates non-formulary requests for appropriateness, and follows departmental or organizational policies and procedures related to non-formulary requests.
- Considers appropriate formulary alternatives.
- Ensures access to non-formulary products when formulary alternatives cannot be used.

Objective R1.3.2: (Applying) Participate in medication event reporting. [N/A for Managed Care]

Criteria:

- Demonstrates ability to investigate and submit a patient specific adverse medication event (e.g., medication error, near miss, and/or adverse drug reaction).
- Uses appropriate technology for reporting adverse drug events.

Objective R1.3.3: (Evaluating) Manage the process for preparing, dispensing, and administering (when appropriate) medications. [N/A for Managed Care]

Criteria:

- Adheres to applicable laws, institutional policies, departmental policies, and best practice standards.
- Identifies, detects, and addresses medication and health-related issues prior to verifying a medication order or dispensing a medication.
- Completes all steps of the medication preparation process.
- Completes all steps of the patient-centered dispensing process accurately and efficiently, including selection of self-care products, as appropriate.
- Takes responsibility for accurate and appropriate order assessment and verification duties for assigned patients.
- Administers medications using appropriate techniques, as appropriate.
- Oversees and ensures accuracy of other pharmacy personnel (e.g., clerical personnel, interns, students, technicians) involved in the preparation, dispensing, and administration of medications according to applicable laws and institutional policies.
- Effectively prioritizes workload and organizes workflow for oneself and pharmacy support personnel.
- Refers patients for other healthcare services or care by other healthcare professionals, as appropriate.
- Ensures appropriate storage of medications.
- Determines barriers to patient adherence and makes appropriate adjustments.

Goal R1.4: Participate in the identification and implementation of medication-related interventions for a patient population (population health management).

Objective R1.4.1: (Applying) Deliver and/or enhance a population health service, program, or process to improve medication-related quality measures.

Criteria:

- Recognizes patterns within aggregate patient data (i.e., defined population data).
- Interprets outcomes benchmarks and dashboards, as applicable.
- Compares outcomes of population data to evidence-based or best practice guidelines and/or established benchmarks (e.g., Star ratings, quality metrics).

- Identifies areas for improved patient care management based on population data.
- Provides targeted interventions for individual patients within a defined group to improve overall population outcomes.
- Recommends appropriate services to patients, providers, or health plans to help improve patient and population outcomes.
- Engages leaders to determine necessary resource(s) to improve patient and population outcomes and promote equitable care.

Objective R1.4.2: (Creating) Prepare or revise a drug class review, monograph, treatment guideline, treatment protocol, utilization management criteria, and/or order set.

Criteria:

- Uses the appropriate format.
- Evaluates and applies evidence-based principles.
- Effectively synthesizes information from available literature.
- Incorporates all relevant sources of information pertaining to the topic being reviewed.
- Applies medication-use safety and resource utilization information.
- Demonstrates appropriate assertiveness and timeliness if presenting pharmacy concerns, solutions, and interests to internal and/or external stakeholders.
- Delivers content objectively.
- Includes proposals for medication-safety technology considerations and improvements, when appropriate.
- Includes considerations for addressing established health equity concerns, when appropriate.
- Effectively communicates any changes in medication formulary, medication usage, or other procedures, if applicable.

Competency Area R2: Practice Advancement

Goal R2.1: Conduct practice advancement projects.

Objective R2.1.1: (Analyzing) Identify a project topic, or demonstrate understanding of an assigned project, to improve pharmacy practice, improvement of clinical care, patient safety, healthcare operations, or investigate gaps in knowledge related to patient care.

Criteria:

- Explains concepts associated with project development.
- Appropriately identifies or understands problems and opportunities for projects.
- Conducts a thorough literature to contextualize project scope.
- Determines an appropriate question or topic for a practice-related project that can realistically be addressed in the available time frame.
- Uses best practices or evidence-based principles to identify opportunities related to the project.

Objective R2.1.2: (Creating) Develop a project plan.

Criteria:

- Develops specific aims, selects an appropriate project design, and develops suitable methods to complete the project.
- Includes operational, clinical, economic, and humanistic outcomes of patient care, if applicable.
- Incorporates appropriate quality improvement process design and/or methodology (e.g.,

standardization, simplification, human factors training, quality improvement process, or other process improvement or research methodologies), if applicable.

- Develops a feasible design for a prospective or retrospective outcomes analysis that considers who or what will be affected by the project.
- Identifies committees or groups to provide necessary approvals, (e.g., intra- or interdepartmental committees, IRB, quality review board, health plan, funding, etc.).
- Develops a feasible project timeline.
- Develops a plan for data collection and secure storage that is consistent with the project intent and design.
- Develops a plan for data analysis.
- Acts in accordance with the ethics of human subject's research, if applicable.

Objective R2.1.3: (Applying) Implement project plan.

Criteria:

- Obtains necessary project approvals, (e.g., intra- or interdepartmental committees, IRB, quality review board, health plan, funding, etc.) and responds promptly to feedback or reviews.
- Demonstrates a systematic and organized approach to gathering and storing data.
- Collects appropriate types of data as required by project design.
- Uses appropriate electronic data and information from internal or external databases, Internet resources, and other sources of decision support, as applicable.
- Adheres to the project timeline as closely as possible, adjusting for unforeseeable factors, when necessary.
- Correctly identifies need for additional modifications or changes to the project.

Objective R2.1.4: (Analyzing) Analyze project results.

Criteria:

- Uses appropriate methods, including statistics when applicable, for analyzing data in a prospective or retrospective clinical, humanistic, and/or economic outcomes analysis.
- Collaborates with project team members to validate project analysis, as appropriate.

Objective R2.1.5: (Evaluating) Assess potential or future changes aimed at improving pharmacy practice, improvement of clinical care, patient safety, healthcare operations, or specific question related to patient care.

Criteria:

- Evaluates data and/or outcomes of project accurately and fully.
- Considers the impact of the limitations of the project design on the interpretation of results.
- Accurately assesses the impact of the project, including its sustainability, if applicable.
- Correctly identifies need for additional modifications or changes based on outcome.

Objective R2.1.6: (Creating) Develop and present a final report.

Criteria:

- Completes all report requirements on time and within assigned time frame.
- Develops a project report that is well-organized and easy to follow.
- Formats written report suitable for project audience.
- Uses effective written and/or oral communication to convey points successfully.
- Submits and/or presents project report to intended audience.
- Summarizes key points at the conclusion of the report.
- Responds to questions in a concise, accurate, and thoughtful manner.

COMPETENCY AREA R3: Leadership

Goal R3.1: Demonstrate leadership skills that contribute to departmental and/or organizational excellence in the advancement of pharmacy services.

Objective R3.1.1: (Understanding) Explain factors that influence current pharmacy needs and future planning.

Criteria:

- Identifies and explains factors influencing medication availability (e.g., procurement, inventory management, shortages, recalls, and formulary).
- Describes resolution of medication access or availability concerns.
- Identifies various effective leadership philosophies and principles.
- Explains how the pharmacy planning relates to the organization and/or department's mission and vision.
- Explains the department and/or organization's decision-making structure.
- Explains the department and/or organization's strategic planning process.
- Identifies human resources and personnel management pertinent policies and procedures including but not limited to workplace violence, safety, diversity, equity, inclusion, employee performance reviews, and implementation and use of appropriate virtual and technology resources.
- Explains current credentialing and privileging processes of the organization and potential changes for the future, if applicable.
- Explains the quality improvement plan(s) of the department and/or organization.
- Correctly assesses internal pharmacy quality, effectiveness, and safety data against benchmarks.

Objective R3.1.2: (Understanding) Describe external factors that influence the pharmacy and its role in the larger healthcare environment.

Criteria:

- Identifies and explains strengths, weaknesses, opportunities, and threats to pharmacy planning and practice advancement including accreditation, legal, regulatory, and safety requirements.
- Identifies and explains the impact of local or regional healthcare entities on pharmacy or organizational practice.
- Accurately explains the purpose and impact of external quality metrics to the practice environment.

Goal R3.2: Demonstrate leadership skills that foster personal growth and professional engagement.

Objective R3.2.1: (Applying) Apply a process of ongoing self-assessment and personal performance improvement.

Criteria:

- Uses principles of continuous professional development (CPD) planning (e.g., accurately reflect on personal strengths and areas for improvement, plan, act, evaluate, record/review).
- Sets realistic expectations of performance.
- Engages in self-reflection of one's behavior, knowledge, and growth opportunities.
- Identifies strategies and implements specific steps to address foundational and clinical knowledge gaps.
- Demonstrates ability to use and incorporate constructive feedback from others.

- Articulates one's career goals, areas of clinical and practice interest, personal strengths and opportunities for improvement, and stress management strategies.
- Engages in self-evaluation by comparing one's performance to a benchmark.
- Demonstrates self-awareness of personal values, motivational factors, and emotional intelligence.
- Demonstrates self-motivation and a "can-do" approach.
- Approaches new experiences as learning opportunities for ongoing self-improvement with enthusiasm and commitment.

Objective R3.2.2: (Applying) Demonstrate personal and interpersonal skills to manage entrusted responsibilities.

Criteria:

- Balances personal needs appropriately with the needs of the department and/or organization.
- Demonstrates personal commitment to the mission and vision of the department and/or organization.
- Demonstrates effective workload and time management skills.
- Prioritizes and organizes all tasks appropriately.
- Prioritizes appropriate daily activities.
- Prepares appropriately to fulfill daily and longitudinal responsibilities (e.g., patient care, projects, management, and meetings).
- Sets SMART goals (Specific, Measurable, Achievable, Relevant, Time-bound goals), implements action steps, and takes accountability for progress.
- Sets and manages appropriate timelines in harmony with pertinent stakeholders.
- Proactively assumes and takes on increased levels of responsibility.
- Proactively identifies issues or barriers and create potential solutions or management strategies.
- Follows through on obligations collaboratively and without prompting.
- Ensures timely and thorough transfer of appropriate responsibilities.
- Demonstrates resilience to recover from unanticipated changes and reprioritize responsibilities, as needed.
- Appropriately balances quality and timeliness in all aspects of work.

Objective R3.2.3: (Applying) Demonstrate responsibility and professional behaviors.

Criteria:

- Represents pharmacy as an integral member of the healthcare team.
- Demonstrates professionalism through appearance and personal conduct.
- Displays emotional intelligence by interacting cooperatively, collaboratively, and respectfully with the team.
- Holds oneself and colleagues to the highest principles of the profession's moral, ethical, and legal conduct.
- Prioritizes patient healthcare needs.
- Accepts consequences for his or her actions without redirecting blame to others.
- Engages in knowledge acquisition regarding healthcare innovations, practice advancement, patient care, and pharmacy practice.
- Advocates effectively on behalf of patients to other members of the healthcare team.
- Delegates appropriate work to technical and clerical personnel.
- Understands and respects the perspective and responsibilities of all healthcare team members.
- Contributes to committees or informal workgroup projects, tasks, or goals (e.g., contribute to committee discussions, identify pertinent background information, identify data for collection, interpret data, implement corrective action), if applicable.

- Works collaboratively within the department and/or organization's political and decision-making structure.

Objective R3.2.4: (Applying) Demonstrate engagement in the pharmacy profession and/or the population served.

Criteria:

- Identifies professional organization(s) that align with practice interests.
- Articulates the benefits of active participation in professional associations at all levels.
- Demonstrates knowledge and awareness of the significance of local, state, and national advocacy activities impacting pharmacy and healthcare.
- Develops personal vision and action plan for ongoing professional engagement.
- Participates appropriately in practice and advocacy activities of national, state, and/or local professional associations.
- Addresses the needs of the patients through service and/or education.

COMPETENCY AREA R4: Teaching and Education

Goal R4.1: Provide effective medication and practice-related education.

Objectives R4.1.1-R4.1.4 will be addressed through resident activities related to teaching either a small or large group. Oral and written presentations should contain a reasonable depth of information that is appropriate for the target audience. Examples may include continuing education presentation(s), in-service(s), patient education class(es), student lecture(s), student topic discussion(s) for several participants, disease state education handout(s), and guideline summary(ies). Oral or written content that is designed for a single person (e.g., drug information response, discussion with individual student) or that is extremely brief and/or not meant for the delivery of defined education (e.g., update at team meeting or huddle, marketing flyer) does not meet the intent of these objectives.

Objective R4.1.1: (Creating) Construct educational activities for the target audience.

Criteria:

- Obtains an accurate assessment of the learner's needs and level of understanding.
- Defines educational objectives that are specific, measurable, and appropriate for educational needs and learning level.
- Uses appropriate teaching strategies, including active learning.
- Chooses content that is relevant, thorough, evidence-based, accurate, reflects best practices and aligns with stated objectives.
- Designs instructional materials that meet the needs of the audience.
- Develops patient education materials that appropriately match the cultural needs and health literacy level of intended audience.
- Includes accurate citations and relevant references and adheres to applicable copyright laws.

Objective R4.1.2: (Creating) Create written communication to disseminate knowledge related to specific content, medication therapy, and/or practice area.

Criteria:

- Writes in a manner that is concise, easily understandable, and free of errors.

- Demonstrates thorough understanding of the topic.
- Determines appropriate breadth and depth of information based on audience and purpose of education.
- Notes appropriate citations and references.
- Includes critical evaluation of the literature and knowledge advancements, and an accurate summary of what is currently known on the topic.
- Develops and accurately uses tables, graphs, and figures to enhance the reader's understanding of the topic, when appropriate.
- Writes at a level appropriate for the target readership (e.g., patients, caregivers, members of the community, pharmacists, learners, and other healthcare professionals).
- Creates visually appropriate documents (e.g., font, white space, and layout).
- Creates materials that are inclusive of all audiences, accommodating any person(s) with health conditions or impairments.
- Creates one's own work and does not engage in plagiarism.
- Seeks, processes, and appropriately incorporates feedback from the targeted audience.

Objective R4.1.3: (Creating) Develop and demonstrate appropriate verbal communication to disseminate knowledge related to specific content, medication therapy, and/or practice area.

Criteria:

- Selects teaching method to deliver the material based on the type and level of learning required (cognitive, psychomotor, and affective).
- Incorporates multiple appropriate educational techniques to present content.
- Demonstrates rapport with learners.
- Develops and uses effectively audio-visual and technology tools and handouts to support learning activities.
- Demonstrates thorough understanding of the topic.
- Organizes and sequences instruction properly.
- Presents at appropriate level of the audience (e.g., patients, caregivers, members of the community, pharmacists, learners, and other healthcare professionals).
- Speaks at an appropriate rate and volume with articulation and engaging inflection.
- Effectively uses body language, movement, and expressions to enhance presentations.
- Makes smooth transitions between concepts.
- Summarizes important points at appropriate times throughout presentations.
- Demonstrates ability to adapt appropriately during the presentation.
- Captures and maintains learner/audience interest throughout the presentation.
- Responds to questions from participants in a concise, accurate, and thoughtful manner.

Objective R4.1.4: (Evaluating) Assess effectiveness of educational activities for the intended audience.

Criteria:

- Selects assessment method (e.g., written or verbal assessment or self-assessment questions, case with case-based questions, learner demonstration of new skill) that matches activity.
- Identifies appropriate time to solicit feedback from the learner.
- Solicits timely, constructive, and criteria-based feedback from the learner.
- Writes assessment questions (if used) in a clear and concise format that reflects best practices.
- Assesses learners for achievement of learning objective(s).
- Identifies and takes appropriate actions when learner fails to understand delivered content.
- Plans for follow-up educational activities to enhance or support learning and ensure objectives were met, if applicable.

Goal R4.2: Provide professional and practice-related training to meet learners' educational needs.

Objective R4.2.1: (Evaluating) Employ appropriate preceptor role for a learning scenario.

Objective R4.2.1 will be addressed through resident practice-related training activities for one or more learners. The resident should actively employ appropriate preceptor role(s). If a program cannot provide opportunities to participate in precepting, this objective may be assigned activities related to the simulation of precepting roles.

Criteria:

- Identifies experiential learning opportunities in the practice setting and engages learners appropriately.
- Creates an organized and systematic approach to designing learning experiences for the learner.
- Identifies which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating).
- Chooses appropriate preceptor roles to stimulate professional growth in learner.
- Adjusts the preceptor role as learner needs change.
- Uses appropriate methods to provide both formative and summative feedback.
- Provides timely, constructive, and criteria-based feedback to learner, including actionable steps for continued growth and improvement.
- Engages the learner effectively in self-evaluation and self-reflection.
- Provides effective and focused direct instruction when warranted.
- Models critical-thinking skills by including "thinking out loud".
- Coaches, including effective use of verbal guidance, feedback, and questioning, as needed.
- Facilitates, when appropriate, by allowing learner independence and using indirect monitoring of performance.
- Selects appropriate problem-solving situations for independent learners.
- Ensures learner understands feedback and next steps needed to improve.

Developed by the ASHP Commission on Credentialing in collaboration with the American Pharmacists Association (APhA), the Academy of Managed Care Pharmacy (AMCP), and the American College of Clinical Pharmacy (ACCP).

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PGY1 Harmonized CAGO revision to include PGY1 Veterinary Pharmacy Residencies approved by the ASHP Commission on Credentialing on August 12, 2025 and endorsed by the ASHP Board of Directors on September 18, 2025. Revision effective September 18, 2025.

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Guidance for PGY1 Residency Program Deliverables

The table below outlines the minimum required deliverables for the Objectives listed. Programs may set their completion requirements higher.

COMPETENCY AREA	OBJECTIVE	PGY1 Pharmacy	PGY1 Community-Based Pharmacy	PGY1 Managed Care Pharmacy	PGY1 Veterinary Pharmacy
Competency Area R1: Patient Care	Objective R1.4.2	<u>Deliverable:</u> Drug class review, monograph, treatment guideline, treatment protocol/pathway, utilization management criteria, and/or order set.	<u>Deliverable:</u> Drug class review, monograph, treatment guideline, treatment protocol/pathway, utilization management criteria, and/or order set.	<u>Deliverable:</u> Drug class review, monograph, treatment guideline, treatment protocol/pathway, utilization management criteria, and/or order set.	<u>Deliverable:</u> Drug class review, monograph, treatment guideline, treatment protocol/pathway, utilization management criteria, and/or order set.
		<u>How will this be surveyed:</u> Completion requirements must include one of the above.	<u>How will this be surveyed:</u> Completion requirements must include one of the above.	<u>How will this be surveyed:</u> Completion requirements must include three of the above with at least two being different (e.g., two drug monographs and one utilization management criteria development).	<u>How will this be surveyed:</u> Completion requirements must include one of the above.
Competency Area R2: Practice Advancement	Objective R2.1.2	<u>Deliverable:</u> Develop a proposal and timeline for the major project related to patient care in the advanced practice area, as defined in the Objective and Criteria.	<u>Deliverable:</u> Develop a proposal and timeline for the major project related to patient care in the advanced practice area, as defined in the Objective and Criteria. In addition, residents must develop a business plan for a new or enhanced service.	<u>Deliverable:</u> Develop a proposal and timeline for the major project related to patient care in the advanced practice area, as defined in the Objective and Criteria.	<u>Deliverable:</u> Develop a proposal and timeline for the major project related to patient care in the advanced practice area, as defined in the Objective and Criteria.
		<u>How will this be surveyed:</u> The surveyor will review the project plan(s). Key components of a project plan include background, rationale, goals and measurable outcomes, and timeline (from proposal to final project report). The project plan may be accomplished using one or more documents.			
	Objective R2.1.6	<u>Deliverable:</u> Project report(s) for at least two projects:	<u>Deliverable:</u> Project report(s) for at least two projects:	<u>Deliverable:</u> Project report(s) for at least two projects:	<u>Deliverable:</u> Project report(s) for at least two projects:

Competency Area R2: Practice Advancement (continued)	Objective R2.1.6 (continued)	- Major project - Second project	- Major project - Second project	- Major project - Second project	- Major project - Second project
		<u>How will this be surveyed:</u> Surveyors will review the Taught and Evaluated (T/E Grid) in PharmAcademic. Each resident is required to complete: Major project: Defined as a longitudinal project with significant breadth intended to advance pharmacy practice. All Objectives (2.1.1-2.1.6) must be assigned to the learning experience(s) which contain the major project. Surveyors will review the project report for the major project, including both: - Platform style or poster presentation to an external audience (e.g., regional residency conference or comparable professional meeting). - Written report (e.g., manuscript and/or formal written report suitable for invested parties). Secondary (“minor”) project: Defined as work on another project, which can be minor in scope. Examples of a secondary project may include: MUE, clinical program development/enhancement/analysis, pipeline forecast, cost or budget analysis, quality assurance. The secondary project must, at a minimum, be assigned to the learning experience where Objective R2.1.6 is taught and evaluated. Surveyors will review the report for the secondary “minor” project.			
Competency Area R4: Teaching and Education	Objectives R4.1.1, R4.1.2, and R4.1.3	<u>Deliverable:</u> Completion requirements must include one verbal and one written example.	<u>Deliverable:</u> Completion requirements must include one verbal and one written example.	<u>Deliverable:</u> Completion requirements must include one verbal and one written example.	<u>Deliverable:</u> Completion requirements must include one verbal and one written example.
		<u>How will this be surveyed:</u> Surveyors will review evidence of the verbal and written educational materials: - Verbal presentation (e.g., audiovisual / slides, presentation handout). - Written example may include of any of the following: - Patient education (e.g., brochure, handout) - Education to health care providers (e.g., newsletter, medication or disease management update) - Education to pharmacists (e.g., guideline update) See additional guidance in the document directly below Goal R4.1			

Appendix		The PGY1 Harmonized CAGOs do not include an Appendix for PGY1 Pharmacy programs. Therefore, the Accreditation Standard 3.1.b.1.b does not apply.	The PGY1 Harmonized CAGOs do not include an Appendix for PGY1 Community-based programs. Therefore, the Accreditation Standard 3.1.b.1.b does not apply.	The PGY1 Harmonized CAGOs includes an Appendix for PGY1 Managed Care programs. Therefore, the Accreditation Standard 3.1.b.1.b is required and must be applied to meet the Standard. See the Appendix attached on the following pages.	The PGY1 Harmonized CAGOs includes an Appendix for PGY1 Veterinary Pharmacy programs. Therefore, the Accreditation Standard 3.1.b.1.b is required and must be applied to meet the Standard. See the Appendix attached on the following pages.
				<u>Deliverable:</u> A completed Appendix tracking tool consistent with the program's design. Program's method for determining appropriate depth and completion of Appendix topics as part of individual resident tracking.	<u>Deliverable:</u> A completed Appendix tracking tool consistent with the program's design. Program's method for determining appropriate depth and completion of Appendix topics as part of individual resident tracking.

Guidance revised and approved by the ASHP Commission on Credentialing on August 12, 2025.

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APPENDIX

FOR PGY1 MANAGED CARE PHARMACY PROGRAMS

Managed Care key principles have been delineated in the currently published [Fundamentals of Managed Care Pharmacy](#), which is the basis for the required appendix topic list for PGY1 Managed Care Pharmacy residencies.

REQUIRED TOPIC	Requires Resident Participation	Requires Topic Discussion
Evolution and Principles of Managed Care Understanding the evolution of managed care pharmacy is important to understand the current marketplace. Delves into the history of managed care and its progression to current practices, the different care delivery models and how each one works to provide patient access to care. This includes discussions of health maintenance organizations (HMOs), preferred provider organizations (PPOs), point-of-service plans (POS's), integrated delivery networks (IDNs), high deductible health plans (HDHPs), and a la carte benefit models.		X
Pharmacy Benefit Management Tools How do pharmacy benefits meet the demands of balancing safety, effectiveness, and accessibility of drug products while also ensuring that the most cost- effective treatment options are used appropriately in the service of optimal health outcomes? Various management strategies and tools used in the management of pharmacy benefits: • Patient cost sharing (e.g., copay, coinsurance, deductible, MOOP) • Formulary • Generic substitution • Therapeutic interchange • DUR • Distribution channels • UM (QL, PA, ST) • Pharmacy network discounts • Manufacturer discounts/rebates • Clinical &/or educational programs		X
Getting Medications to Patients Through the Pharmacy Benefit Behind-the-scenes coverage, prescribing, claims and adjudication processes, the invisible steps and data exchange that culminates into a filled prescription, ready for pick up, differences between traditional and electronic prescribing, the use of claims analysis and edits, and the importance of data exchange and reporting are additional concepts.		X
Developing and Managing the Drug Formulary & Utilization Management Policy (includes specialty medications and criteria) The drug formulary, or preferred drug list, is a listing of drugs covered by a payer such as a health plan or pharmacy benefits manager - and is the backbone to understanding managed care pharmacy. There is extensive work done to prepare and review each medication added to the formulary. This details what a formulary is and how a P&T Committee develops and maintains a formulary.	X	
Stakeholders and Flow of Money in Managed Care Pharmacy The health care of the United States is both unique and complex. It has both state and federal oversight, and many stakeholders must work together to		X

ensure the systems work to get medications to patients. Explains the “flow of money” between these stakeholders and how specific fees are calculated.		
Pharmaceutical Manufacturer Discounts and Rebates; including Value Based Contracting and Direct Negotiations Managed care organizations and pharmaceutical manufacturers work very closely to negotiate drug prices. There are different types of price concessions that can help both organizations in the long run. Discuss this close relationship and how it works for Medicare, Medicaid, Exchange, and Commercial plans.		X
Population Level: Clinical and Educational Programs The overall goals of provider and member clinical and educational programs in managed care pharmacy are to maintain a high quality of care and reduce overall health care costs. Considerations and involvement should include the role and use of pharmacy clinical and educational programs for providers and patients: • Clinician education • Patient/member/caregiver education at the population level • Disease &/or care management programs • Medication Adherence • retro-DUR	X	
Individual Patient Level: Clinical and Educational Programs • Medication Therapy Management (MTM) or Comprehensive Medication Management (CMM): Covers the background and goals of MTM/CMM. Reviews the definition of MTM, processes, and models, eligibility criteria, and other key elements of MTM. MTM can be provided by pharmacists and identifies five core elements: medication therapy review, a personal medication record, a medication-related action plan, intervention or referral and documentation and follow-up. Also cover CMM, which is a patient-centered approach to optimizing medication use and improve patient health outcomes that is delivered by a clinical pharmacist working in collaboration with the patient and other health care providers. https://gtmr.org/blog-cmm-vs-mtm-patient-focused-process-vs-medication-focused-activity/ • Clinical outreach on complex patient reviews and PA determinations.	X	
Specialty Pharmacy What is the role and impact of specialty pharmacy on managed care pharmacy? Review specialty medications and what makes them “special.” Additionally, review how specialty drugs are managed to improve outcomes and quality, and decrease costs. • Describe how specialty pharmacies differ from traditional retail pharmacies • Specialty drug trend data • Discuss approaches for managing specialty drugs: ○ UM (e.g., PA) ○ REMS ○ Distribution channels (open, limited, exclusive) ○ Guidelines/Pathways	X	
Managed Care Pharmacy within various lines of business including Medicare, Medicaid, Exchange and Commercial Medicare: How Medicare has advanced through the decades, while also providing a breakdown of its various components, differences between Medicare Plans and legal requirements. Medicaid: How it is administered and funded, a listing of the services covered by Medicaid, dual eligibility, and the complexities and challenges associated with this line of business. Exchange and Commercial: Unique characteristics of each of these plans.		X

Quality Measures in Managed Care Pharmacy Describe the role of quality measures in managed care pharmacy. Review the various accrediting bodies, the purpose of quality measures, and types of measures. Also, explore quality measures in the context of the Medicare Stars Rating and the Quality Reporting System used in the Exchanges. • Health plan national accreditation organizations (NCQA, URAC, HEDIS, CAHPS). • Quality care measures in managed care pharmacy (e.g., pay-for-performance programs, PQA endorsed performance measures, etc.). • Medicare star ratings program (overview, plan finder, Part D measures and weighting, bonus payments, etc.).	X	
Health Equity Describe and take actionable steps to review, address, and propose recommendations, where applicable, that address existing health disparities in the pursuit of health equity. Opportunities to address health equity can be realized through a variety of actions. <u>Examples of health equity activities may include, but are not limited to:</u> <u>Formulary Management:</u> • Delineate/stratify demographic information in formulary documents, as available (e.g., race, ethnicity, sex, gender, language, access/geography, disability status, SDOH). • Identify and report differences in clinical trial populations vs. epidemiologic disease prevalence in monographs/NDRs, TCRs, and other relevant formulary management documents. • Develop PA criteria, clinical initiative proposal/ recommendations, QA/QI project recommendations, UM proposals, treatment guidelines/protocols, or other formulary management projects impacting managed care decision-making and medication management approaches that consider the needs of disproportionately affected groups/populations experiencing health inequities. <u>Pharmacy Benefit Design:</u> • Evaluate medication, pharmacy, and general health care access and utilization to identify opportunities to address health inequities. • Create and implement clinical initiative proposals, QA/QI projects and recommendations, or other projects that are utilized in health plan decision-making to improve care in underserved populations. • Design strategies or revisions to improve outcomes of underserved populations as well as adherence (e.g., mail order, 90-day access, pharmacy automation approaches to medication access, e-prescribing, broad vs narrow pharmacy networks, etc.). ○ At a minimum, discussions should encompass access to medications and health care, including the impact of pharmacy deserts, closed pharmacy networks, and other restrictions that affect adherence and access concerns. <u>Other opportunities:</u> • Conduct a longitudinal research project where stratification of health disparity information is highlighted and recommendations to address health inequity concerns are proposed and/or acted upon. • Develop population-based educational materials that address targeted under-represented populations and their associated access to care, appropriate medications, culturally and linguistically appropriate services (CLAS) and supports, etc. • Create patient and/or provider resources addressing specific needs of individuals experiencing or who are at-risk of experiencing health inequities.	X	

• Develop and/or participate in community-based services or volunteer activities that focus on addressing a health care- or medication-associated need(s) of underserved populations. • Conduct MTM/CMM that considers and addresses the medication-related needs of disproportionately affected groups/populations experiencing health inequities. • Participate in organizational-wide workgroups on diversity, equity, inclusion, and belonging. • Lead a training or informational session for colleagues on a health equity-related topic.		
Health Economics and Outcomes Research Health economics and outcomes research (HEOR) is critical in health care decision-making. Address the value of HEOR and detail how evidence is obtained through various study designs.		X

CAHPS=Consumer Assessment of Healthcare Providers and Systems, DUR=drug utilization review, HEDIS=Healthcare Effectiveness Data and Information Set, MOOP=maximum out of pocket, MTM/CMM=medication therapy management/comprehensive medication management, NCQA=National Committee for Quality Assurance, NDR=new drug review, PA=prior authorization, P&T=pharmacy & therapeutics, PQA=Pharmacy Quality Alliance, QA/QI=quality assurance/quality improvement, QL=quantity limit, REMS=risk evaluation and mitigation strategies, Retro-DUR=retrospective drug utilization review, SDOH=social determinants of health, ST=step therapy, TCR=therapeutic class review, UM=utilization management, URAC=Utilization Review Accreditation Commission

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APPENDIX

FOR PGY1 VETERINARY PHARMACY PROGRAMS

Pharmacists caring for veterinary patients practice in both veterinary hospital and community/ ambulatory settings. PGY1 veterinary pharmacy residents will acquire new knowledge, skills, and experience in providing comprehensive pharmacy care to veterinary patients.

The following topic list designates required topics and the expected participation by PGY1 Veterinary Pharmacy residencies. As described below, select topics may be accomplished through topic discussions while others require the resident to directly participate in the care of patients with common veterinary diseases states and conditions.

Unless otherwise denoted, all disease topics listed apply to canine and feline patients. Species listed in parentheses apply only to that species.

REQUIRED TOPIC	Direct Patient Care	Topic Discussion
<i>Legal, regulatory, and ethical issues in veterinary pharmacy</i> To provide the highest standard of care in veterinary medicine it is important to understand the evolution of veterinary pharmacy practice, and laws and regulations regarding veterinary medicine. It is therefore important to understand the current practice models in veterinary hospitals and community practice. This will be accomplished by the following topic discussions:		
Regulatory oversight of veterinary medicinal products (prescription, over the counter, vaccines, medical devices, preventatives)		
Animal Drug Amendment - New Animal Drug Application (NADA) (Pub. L. 90-399; 21 CFR § 514)		X
Generic Animal Drug and Patent Term Restoration Act (GADPTRA) - Abbreviated New Animal Drug Application (ANADA) (Public Law 100-670; S. 2843 100th Congress)		X
Animal Medicinal Drug Use Clarification Act (AMDUCA) (Pub. L. 103-396; 21 CFR § 530)		X
Animal Drug Availability Act (ADAA) ([H.R. 2508] Pub. L. 104-250 104th Congress)		X
Virus-Serum-Toxin Act 21 USC 151-159 et. seq.		X
Resource Conservation and Recovery Act (RCRA), the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and the Clean Water Act (CWA), impact veterinary practices and products		X
- Minor Use/Minor Species Act (MUMS) (21 CFR § 516) - Designation, Conditionally Approved (CA), Index (MIF)		X
- Veterinary Feed Directive (21 CFR § 558) - Guidance for Industry #209: The Judicious Use of Medically Important Antimicrobial Drugs in Food-Producing Animals - Guidance for Industry #263: Recommendations for Sponsors of Medically Important Antimicrobial Drugs		X

REQUIRED TOPIC	Direct Patient Care	Topic Discussion
Approved for Use in Animals to Voluntarily Bring Under Veterinary Oversight All Products That Continue to be Available Over-the-Counter		
Sterile and non-sterile compounding practices for veterinary patients		
• United State Pharmacopeia chapters <795>, <797>, <800>	X	
• Guidance for Industry #256: Compounding Animal Drugs from Bulk Drug Substances	X	
<i>Anatomic, physiologic, and toxicologic considerations for drug therapy in non-human species</i> Knowing and understanding anatomical and physiologic differences in animal species is a critical factor in veterinary pharmacy. These differences affect drug metabolism, absorption, distribution and elimination, how medications can be administered, differences in dosing, and many other aspects that can impact patient care.		
Unique dosage forms and routes of administration for veterinary pharmacy patients		
• Subcutaneous administration	X	
• Transdermal delivery (feline)	X	
• Subpalpebral lavage (equine)		X
• Intramammary infusion (farm animals)		X
• Intravaginal devices (farm animals)		X
• Intraperitoneal delivery (feline, exotics)		X
• Inhalation (companion animals)	X (feline, canine)	X (equine)
Major anatomical differences		
• Sensory organ systems	X	
• Cephalic orientation	X	
• Eye structure	X	
• Body structure	X	
• Gastrointestinal/ digestive system (companion animals, farm animals)	X (feline, canine)	X (equine, farm animals)
Major physiological differences		
• Vital signs (companion animals)	X	
• Renal clearance	X	
• Structural and functional differences in hemoglobin and blood volume	X	
• Pharmacogenomics (affecting ADME)	X	
• Metabolic deficiencies: Phase I	X	
• Metabolic deficiencies: Phase II	X	
<i>Common veterinary disease states</i> Understanding common veterinary disease states helps pharmacists provide better care, reduce medication errors, improve client counseling, foster interprofessional relationships with veterinarians, and support One Health initiatives.		
General wellness and prevention		
• Vaccines, flea, tick, and heartworm preventatives, deworming	X	
• Vaccines, deworming (equine, farm animals)		X
Behavior disorders		
• Fear aggression	X	
• Separation anxiety	X	
• Inappropriate elimination	X	

REQUIRED TOPIC	Direct Patient Care	Topic Discussion
Cardiac system		
• Hypertension	X	
• Congestive heart failure (CHF) and etiologies that lead to CHF	X	
• Myxomatous mitral valve disease (canine)	X	
• Dilated cardiomyopathy (canine)	X	
• Hypertrophic cardiomyopathy (feline)	X	
• Arrhythmias (companion animals)	X (feline, canine)	X (equine)
Endocrine system		
• Diabetes	X	
• Insulin dysregulation (equine)		X (equine)
• Thyroid disorders (companion animals)	X (feline, canine)	X (equine)
• Adrenal disorders (canine)	X	
Infectious diseases		
• Ear infections	X	
• Enteric diseases	X	
• Pneumonia	X	
• Skin infections	X	
• Urinary tract infections	X	
• Flea and tick-borne illnesses	X	
• Systemic joint infections (equine)		X
Neurologic system		
• Intervertebral disc disease (IVDD) (canine)	X	
• Epilepsy (companion animals)	X (feline, canine)	X (equine)
Oncologic disorders		
• Transitional cell carcinoma (canine)	X	
• Mast cell tumors (canine)	X	
• Lymphomas	X	
• Leukemia (feline)	X	
• Osteosarcoma (companion animals)	X	X (equine)
• Skin cancers: Squamous cell (feline, equine)	X	X (equine)
• Skin cancers: Melanoma (canine, equine)	X (canine)	X (equine)
• Sarcoma: Hemangio (canine, equine)	X (canine)	X (equine)
• Sarcoma: Fibro (feline, equine)	X (feline)	X (equine)
Anesthesiology and pain management (chronic)		
• Companion animals	X	
• Farm animals		X
<i>Special species: pathophysiology, toxicology, and considerations of care</i> Pharmacists practicing veterinary medicine primarily focus on care for companion and farm animals. It is crucial to acknowledge the unique needs of special species, including exotics, minor species, and less common major species, to deliver the highest standard of care.		
• turkeys		X
• camelids		X
• avians		X
• small mammals and pocket pets		X
• reptiles		X

Definitions and clarifications:

- Major species designated by the FDA: dogs, cats, horses, pigs, cattle, chickens, and turkeys
- Minor species designated by the FDA: sheep, goats, fish, zoo animals, ornamental fish, parrots, ferrets, and guinea pigs
- One Health: an integrated approach that seeks to balance and optimize the health of people, animals, and ecosystems, recognizing their interdependence.

Terminology of patient species-type can be defined as, but not limited to:

- **Companion animals:** canine, feline, and equine
- **Equine:** horses, donkeys, ponies, zebras, and mules
- **Farm animals:** bovine (cattle), ovis aries (sheep), capra hircus (goats), camelids (old-world camel, llama), swine (pigs), gallus (chicken) (turkeys are not included in this list)
- **Small ruminants:** ovis aries (sheep), capra hircus (goats)
- **Exotics:** small mammals (rabbits), pocket pets (mice/hamsters/guinea pigs/ferrets), reptiles (turtle, tortoises, snakes, lizard, gecko), amphibians (frog, toad, salamander), avians (birds), zoo animals (big cats “lion, tiger”, giraffes, other), aquatics (fish, aquatic mammals, etc.)

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