

Triad HealthCare Network PGY2 Ambulatory Care Residency

PGY2 Program Purpose:

PGY2 pharmacy residency programs build on Doctor of Pharmacy (Pharm.D.) education and PGY1 pharmacy residency programs to contribute to the development of clinical pharmacists in specialized areas of practice. PGY2 residencies provide residents with the opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care that improves medication therapy. Residents who successfully complete an accredited PGY2 pharmacy residency should possess competencies that qualify them for clinical pharmacist and/or faculty positions and position them to be eligible for attainment of board certification in the specialized practice area (when board certification for the practice area exists).

The Triad HealthCare Network PGY2 Ambulatory Care Pharmacy Residency program has been designed to foster the development of a clinician that is able to apply evidence-based medicine in the ambulatory care environment with focus on applying these skills in the Accountable Care Organization healthcare model or other advancing ambulatory care pharmacy setting, as well as qualify as a board certified ambulatory care pharmacist. This will be achieved through interdisciplinary and independent learning opportunities in a variety of diverse clinical areas.

Program Goals:

Practice Excellence

- Develop a mastery knowledge base in Ambulatory Care Pharmacotherapy
- Achieve excellence in core Ambulatory Care disease states, such as COPD, CHF, DM, and HTN
- Develop patient care skills in the Ambulatory Chronic Care setting
- Develop effective patient care skills and manage patients of differing cultures and beliefs with empathy.
- Demonstrate effective patient / provider communication.
- Develop a collaborative primary care practice and become an integral member of the medical team.

Scholastic Excellence

- Demonstrate proficiency in teaching in both didactic and small group learning environments
- Develop effective precepting skills
- Generate new knowledge in Ambulatory Care Pharmacotherapy
- Interpret and disseminate knowledge in Ambulatory Care Pharmacotherapy

Individual Excellence

- Develop and improve upon a system of self-assessment skills
- Demonstrate exemplary verbal and written communication skills
- Utilize a system for balancing multiple work-related and personal responsibilities
- Learn and demonstrate the importance of professionalism through participation in pharmacy

Program Outcomes:

Required Outcomes

Outcome R1: *Establish a collaborative interdisciplinary practice.*

Goal R1.1 Participate in the development and implementation of collaborative interdisciplinary practice agreements.

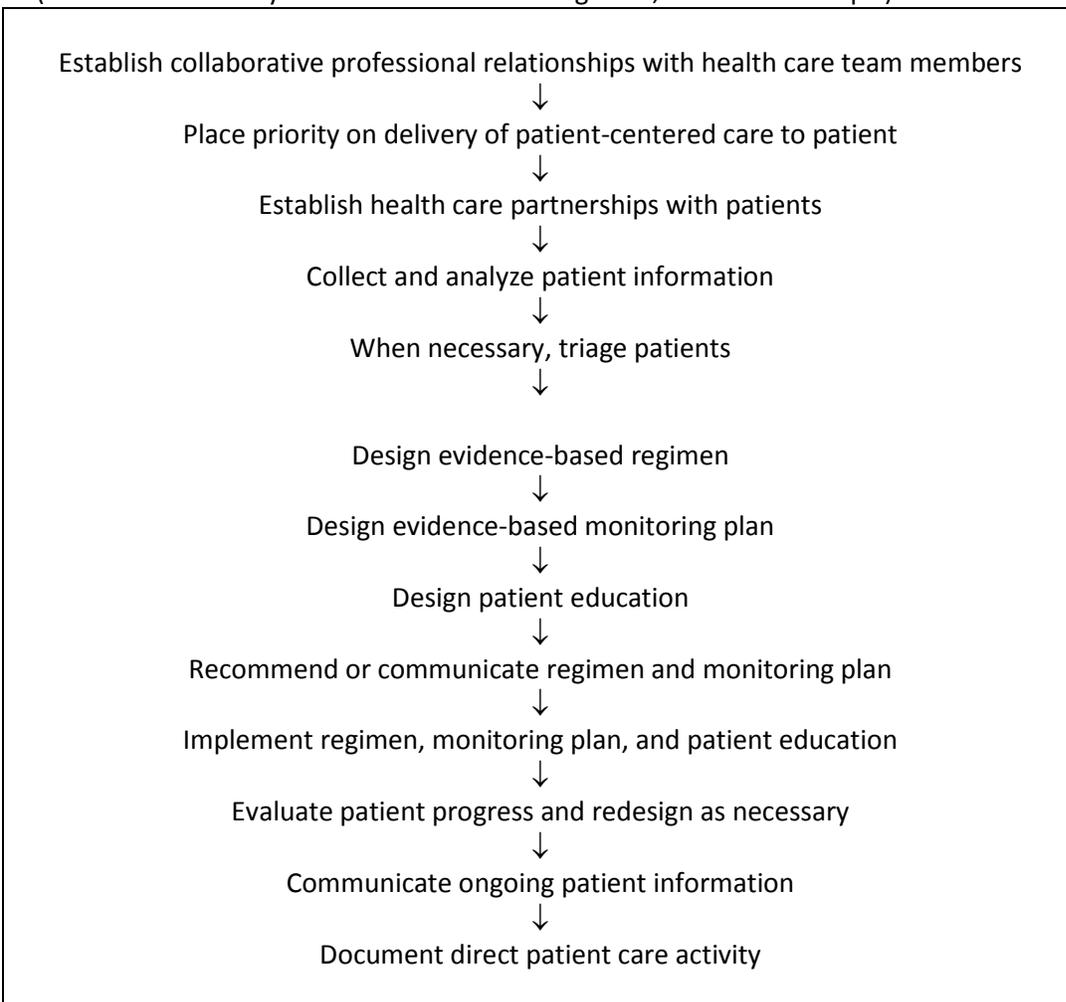


- OBJ R1.1.1 (Comprehension) Explain the process by which collaborative interdisciplinary practice agreements are developed and implemented.
- IO State the practice area settings in which specialized ambulatory care pharmacists practice.*
 - IO Explain the role of collaborative practice agreements in defining the scope of an individual ambulatory care pharmacy specialist's practice.*
 - IO Explain the legal environment in which collaborative practice agreements are possible.*
 - IO For a given situation, identify the stakeholders in the formation of a collaborative practice agreement.*
 - IO Explain strategies for establishing a collaborative practice agreement.*
 - IO Explain the collaborative relationships that are necessary to successful fulfillment of the pharmacist's role in a collaborative practice.*
- OBJ R1.1.2 (Synthesis) Develop a proposal (may be hypothetical) for a collaborative interdisciplinary practice agreement that could be used in a specific area of the ambulatory practice.
- IO State the categories of information provided in a typical proposal to establish a collaborative practice.*
- Goal R1.2 Contribute to the development of a new ambulatory pharmacy service or to the enhancement of an existing service.
- OBJ R1.2.1 (Evaluation) Assess a current ambulatory pharmacy service or program to determine if it meets the stated goals.
- OBJ R1.2.2 (Synthesis) Participate in the writing of a proposal (may be hypothetical) for a marketable, new or enhanced ambulatory pharmacy service.
- IO Accurately identify unmet customer (i.e., patient, physicians, and other health care providers) needs.*
 - IO Explain the organization's desired format for a proposal for a new or enhanced pharmacy service.*
 - IO Explain the components of a new service.*
 - IO Explain the role of other health care providers in meeting the needs of patients involved in a new service.*
 - IO Explain the process by which pharmacy databases are used to develop a new service.*
 - IO Use modeling to predict the financial outcome(s) of implementing a proposed new or enhanced service on meeting unmet customer needs.*
 - IO Accurately predict system and human resource needs for developing and implementing a new or enhanced service.*
 - IO Accurately predict the outcome(s) for patients of implementing a new or enhanced service.*
 - IO Accurately predict financial benefit to the organization of implementing a new or enhanced service.*
- OBJ R1.2.3 (Synthesis) Formulate an effective strategy for promoting a proposal (may be hypothetical) for a new or enhanced ambulatory pharmacy service.
- IO Explain how to identify the stakeholders for a specific proposal.*
- OBJ R1.2.4 (Synthesis) Devise effective plans (may be hypothetical) for marketing a new or enhanced service, including the recruitment of patients.
- IO Explain the components of a marketing plan.*
 - IO Explain why and how potential shifts in market share should be factored into decisions on the marketability of a service.*
- OBJ R1.2.5 (Synthesis) Formulate a plan (may be hypothetical) for full implementation of a new or enhanced ambulatory pharmacy service or program.

- IO Explain the components of an implementation plan for implementing a new or an improved service or program.
- OBJ R1.2.6 (Synthesis) When applicable, manage the implementation of a new or enhanced ambulatory pharmacy service or program.
- IO Explain the kinds of tasks involved in managing the implementation of a new service or program.

Outcome R2: In a collaborative interdisciplinary ambulatory practice provide efficient, effective, evidence-based, patient-centered treatment for chronic and/or acute illnesses in all degrees of complexity.

(This outcome always involves a series of integrated, interrelated steps.)



- Goal R2.1 Establish collaborative professional relationships with members of the ambulatory health care team.
- OBJ R2.1.1 (Synthesis) Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with members of interdisciplinary ambulatory health care teams.

IO Explain situations in which the ambulatory care pharmacist may need to “earn” credibility with the health care team.

Goal R2.2 Place priority on the delivery of patient-centered care to ambulatory patients.

OBJ R2.2.1 (Organization) Choose and manage daily activities so that they reflect a priority on the delivery of appropriate patient-centered care to each ambulatory patient.

Goal R2.3 Establish health care partnerships with ambulatory patients.

OBJ R2.3.1 (Synthesis) Formulate a strategy that effectively establishes a health care partnership with a particular ambulatory patient.

IO Explain the influence that the practice site approach to continuity of care, focus on health promotion, and focus on health care maintenance can have on the establishment of health care partnerships with ambulatory patients.

IO Explain the role of cultural competence in achieving an effective health care partnership with ambulatory patients both in gathering information and achieving patient adherence to prescribed therapy and/or prevention and health promotion strategies.

IO Explain how the strategy for establishing a health care partnership with an ambulatory patient must change as the age category of the patient (i.e., adolescent, adult, geriatric) changes.

IO Explain the characteristics of the rapport that must be established between the pharmacist and patient in the ambulatory environment.

IO Explain the importance of adjusting one’s communications according to the level of health literacy of the patient.

IO Explain common situations in the practice of pharmacy which can produce a difficult communications encounter.

IO Explain effective communications strategies that could be used in a difficult encounter including the use of active listening.

IO Explain the meaning of cultural competence.

IO Explain communication strategies that are appropriate for patients who are non-English speakers or who are impaired.

IO Explain ways in which communication strategy can be modified to accommodate the individual’s personal characteristics.

Goal R2.4 Collect and analyze information specific to an ambulatory patient.

OBJ R2.4.1 (Application) Exercise proficiency in the application of physical assessment skills commonly employed by ambulatory care pharmacists to secure needed patient-specific information.

IO Identify a core physical assessment reference library.

IO List the pertinent physical assessments necessary to appropriately evaluate one’s practice’s typical patient population.

IO Explain the technique for executing each physical assessment required for one’s own practice.

OBJ R2.4.2 (Analysis) Collect and organize all patient-specific information needed by the pharmacist to prevent, detect, and resolve medication-related problems and to make

appropriate evidence-based, patient-centered medication, non-medication, health improvement, wellness, and/or disease prevention recommendations.

- IO Identify the types of patient-specific information the ambulatory care pharmacist requires to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication, non-medication, health improvement, wellness, and/or disease prevention recommendations.*
- IO Explain the increased importance in the ambulatory environment of collecting information regarding the patient's culture, emotional needs, preferences, values, caregivers, and life issues in formulating evidence-based, patient-centered care decisions.*
- IO Explain circumstances in which there is increased importance for the ambulatory care pharmacist to collect pharmacogenomic and/or pharmacogenetic information.*
- IO Explain unique ambulatory care environment issues surrounding confidentiality of patient information and the impact of HIPPA regulations on the collection and safeguarding of patient-specific information.*
- IO Explain how physical assessment data fits within the subjective and objective database to support the patient therapeutic plan.*
- IO Explain prevention, signs and symptoms, epidemiology, risk factors, pathogenesis, natural history, pathophysiology, clinical course, etiology, biopsychosocial factors, socioeconomic factors, and treatment of diseases commonly encountered in the ambulatory environment.*
- IO Explain the mechanism of action, pharmacokinetics, pharmacodynamics, pharmacoeconomics, usual regimen (dose, schedule, form, route, and method of administration), indications, contraindications, interactions, adverse reactions, and therapeutics of medications used in the treatment of diseases commonly encountered in the ambulatory environment.*
- IO Where known, explain the mechanism of action, pharmacokinetics, pharmacodynamics, usual regimen, indications, contraindications, interactions, adverse reactions, and therapeutics of nontraditional medications used in the treatment of ambulatory patients.*
- IO Explain the importance of securing information from the previous health care provider(s) of patients transitioning to the ambulatory environment.*
- OBJ R2.4.3 (Analysis) Determine the presence of any of the following medication, non-medication, or adherence problems in a patient's current therapy:
1. Medication used with no medical indication
 2. Patient has medical conditions for which there is no medication or non-medication therapy prescribed
 3. Medication or non-medication therapy prescribed inappropriately for a particular medical condition
 4. Immunization regimen is incomplete
 5. Current medication therapy regimen contains something inappropriate (dose, dosage form, duration, schedule, route of administration, method of administration)
 6. There is therapeutic duplication
 7. Medication to which the patient is allergic has been prescribed
 8. There are adverse drug or device-related events or potential for such events
 9. There are clinically significant drug-drug, drug-disease, drug-nutrient, or drug-laboratory test interactions or potential for such interactions

10. Medication or non-medication therapy has been interfered with by social, recreational, nonprescription, or nontraditional drug use by the patient or others
11. Patient not receiving full benefit of prescribed medication or non-medication therapy
12. There are problems arising from the financial impact of medication or non-medication therapy on the patient
13. Patient lacks understanding of medication or non-medication therapy
14. Patient not adhering to medication or non-medication regimen
15. Patient not adhering to prescribed monitoring plan

IO Explain the increased impact of psychological, cultural, and economic factors on ambulatory patients' adherence to prescribed medication or non-medication therapy.

IO Explain how the patient's failure to sense importance or urgency of complying with therapy may affect adherence.

IO Explain varying methods of payment for medication therapy for ambulatory patients and their affect on adherence.

IO Explain how the perspective of long-term management influences the prioritization of ambulatory patients' medication and non-medication therapy problems.

IO Explain how the ambulatory care organization's priorities for patient care influence management of patients' medical problems.

OBJ R2.4.4 (Analysis) Using an organized collection of patient-specific information, prioritize ambulatory patients' health care needs.

IO Explain how new symptoms or changes in the acuity of chronic disease may affect the prioritization of ambulatory patients' health care needs.

IO Explain how an ambulatory patient's health beliefs, personal health goals, and socioeconomic status may affect the prioritization of the patient's health care needs.

Goal R2.5 Appropriately triage patients.

OBJ R2.5.1 (Evaluation) When presented with a patient with health care needs that cannot be met by the ambulatory care pharmacist, make a referral to the appropriate health care provider based on the patient's presenting problem and acuity.

OBJ R2.5.2 (Evaluation) Assure a plan for follow-up for a referred ambulatory patient.

Goal R2.6 Design evidence-based medication, non-medication, health improvement, wellness, and/or disease prevention regimens for ambulatory patients presenting with a wide range of disease states or conditions.

OBJ R2.6.1 (Synthesis) Specify therapeutic goals, compatible with long-term management of the ambulatory patient, incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, quality-of-life, and end-of-life considerations.

IO Explain the role of advance directives in the specification of therapeutic goals.

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

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

IO Explain the increased influence in the ambulatory environment of culture on patients' perceptions of desirable outcomes.

IO Explain the realistic limits of treatment outcomes in the ambulatory setting.

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

- IO *Explain unique aspects of the patient's role in the ambulatory environment in determining his/her therapeutic goals.*
- OBJ R2.6.2 (Synthesis) Design a patient-centered regimen, compatible with long-term management of an ambulatory patient, that meets the evidence-based therapeutic goals established for a patient; integrates patient-specific information, disease and drug information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles.
 - IO *Explain the role of advance directives in the design of therapeutic goals.*
 - IO *Explain the use in the ambulatory environment of evidence-based consensus statements and guidelines in the design of patient-specific therapeutic regimens.*
 - IO *Explain how culture influences ambulatory patients' perception of disease and how this affects responses to various symptoms, diseases, and treatments.*
 - IO *Explain how patient-specific pharmacogenomics and pharmacogenetics may influence the design of ambulatory patients' medication regimens.*
 - IO *Explain how the ambulatory environment's emphasis on long-term planning and patient continuity affects the design of therapeutic regimens.*
 - IO *Explain procedures for acquiring medications for patients who lack adequate medical insurance coverage.*
 - IO *Explain how to incorporate disease prevention and wellness promotion into ambulatory patients' therapeutic regimens.*
 - IO *Explain the contents of the organization's formulary and those drugs available for restricted use.*
- Goal R2.7 Design evidence-based monitoring plans for ambulatory patients.
 - OBJ R2.7.1 (Synthesis) Design a patient-centered, evidenced-based monitoring plan for an ambulatory patient's medication, non-medication, health improvement, wellness, and/or disease prevention regimen that effectively evaluates achievement of the patient-specific goals.
 - IO *Explain the role of advance directives in the specification of therapeutic goals.*
 - IO *Explain the use in the ambulatory environment of evidence-based consensus statements and guidelines in the design of patient-specific monitoring plans.*
 - IO *Explain cultural and social issues that should be considered when designing a monitoring plan for a ambulatory patient.*
 - IO *Explain the importance of considering what is feasible and useful when designing a monitoring plan for an ambulatory patient.*
 - IO *Explain effective approaches to assuring patient return for follow-up visits in the ambulatory environment.*
 - IO *Explain effective strategies for measuring adherence to prescribed medication and non-medication therapies for the ambulatory patient.*
- Goal R2.8 Design education for a specific ambulatory patient's regimen and monitoring plan.
 - OBJ R2.8.1 (Analysis) Accurately identify what education will be essential to the patient's or caregiver's understanding of the medication, non-medication, health improvement, wellness, and/or disease prevention regimen and monitoring plan; how to adhere to it; and the importance of adherence.
 - OBJ R2.8.2 (Synthesis) Design an effective and efficient plan for meeting the educational needs of a specific ambulatory patient, including information on medication therapy, adverse effects, adherence, appropriate use, handling, and medication administration.
- Goal R2.9 Recommend or communicate regimens and monitoring plans for ambulatory patients.
 - OBJ R2.9.1 (Application) Recommend or communicate a patient-centered, evidence-based medication, non-medication, health improvement, wellness, and/or disease prevention

regimen and corresponding monitoring plan to other members of the interdisciplinary team, patients, and/or caregiver in a way that is systematic, logical, accurate, timely, and secures consensus.

- Goal R2.10 Implement medication, non-medication, health improvement, wellness, and/or disease prevention regimens; monitoring plans; and education for ambulatory patients.
- OBJ R2.10.1 (Application) When appropriate, prescribe and administer medications under collaborative practice agreements.
 - OBJ R2.10.2 (Complex Overt Response) When appropriate, use skills to administer immunizations.
 - OBJ R2.10.3 (Application) When appropriate, order tests according to the ambulatory environment's policies and procedures.
 - OBJ R2.10.4 (Application) Use effective patient education techniques to provide and evaluate the effectiveness of the regimen's patient education.
 - OBJ R2.10.5 (Application) Use a working knowledge of the organization's referral process to make any necessary patient referrals.
 - OBJ R2.10.6 (Application) Make follow-up appointments as specified in the monitoring plan.
- Goal R2.11 Evaluate ambulatory patients' progress and redesign medication, non-medication, health improvement, wellness, and/or disease prevention regimens and monitoring plans.
- OBJ R2.11.1 (Evaluation) Accurately assess the patient's progress toward the specified goal(s).
 - IO Explain the potential for decreased reliability of the monitoring data reported or collected by ambulatory patients or their caregivers when compared to inpatient settings.*
 - IO Explain the importance of the analysis of trends over time in monitoring parameter measurements for ambulatory patients.*
 - OBJ R2.11.2 (Synthesis) If necessary, redesign a patient-centered, evidence-based medication, non-medication, health improvement, wellness, and/or disease prevention regimen as necessary based on evaluation of monitoring data and outcomes.
 - IO Explain the role of advance directives in the interpretation of success in meeting therapeutic goals.*
- Goal R2.12: Communicate ongoing patient information.
- OBJ R2.12.1 (Application) When given an ambulatory patient who is transitioning to a different health care setting, communicate pertinent medication, non-medication, health improvement, wellness, and/or disease prevention information to the receiving health care professional(s).
 - OBJ R2.12.2 (Application) Ensure that accurate and timely medication-specific information regarding a specific ambulatory patient reaches those who need it at the appropriate time.
 - IO Determine instances in which there is urgency in communicating the results of monitoring to the ambulatory care interdisciplinary team.*
- Goal R2.13 Document direct patient care activities appropriately.
- OBJ R2.13.1 (Analysis) Appropriately select direct patient-care activities for documentation.
 - IO Explain the increased need for documenting patient care activities in the medical record in the ambulatory environment.*
 - OBJ R2.13.2 (Application) Use effective communication practices when documenting a direct patient-care activity.
 - OBJ R2.13.3 (Comprehension) Explain the characteristics of exemplary documentation systems that may be used in the ambulatory environment.
 - OBJ R2.13.4 (Application) Record patient outcomes according to the ambulatory organization's policies and procedures.

Outcome R3: Demonstrate leadership and practice management skills.

- Goal R3.1 Exhibit essential personal skills of a practice leader.
- OBJ R.3.1.1 (Characterization) Practice self-managed continuing professional development with the goal of improving the quality of one's own performance through self-assessment and personal change.
 - IO State the criteria for judging one's performance of tasks that are critical in one's own practice.*
 - OBJ R3.1.2 (Characterization) Demonstrate commitment to the profession through active participation in local, state, and/or national professional organizations.
 - OBJ R3.1.3 (Characterization) Demonstrate a commitment to advocacy for the optimal care of patients through the assertive and persuasive presentation of patient care issues to members of the health care team, the patient, and/or the patient's caregivers.
 - OBJ R3.1.4 (Application) Use effective negotiation skills to resolve conflicts.
 - OBJ R3.1.5 (Comprehension) Explain the nature of mentoring in pharmacy, its potential connection with achievement, and the importance of willingness to serve as mentor to appropriate individuals.
 - OBJ R3.1.6 (Application) Use group participation skills when leading or working as a member of a committee or informal work group.
- Goal R3.2 Manage the operation of an ambulatory care pharmacy service.
- OBJ R3.2.1 (Synthesis) Participate in the management of the service's manpower needs and scheduling of staff including backup plans for when assigned staff are not available.
 - IO Explain the components of an effective and efficient plan for the orientation of new ambulatory care staff.*
 - IO Explain the effect of competition among professions on manpower needs in the ambulatory setting.*
 - IO Explain the common areas of ongoing training needs of ambulatory care staff.*
 - OBJ R3.2.2 (Synthesis) Assure that the service operates in accord with legal and regulatory requirements.
 - OBJ R3.2.3 (Comprehension) Explain those things to consider when setting up an efficient and effective structure for scheduling patients.
 - OBJ R3.2.4 (Synthesis) Manage the day-to-day space needs required to serve patients appropriately.
 - OBJ R3.2.5 (Application) Maintain coding and billing activities according to the design of the service.
 - OBJ R3.2.6 (Application) Maintain the established system for securing service supplies (e.g., patient education materials, clinic supplies).
 - OBJ R3.2.7 (Synthesis) Implement effective plans for the ongoing marketing of the service including the recruitment of patients.
 - OBJ R3.2.8 (Synthesis) Identify and implement changes in the service based on changes in standards of practice.
 - IO Explain the particular relevance of the existence and use of evidence-based treatment guidelines/protocols in the ambulatory environment.*
 - IO Explain effective strategies for the ambulatory environment for gaining necessary commitment and approval for use of a treatment guideline/protocol.*
 - OBJ R3.2.9 (Analysis) Apply the principles of performance improvement to the ongoing functions of the service.
 - OBJ R3.2.10 (Synthesis) Exercise skill in the systematic resolution of problems arising in the operation of the service.
 - IO Explain strategies that can be employed when demand exceeds staffing.*

- IO Explain strategies that can be employed when clinic resources are not sufficient.*
- IO Explain strategies for managing overbooks.*
- IO Explain the potential effectiveness of establishing minimum return to clinic policies.*
- IO Explain strategies for managing “no shows” to clinic.*
- IO Explain the functions of a group session clinic.*
- OBJ R3.2.11 (Evaluation) Contribute to strategic planning for the service and/or practice.
- Goal R3.3 Conduct a clinical, humanistic or economic outcomes analysis of an ambulatory service.
- OBJ R3.3.1 (Analysis) Identify a clinical, humanistic, or economic service issue that would be useful to study and can be completed in one year.
 - IO Explain the principles and methodology of basic pharmacoeconomic analyses.*
 - IO Explain the purpose of a clinical, humanistic or economic outcomes analysis.*
- OBJ R3.3.2 (Application) Use a systematic procedure for performing a comprehensive literature search.
- OBJ R3.3.3 (Analysis) Draw appropriate conclusions based on a summary of a comprehensive literature search.
- OBJ R3.3.4 (Synthesis) Generate a research question(s) to be answered by the outcomes investigation.
- OBJ R3.3.5 (Synthesis) Develop specific aims and design study methods that will answer the question(s) identified.
 - IO Explain the ethics of human research on human subjects and the role of the IRB.*
 - IO Explain patient privacy issues as defined by HIPPA.*
 - IO Explain study designs appropriate for a clinical, humanistic and economic outcomes analysis.*
 - IO Explain the technique and application of modeling.*
 - IO Explain the types of data that must be collected in a clinical, humanistic and economic outcomes analysis.*
 - IO Explain possible reliable sources of data for a clinical, humanistic and economic outcomes analysis.*
- OBJ R3.3.6 (Synthesis) Use a systematic procedure to collect and analyze data.
 - IO Explain methods for analyzing data in a clinical, humanistic and economic outcomes analysis.*
- OBJ R3.3.7 (Evaluation) Draw valid conclusions through evaluation of the data.
- OBJ R3.3.8 (Synthesis) Use effective communication skills to report orally the study results and recommendations.
- OBJ R3.3.9 (Synthesis) Prepare, using accepted manuscript style, the results of the outcomes study.

Outcome R4: Promote health improvement, wellness, and disease prevention.

- Goal R4.1 Design and deliver programs that contribute to public health efforts.
 - OBJ R4.1.1 (Comprehension) Explain the pharmacist’s role in public health, including specific contributions to public health efforts.
 - OBJ R4.1.2 (Synthesis) Design and deliver programs for health care consumers that center on health improvement, wellness, and disease prevention.
 - IO Explain the prevalent health improvement educational needs of consumers.*
 - IO Explain the prevalent wellness educational needs of consumers.*
 - IO Explain the prevalent disease prevention educational needs of consumers.*
 - OBJ R4.1.3 (Synthesis) Participate in the development of organizational plans for emergency preparedness.

Outcome R5: Demonstrate excellence in the provision of training or educational activities for health care professionals and health care professionals in training.

Goal R5.1 Provide effective education or training to health care professionals and health care professionals in training.

- OBJ R5.1.1 (Comprehension) Explain the differences in effective educational strategies when teaching colleagues versus residents versus students versus health professionals in other disciplines.
- OBJ R5.1.2 (Application) Use effective educational techniques in the design of all educational activities.
 - IO *Design instruction that meets the individual learner's needs.*
 - IO *Explain the concept of learning styles and its influence on the design of instruction*
 - IO *Write appropriately worded educational objectives.*
 - IO *Design instruction to reflect the specified objectives for education or training.*
 - IO *Explain the match between instructional delivery systems (e.g., demonstration, written materials, videotapes) and the specific types of learning each facilitates.*
 - IO *Design instruction that employs strategies, methods, and techniques congruent with the objectives for education or training.*
 - IO *Explain effective teaching approaches for the various types of learning (e.g., imparting information, teaching psychomotor skills, inculcation of new attitudes).*
- OBJ R5.1.3 (Synthesis) Design an assessment strategy that appropriately measures the specified objectives for education or training and fits the learning situation.
 - IO *Explain appropriate assessment techniques for assessing the learning outcomes of educational or training programs.*
- OBJ R5.1.4 (Application) Use skill in the four preceptor roles employed in practice-based teaching (direct instruction, modeling, coaching, and facilitation).
 - IO *Explain the stages of learning that are associated with each of the preceptor roles.*
- OBJ R5.1.5 (Application) Use skill in case-based teaching.
 - IO *Explain the importance of identifying the key teaching points for a case before attempting to construct it.*
 - IO *Explain factors to consider when deciding the patient data to present in a case.*
- OBJ R5.1.6 (Application) Use public speaking skills to speak effectively in large and small group situations.
 - IO *Explain techniques that can be used to enhance audience interest.*
 - IO *Explain techniques that can be used to enhance audience understanding of one's topic.*
 - IO *Explain speaker habits that distract the audience.*
- OBJ R5.1.7 (Application) Use knowledge of audio-visual aids and handouts to enhance the effectiveness of communications.
 - IO *Use a systematic and educationally sound method for determining when it is appropriate to use handouts or visual aids and for selecting the appropriate aid.*
 - IO *Explain accepted conventions for the design of visual aids and handouts.*
 - IO *Exercise skill in the operation of audio-visual equipment.*

Outcome R6: Serve as an authoritative resource on the optimal use of medications.

Goal R6.1 Participate in the maintenance of the organization's formulary or prescribing process.

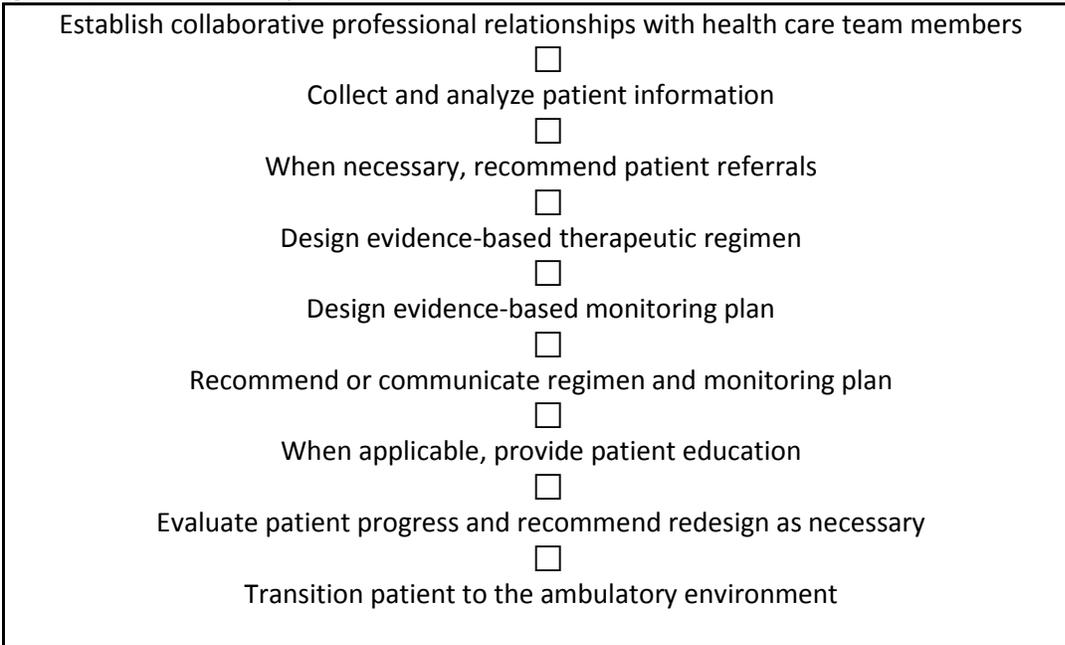
- OBJ R6.1.1 (Synthesis) When the organization uses a formulary, formulate effective strategies for communicating formulary restrictions and options to providers.

- IO *Explain conventional routes of communication of formulary information in the ambulatory setting.*
- IO *Explain the routes of communication within one's own ambulatory setting.*
- IO *Explain circumstances in which formulary information should be conveyed on a one-to-one basis as opposed to organization-wide.*
- OBJ R6.1.2 (Synthesis) Make or recommend pharmacoeconomically sound medication choices.
 - IO *Explain how price differences influence medication choices.*
 - IO *Explain how insurance coverage structure affects patient access to medication.*
 - IO *Explain the importance of considering the patient's economic status in making medication choices.*
 - IO *Explain the role of pharmaceutical industry billing structures in making medication choices.*
 - IO *Explain situations in which a pharmacoeconomic analysis is warranted.*
- OBJ R6.1.3 (Analysis) When presented with a real or hypothetical drug shortage, identify appropriate alternative medications.
 - IO *State resources for identifying medications in short supply.*
 - IO *Explain the ambulatory environment's system for communicating information regarding drug shortages.*
- Goal R6.2 Strategize approaches to the use of special order medications (e.g., non-formulary, patient assistance, high risk, medications through specialty pharmacies).
 - OBJ R6.2.1 (Evaluation) When presented with a request for a special order medication, evaluate the appropriateness of the medication for the requested use.
 - IO *Explain how to evaluate a request for a special order medication.*
 - OBJ R6.2.2 (Synthesis) When a request for a special order medication is not appropriate, suggest an appropriate formulary alternative.
 - OBJ R6.2.3 (Analysis) Identify sources for a requested special order medication.
 - IO *State common resources for various types of medications that end up special order.*
 - OBJ R6.2.4 (Synthesis) Facilitate procurement of the requested special order medication.
 - IO *Explain the range of approaches that might be involved in procuring special order medications.*
 - IO *Assess the need for prescriber education related to the procurement of the special order medication.*
- Goal R6.3 Demonstrate ownership of and responsibility for the welfare of the patient by performing all necessary aspects of the medication-use system.
 - OBJ R6.3.1 (Characterization) Display initiative in preventing, identifying, and resolving pharmacy-related patient-care problems.
- Goal R6.4 Assure an effective relationship with regard to the pharmaceutical industry
 - OBJ R6.4.1 (Synthesis) Formulate effective academic detailing strategies that give providers accurate information upon which to base decisions.
 - IO *Explain the organization's policy governing the presence of representatives from the pharmaceutical industry.*
 - IO *Explain the principles of counter-detailing.*
 - OBJ R6.4.2 (Application) If appropriate, manage the use and storage of medication samples.

Elective Outcomes

Outcome E4: *Where the practice includes integrated care such as in family medicine, provide efficient, effective, evidence-based, patient-centered treatment for chronic and/or acute illnesses in all degrees of complexity to hospitalized patients.*

(When provided as part of the practice of direct patient care, this outcome always involves a series of integrated, interrelated steps.)



Goal E4.1 As appropriate, establish collaborative professional relationships with members of the health care team.

OBJ E4.1.1 (Synthesis) Implement a strategy that effectively establishes cooperative, collaborative, and communicative working relationships with members of interdisciplinary health care teams.

IO Explain the role and responsibilities on the interdisciplinary team of the ambulatory care pharmacist when a patient from the ambulatory care practice is hospitalized and when the ambulatory care pharmacist is acting as a consultant to the health system team caring for the patient.

Goal E4.2 Collect and analyze patient information.

OBJ E4.2.1 (Analysis) Collect and organize all patient-specific information needed by the ambulatory pharmacist to prevent, detect, and resolve medication-related problems and to make appropriate evidence-based, patient-centered medication therapy recommendations as part of the interdisciplinary team.

OBJ E4.2.2 (Analysis) Determine the presence of any of the following medication therapy problems in a patient's current medication therapy:

1. Medication used with no medical indication
2. Patient has medical conditions for which there is no medication prescribed
3. Medication prescribed inappropriately for a particular medical condition
4. Immunization regimen is incomplete
5. Current medication therapy regimen contains something inappropriate (dose, dosage form, duration, schedule, route of administration, method of administration)

6. There is therapeutic duplication
7. Medication to which the patient is allergic has been prescribed
8. There are adverse drug or device-related events or potential for such events
9. There are clinically significant drug-drug, drug-disease, drug-nutrient, or drug-laboratory test interactions or potential for such interactions
10. Medical therapy has been interfered with by social, recreational, nonprescription, or nontraditional drug use by the patient or others
11. Patient not receiving full benefit of prescribed medication therapy
12. There are problems arising from the financial impact of medication therapy on the patient
13. Patient lacks understanding of medication therapy
14. Patient not adhering to medication regimen

OBJ E4.2.3 (Analysis) Using an organized collection of patient-specific information, summarize patients' health care needs.

Goal E4.3 When necessary, recommend patient referrals.

OBJ E4.3.1 (Evaluation) When presented with a patient with health care needs that cannot be met by the pharmacist, recommend to the interdisciplinary team that a referral be made to the appropriate health care provider based on the patient's acuity and the presenting problem.

Goal E4.4 Design evidence-based therapeutic regimens.

OBJ E4.4.1 (Synthesis) Specify therapeutic goals for a patient incorporating the principles of evidence-based medicine that integrate patient-specific data, disease and medication-specific information, ethics, and quality-of-life considerations.

OBJ E4.4.2 (Synthesis) Design a patient-centered regimen that meets the evidence-based therapeutic goals established for a patient; integrates patient-specific information, disease and drug information, ethical issues and quality-of-life issues; and considers pharmacoeconomic principles.

Goal E4.5 Design evidence-based monitoring plans.

OBJ E4.5.1 (Synthesis) Design a patient-centered, evidenced-based monitoring plan for a therapeutic regimen that effectively evaluates achievement of the patient-specific goals.

Goal E4.6 Recommend or communicate regimens and monitoring plans.

OBJ E4.6.1 (Application) Recommend or communicate a patient-centered, evidence-based therapeutic regimen and corresponding monitoring plan to other members of the interdisciplinary team and/or patients in a way that is systematic, logical, accurate, timely, and secures consensus from the team and patient.

Goal E4.7 When applicable, provide patient education.

OBJ E4.7.1 (Application) When applicable, use effective patient education techniques to provide counseling to patients and caregivers, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration.

Goal E4.8 Evaluate patients' progress and recommend redesign of regimens and monitoring plans.

OBJ E4.8.1 (Evaluation) Accurately assess the patient's progress toward the therapeutic goal(s).

OBJ E4.8.2 (Synthesis) Recommend redesign of a patient-centered, evidence-based therapeutic plan as necessary based on evaluation of monitoring data and therapeutic outcomes.

Goal E4.9 Transition hospitalized patients to the ambulatory environment.

OBJ E4.9.1 (Synthesis) Design a plan for patient pharmacotherapeutic follow-up post hospitalization.

IO Explain the categories of information that should be in a complete pharmacotherapeutic follow-up plan post discharge.

- IO Explain issues, including ability to pay, that may arise regarding access to medications that may occur as the patient transitions from the hospital to the ambulatory environment.*
- IO Explain the importance of updating the outpatient medication record post hospitalization.*
- OBJ E4.9.2 (Synthesis) Communicate or recommend to the patient, health-system interdisciplinary team, ambulatory health care team, and /or the patient's caregiver the plan for pharmacotherapeutic follow-up.

Program structure:

- 1) Longitudinal Rotation design with some mix of block experiences
- 2) Participate in medication/disease state management in ambulatory practice sites. Possible sites may eventually include (thoughts for both now and *future* development):
 - a. Possible Longitudinal Experiences (3 choices, varying from ½ day a week to 1 day a week each)
 - i. Lebauer HeartCare (ACS, angina clinics)
 - ii. Moses Cone Family Medicine (Geriatric Clinic)
 - iii. Heart Failure Clinic (Pharmacist day—education day)
 - iv. Infectious Disease Clinic
 - v. AlaMAP
 - vi. Discharge Counseling/Transition of Care Pharmacy service for THN (sporadically each day)
 - vii. Link to Wellness Program
 - b. Possible Block Experiences (6-8 week blocks)
 - i. Guilford Medical
 - ii. Western Rockingham Family Medicine
 - iii. Link to Wellness
 - iv. Other THN pharmacy clinics

Possible Future rotations

- c. Chronic pain management
- d. Other THN-clinics that need clinical services
- e. Independent Pharmacies