ASHP ACCREDITATION STANDARD
FOR INTERNATIONAL PHARMACY PRACTICE RESIDENCY
PROGRAMS

Preamble:

The need for pharmacy postgraduate training opportunities throughout the world to foster pharmacy practice development and patient care services has led ASHP to develop a new accreditation standard and survey process for use in countries or areas of the world that cannot meet the intent of the ASHP pharmacy residency standards that are used in the United States and in some other countries. This international pharmacy practice accreditation standard is structurally similar to the PGY1 and PGY2 accreditation standards, but differs substantially in the requirements of the hospital offering the residency program and the pharmacy services provided within the hospital offering the residency program. In this regard, this accreditation standard embodies the processes of continuous quality improvement. This accreditation standard also utilizes a different set of competencies, educational goals and objectives than the PGY1 pharmacy residency accreditation standard.

The international pharmacy practice residency accreditation standard requires a departure from the survey process utilized for PGY1 and PGY2 residency programs, and will utilize a structured continuous quality improvement process. For decades, PGY1 programs and PGY2 programs have been deemed to be fully, partially, or non-compliant with elements of the accreditation standards. Those terms will not be utilized for this Standard. Rather, for this Standard, survey teams will measure the current state of each element of the standards (as explained below) and will work with pharmacy leaders and program directors to establish goals to reach the intent of these elements and appropriate timeframes for achievement. Accreditation decisions for the international pharmacy practice residency programs will be "Accredited," "Not Accredited," or "Conditional Accreditation." Survey response and subsequent progress reports to the ASHP International Accreditation Commission will be required at appropriate intervals to measure progress.

Introduction

Purpose of this Standard: the *ASHP Accreditation Standard for International Pharmacy Practice Residency Programs* (hereinafter the Standard) establishes criteria for training pharmacists to achieve professional competence in the delivery of patient-centered care and pharmacy services.

Residency Program Purpose: International pharmacy practice residency programs build on pharmacy education and outcomes to contribute to the development of clinical pharmacists responsible for medication-related care of patients with a wide range of conditions and to have a leadership role in advancing pharmacy practice in their country.

Application of the Standard: the requirements serve as the basis for evaluating an international pharmacy practice residency program for accreditation.

Throughout the Standard use of the auxiliary verbs *will* and *must* implies an absolute requirement, whereas use of *should* and *may* denotes a recommended guideline.

The Standard describes the criteria used in evaluation of hospitals that apply for accreditation of their residency program. The accreditation program is conducted under the authority of the ASHP Board of Directors and is supported through formal partnerships with several other pharmacy associations. The *ASHP Regulations on Accreditation of Pharmacy Residencies*[1] describes the policies governing the accreditation program and procedures for seeking accreditation.

Overview of the Standard for International Pharmacy Practice Residency Programs

The following explains the rationale and importance of the areas selected for inclusion in the standards.

Standard 1: Requirements of the Hospital Conducting the Residency Program

It is important that residents learn in a high quality learning environment. Therefore, the hospital conducting the residency should be accredited or working toward accreditation, regulatory requirements, and other nationally applicable standards, and will have sufficient resources to achieve the purposes of the residency program.

Standard 2: Pharmacy Services

Since pharmacy facilities and services provide the learning environment where residents are trained, it is important that they train in exemplary environments. After completion of a residency program, residents should strive to provide exemplary pharmacy services that improve patient care outcomes.
The pharmacy department's role in providing effective leadership, quality improvement efforts, appropriate organization, staffing, and collaboration with others to provide safe and effective medication-use systems are reviewed in this section. This section sets the expectation that sites should continue to improve and advance pharmacy services and should motivate the profession to continually improve patient care outcomes.

Standard 3: Requirements of the Residency Program Director and Preceptors

The residency program director (RPD) and preceptors are critical to the residency program's success and effectiveness. Their qualifications and skills are crucial. Therefore, the residency program director and preceptors will be professionally and educationally qualified pharmacists who are committed to providing effective training of residents and being exemplary role models for residents.

Standard 4: Requirements and Selection of Residents

This Standard is intended to help ensure the success of residents and the identification of exemplary pharmacists for further development for the benefit of the profession and patient care. Therefore, residents must be pharmacists committed to attaining professional competence beyond entry-level practice, committed to attaining the program's educational goals and objectives, and supportive of the organization's mission and values.

Standard 5: Responsibilities of the Program to the Resident

It is important that pharmacy residency programs provide an exemplary environment for residents' learning. This area indicates policies that must be in place to help protect residents and organizations

during unusual situations that may arise with residency programs (e.g. extended leaves, dismissal, duty hours).

Standard 6: Design and Conduct of the Residency Program

It is important that residents' training enables them to achieve the purpose, goals, and objectives of the residency program and become more mature, clinically competent practitioners, enabling them to address patients' needs. Proper design and implementation of programs helps ensure successful residency programs.

Standard 1: Requirements of the Sponsoring Organization and Hospital(s) Conducting the Residency Program

1.1 As appropriate, residency programs should be conducted in hospitals that have sought and accepted outside appraisal of facilities and patient care practices. The external appraisal must be conducted by a recognized organization appropriate to the hospital.

1.2 Residency programs must be conducted only in those hospitals where staff and leaders are committed to seek excellence in patient care as evidenced by substantial compliance with professionally developed and internationally applied practice and operational standards.

   1.2.a. The hospital offering the residency program should comply with currently published medication-related international patient safety goals (e.g., JCI, WHO, or others);

   1.2.b. Medication use in the hospital is organized and delivered to meet patient needs, complies with applicable laws and regulations, and is under the direction and supervision of a licensed pharmacist who practices at that site;

   1.2.c. Pharmacy and Therapeutics Committee/Medication Management Committee provides oversight over medication use throughout the hospital;

   1.2.c.(1) Medication prescribing, ordering, and transcribing processes are guided by policies and procedures;

   1.2.c.(2) All medications that are administered to patients are prescribed and documented in the patient's record;

   1.2.d. Quality and patient safety programs use current evidence to support safe medication use in the hospital.

   1.2.d.(1) Data measures selected reflect patient needs and best practices and are selected by an interprofessional group that includes a pharmacist;

   1.2.d.(2) Data collected is analyzed, aggregated, and reported to appropriate committees;

   1.2.d.(3) The hospital uses a defined process for identifying and managing sentinel events; specifically, pharmacists are involved in medication-related sentinel event management.

   1.2.d.(4) The organization uses a defined process for the identification, analysis and management of near-miss events.;

   1.2.e. The hospital maintains a standardized medical record for every patient. Pharmacists should have access to the medical record and should document significant patient care activities;

   1.2.f. The hospital offering the residency program must develop and use uniform processes for prescribing patient medications;

   1.2.g. All medication orders or prescriptions are reviewed, interpreted, and validated by pharmacists for appropriateness prior to medicine administration. If a pharmacist is not available for this function, prior review must be done by someone who has been trained according to a written policy;

   1.2.h. All medications used in the hospital are properly and safely stored;

   1.2.i. All medications used in the hospital are prepared and dispensed in a safe and clean environment. If medications are prepared outside of the pharmacy, staff who perform compounding (sterile or non-sterile), should be properly trained;

   1.2.j. Human subjects research conducted in the hospital is guided by laws, regulations, and hospital leadership.

   1.2.j.(1) The hospital has a committee or another way to oversee all medication-related research in the hospital involving human subjects;

1.2.j.(2) All medications involved with investigational studies should be controlled, stored, and dispensed by the pharmacy department;

1.2.k. As a part of the hospital's emergency management program (emergencies, epidemics, and disasters), all medications involved in emergency management programs should be appropriately selected and controlled, stored, and dispensed by the pharmacy department;

1.2.l. Laboratory services required to support safe and appropriate medication use are available to meet patient needs, and all such services should meet applicable local and national standards, laws, and regulations;

1.2.m. The hospital offering the residency program should design and carry out processes to provide continuity of care of medication-related information to patients in the hospital and at discharge to home or other health care facilities;

1.2.n. The hospital offering the residency program should provide patient and family education and instruction for all medications used by the patient during the hospitalization and at discharge from the hospital;

1.2.o. Pharmacy leaders define the desired education, skills, knowledge, and other requirements of all staff members. Each staff member's responsibilities are defined in current job descriptions; and,

1.2.p. The hospital uses a defined process to ensure that clinical and nonclinical staff knowledge and skills are consistent with patient needs.

1.3. Two or more hospitals, or a sponsoring organization (e.g., college of pharmacy, ministry of health) working in cooperation with one or more hospitals, may offer a pharmacy residency.

1.3.a Sponsoring organizations must maintain authority and responsibility for the quality of their residency programs;

1.3.b. Sponsoring organizations may delegate day-to-day responsibility for the residency program to a hospital; however, the sponsoring organization must ensure that the residency program meets accreditation requirements;

1.3.b.(1) The sponsoring organization must ensure that the purpose of the residency and the terms of the agreement are being met;

1.3.c. The sponsoring organization must designate and empower an individual to be responsible for directing the residency program and for achieving consensus on the evaluation and ranking of applicants for the residency;

1.3.d. Sponsoring organizations and hospitals must have a signed agreement(s) that defines clearly the responsibilities for all aspects of the residency program;

1.3.e. Each of the hospitals that provide residency training must meet the requirements set forth in Standard 1.2 and the pharmacy's service requirements in Standard 2.

1.4 Multiple-site residency programs must be in compliance with the *ASHP Accreditation Policy for Multiple-Site Residency Programs*[5].

Standard 2: Pharmacy Services

2.1 Pharmacy Services Integration Within the Hospital

2.1.a. The pharmacy must be led and managed by a professional, legally qualified pharmacist;

2.1.b. Current professional practice standards and guidelines should be followed , such as: ASHP *Best Practices for Health-System Pharmacy* and FIP Basal Statements on the Future of Hospital Pharmacy and, when necessary, other standards that apply to specific practices

sites will be used to evaluate any patient care sites or other practice operations providing pharmacy residency training;

2.1.c. The pharmacy department is integrated into planning and provision of patient care services. This includes pharmacy representation on key hospital committees and developing goals for the hospital and the pharmacy department regarding medication use;

2.1.d. The scope of pharmacy services is documented and is based upon the mission of the pharmacy department and an assessment of needs of the patients served by the hospital. These may include but are not limited to hours of service, types of pharmacy services provided, such as clinical pharmacy programs, formulary management programs, medication reconciliation, IV admixture, unit dose drug distribution service, pharmacokinetic service, and others;

2.1.e. Clinical pharmacy services are provided by pharmacy department employees for all areas of the hospital, including diagnostic and treatment areas (and clinics, if applicable). Policies and procedures are used to manage employees who provide clinical pharmacy services who are not members of the pharmacy department, if applicable;

2.1.f. All medications used in all areas of the hospital, including diagnostic and treatment areas (and clinics, if applicable) should be provided by the pharmacy department. Where medications are not provided by the pharmacy, there is pharmacy oversight;

2.1.g. Policies and procedures are used to ensure the medication-use processes (ordering, preparation, dispensing, storage, administration, and monitoring) are safe and effective for all drugs (up to the point of administration) to all patients in all areas of the health care organization.

2.2 Pharmacy Services Administration/Management

2.2.a. A pharmacy mission statement and strategic plan or pharmacy goals are developed and used to guide the pharmacy service;

2.2.b. A well-defined pharmacy organizational structure is developed and implemented;

2.2.c. Current policies and procedures for all pharmacy operations and services are readily available to staff;

2.2.d. Current position descriptions are used for all categories of pharmacy personnel, including residents. Position descriptions include the desired education, skills, knowledge, and other requirements;

2.2.e. A staffing strategy for the hospital is maintained by leaders of the pharmacy department and identifies the number, types, and desired qualifications of staff based on patient need. Such strategy is reviewed and revised on an ongoing basis, and is updated as necessary;

2.2.f. Each staff member receives ongoing education and training to maintain or to advance his/her knowledge and skills;

2.2.g. The hospital has a uniform process to gather, verify, and evaluate staff members' credentials (license, education, training, and experience);

2.2.h. The pharmacy department measures and demonstrates the value and quality of pharmacy services (e.g., patient satisfaction surveys, operational and clinical measures);

2.2.i. Pharmacy services comply with all applicable laws, codes, statutes, and regulations governing pharmacy practice unique to the hospital;

2.2.j. Systems are used to assess financial performance of the pharmacy department;

2.2.k. Financial, personnel, and facilities resources support the training of current and future workforce (e.g., residents, students, technicians, and others).

2.3 Drug Information, Medication Use Policy and Safety

2.3.a. Pharmacists respond to inquiries for medication information using appropriate drug information references and literature sources;

2.3.b. Medication use and safety programs are adequately supported by current drug information sources, including journals, periodicals, textbooks, and/or electronic systems in all areas of the hospital where medications are prepared, dispensed and administered to patients;

2.3.c. A pharmacy and therapeutics committee, or similar group, provides oversight of medication use in the organization;

    2.3.c.(1) committee membership is interdisciplinary (e.g., physicians, nurses, pharmacists) and represents patient care needs;

    2.3.c.(2) frequency of meetings is based on patient care and organizational needs;

    2.3.c.(3) meeting discussions and decisions are evidence-based, unbiased and independent from political influences;

    2.3.c.(4) Committee reports to the medical executive committee or other appropriate organizational committee;

2.3.d. The pharmacy department maintains a drug formulary approved by the Pharmacy & Therapeutics Committee, based on criteria, safety and efficacy;

2.3e. Drug formulary decisions are based on defined criteria that include the indication for use, effectiveness, risks, and costs;

2.3.f. Evidence-based medication-use guidelines, policies, and order sets are developed, utilized and evaluated at appropriate intervals;

2.3.g. Medication-use (including compliance with clinical guidelines, protocols and order sets, and the appropriateness of ward-stock medications) is evaluated for safety, clinical effectiveness, and cost effectiveness;

2.3.h. The hospital has developed and implemented a medication safety plan that addresses all aspects of the medication-use process;

2.3.i. Hospital and pharmacy systems report and review adverse events and medication errors, including individual report analysis, aggregation, and trend analysis to evaluate medication use. Systems such as root-cause analysis and failure mode effect analysis and other appropriate tools are used when appropriate;

2.3.j. Policies define which medications are permitted to be stocked in all areas of the hospital, including outside of the pharmacy;

2.3.k. Policies are developed and used when the pharmacy is closed, including medication order review, interpretation and verification, medication selection, and access to medications within the pharmacy or pharmacy satellite(s);

2.3.l. Policies are developed and used for the identification, control, and use of patients' own medications (not provided by the hospital);

2.3.m. Policies are developed and used for complementary and alternative medications used for patients or self-administered by patients (natural, herbal, tribal, traditional);

2.3.n. The pharmacy department provides education and information to health care professionals on timely medication-related matters and medication policies (in-services, newsletters, meetings, intranet use);

2.3.o. Processes are used by the hospital and by the hospital pharmacy department to evaluate the safety of the medication-use system, including manual and automated systems:

    2.3.o.(1) Use of information systems;

    2.3.o.(2) Use of automation in pharmacy and in patient care areas;

    2.3.o.(3) Use of smart infusion devices and their libraries and guardrails ;

    2.3.o.(4) 24 hour access to pharmacy and medications.

2.4 Procurement

    2.4.a. The pharmacy department is responsible for and manages the selection, procurement, storage, and dispensing of medications used within the organization. Pharmacists should ensure transparent procurement processes are in place in line with best practice and national legislation, are free from conflict of interest, and are based on principles of safety, quality, and efficacy;

    2.4.b. Processes are utilized for the approval of all vendors and suppliers of medications used in the organization;

    2.4.c. Appropriate packaging procedures are used to prepare medications;

    2.4.d. The hospital and/or pharmacy department procures and dispenses ready-to-administer medications as much as possible; and,

    2.4.e. The pharmacy department manages processes for drug that are in short supply;

    2.4.f. The pharmacy department manages process for recalled, expired and defective medications; and,

    2.4.g. Appropriate personal protective equipment for medication preparation, dispensing, and administration is purchased and used for hazardous materials handling by all staff.

2.5 Medication Distribution Systems

    2.5.a. Pharmacists are responsible for the preparation, distribution, and control of all medications used;

        2.5.a.(1) If pharmacy services are not provided 24 hours daily, pharmacy policies and procedures, training, and reconciliation processes are used to ensure medication safety and appropriate medication therapies;

        2.5.a.(2) Access to medications is appropriately controlled when the pharmacy department is closed;

    2.5.b. Medication storage, labeling, and packaging in the pharmacy and in the hospital complies with high risk, high alert and sound alike-look alike medication safe practices;

    2.5.c. All oral medication dosage forms are packaged and dispensed from the pharmacy in the most ready-to-administer to patients form;

    2.5.d. All intravenous admixtures, including all small and large volume parenteral solutions, chemotherapy, TPN (IV nutrition), concentrated electrolyte supplements and infusions, dialysis solutions and all others are provided for all patients in the most ready-to-administer form;

    2.5.e. All medications are packaged and labeled to ensure identification of the medicine and to maintain integrity until immediately prior to administration to individual patients;

    2.5.f. The pharmacy follows applicable quality standards when compounding non-sterile products;

    2.5.g. The pharmacy establishes procedures for dispensing, handling and administering institutionally-identified high-risk medications;

    2.5.h. The pharmacy department ensures the development and implementation of policies and procedures for the safe handling of hazardous drugs;

    2.5.i. A secured ward-stock system is used for a minimal amount of medications and access is limited;

    2.5.j. A secure system for the safe storage, control, and use of controlled substances and narcotics is used for all medications in all hospital areas;

    2.5.k. The pharmacy department ensures that systems are in place for medications and

supplies used for emergencies;

2.5.l. Appropriate pharmacy facilities for medications used for research should be provided, including an investigational drug service, if applicable;

2.5.m. The pharmacy department ensures that systems are used for the safe storage, control, and use of medication kits used through the organization, if applicable;

2.5.n. The pharmacy department ensures the development and implementation of policies and procedures for the safe storage, control, and use of medication samples, if applicable; and,

2.5.o. If an outpatient dispensing service is provided, it should include a patient assessment and counseling area.

2.6 Patient Care Services

2.6.a. Clinical pharmacy services are based on an assessment of patient care needs;

2.6.b. Pharmacists are members on interdisciplinary teams in patient care areas;

2.6.c. Pharmacists are responsible and accountable for pursuing optimal medication-related patient care outcomes;

2.6.d. Pharmacists are responsible for identification of patient specific medication-related problems, including but not limited to those related to therapeutic failures, adverse drug reactions, medication errors, inappropriate prescribing;

2.6.e. In collaboration with the healthcare team, pharmacists contribute to prospective development of patient-specific medication therapy and treatment plans;

2.6.f. Pharmacists are responsible for the monitoring of patient response to medication therapy;

2.6.g. Pharmacists participate in disease prevention and wellness promotion programs within the hospital, and community, if possible (e.g., smoking cessation, weight reduction, immunization, etc.);

2.6.h. Pharmacists participate in continuity-of-care processes utilized during patient care transitions;

2.6.i. Pharmacists and residents document in the patient record clinically-relevant activities which significantly impact individual patient care.

2.7 Quality Assurance

2.7.a. Pharmacy department personnel engage in an on-going process to assess and improve the quality of pharmacy services, including evaluation and implementation of new practice standards and guidelines;

2.7.b. The pharmacy department's assessment and improvement process include assessing and developing skills of the pharmacy department's staff;

2.7.c. A system ensuring accountability and optimization for the use of safe medication-use system technologies, including devices used for medication preparation, distribution, administration, and monitoring is used for continuous improvement;

2.7.d. A process is used to ensure safe and effective medication use while the pharmacy is closed (if applicable);

2.7.e. Pharmacy personnel conduct routine inspections of ward-stock, procedure areas, and any other locations where medications are stored. The results of inspections are reported to pharmacy and nursing leaders/managers, and reported to the appropriate medication policy committee; and,

2.7.f. Pharmacy department inspections by external organizations are conducted and results are reported and used for process improvement.

2.8 Personnel/Human Resources:
  2.8.a. The professional, technical, and clerical staff complement is sufficient to ensure that the department can provide the level of service required by all patients served;
  2.8.b. The staff complement is competent to perform the duties and responsibilities assigned (e.g., clinical and distributive services).

2.9 Pharmacy Facilities:
  2.9.a. Inpatient pharmacy and satellite (if applicable) pharmacy facilities are designed, constructed, organized, and equipped to promote safe and efficient work and to meet patient care needs;
  2.9.b. Sterile product facilities are appropriate to meet patient care needs and are compliant with appropriate guidelines;
  2.9.c. Outpatient pharmacy facilities are designed to promote safe and efficient work;
  2.9.d. Adequate office space for managers, supervisors, staff and learners is provided;
  2.9.e. Adequate workspace for pharmacists in patient care areas is provided;
  2.9.f. Adequate office space for residents is provided;
  2.9.g. Adequate meeting space is provided;
  2.9.h. Space is adequate for patient education in pharmacy areas;
  2.9.i. Space is adequate for security and control of controlled substances and narcotics in all pharmacy and patient care areas.

2.10 IT Systems
  2.10.a. Electronic health information technology systems support a safe medication-use system;
  2.10.b. If utilized, automated medication-related technologies support safe medication-use in patient care areas.

Standard 3: Requirements of the Residency Program Director and Preceptors

3.1 Program Leadership Requirements
  3.1.a. Each residency program must have a single residency program director (RPD) who must be a pharmacist from the hospital involved in the program or from the sponsoring organization;
  3.1.b. The RPD must establish and chair a residency advisory committee (RAC) specific to that residency program;
  3.1.c. The RPD may delegate, with oversight, to one or more individuals [(e.g., residency program coordinator(s)], administrative duties/activities for the conduct of the residency program;
  3.1.d. For residencies conducted by more than one organization (e.g., two organizations in a partnership) or residencies offered by a sponsoring organization (e.g., a college of pharmacy, hospital) in cooperation with one or more hospitals:
      3.1.d.(1) A single RPD must be designated in writing by responsible representatives of each participating organization;
      3.1.d.(2) The agreement must include the definition of:
            3.1.d.(2)(a) responsibilities of the RPD (oversight of preceptors); and,
            3.1.d.(2)(b) RPD's accountability to the organizations and/or hospital(s) (e.g. patient care responsibilities, participation on hospital committees).

3.2 Residency Program Directors' Eligibility

RPD must be licensed (or equivalent designation for the country conducting the residency, e.g., registered) pharmacist who

- has not completed a residency but has five or more years of hospital pharmacy practice experience; **or**,
- has completed an ASHP accredited international Pharmacy Practice Residency, s/he must have a minimum of two years of hospital pharmacy practice experience; **or**,
- has completed an ASHP-accredited PGY1 residency, s/he must have one year of hospital pharmacy practice experience; **or**,
- has completed an ASHP-accredited PGY2 residency. (No additional pharmacy practice experience is required.)

3.3 Residency Program Directors' Qualifications
RPD serves as role models for pharmacy practice, as evidenced by:
3.3.a. leadership within the pharmacy department or within the organization, through a documented record of improvements in and contributions to pharmacy practice;
3.3.b. demonstrating ongoing professionalism and contribution to the profession;
3.3.c. representing pharmacy on appropriate drug policy and other committees of the pharmacy department or within the organization.

3.4 Residency Program Leadership Responsibilities
RPDs serve as organizationally authorized leaders of residency programs and have responsibility for:
3.4.a. organization and leadership of a residency advisory committee that provides guidance for residency program conduct and related issues;
3.4.b. oversight of the progression of residents within the program and documentation of completed requirements;
3.4.c. implementing use of criteria for appointment and reappointment of preceptors;
3.4.d. evaluation, skills assessment, and development of preceptors in the program;
3.4.e. creating and implementing a preceptor development plan for the residency program;
3.4.f. continuous residency program improvement in conjunction with the residency advisory committee; and,
3.4.g. working with pharmacy administration.

3.5 Appointment or Selection of Residency Program Preceptors
3.5.a. Organizations shall allow residency program directors to appoint and develop pharmacy staff to become preceptors for the program;
3.5.b. RPDs shall develop and apply criteria for preceptors consistent with those required by the Standard.

3.6 Pharmacist Preceptors' Eligibility
Pharmacist preceptors must be licensed (or equivalent designation for the country conducting the residency, e.g., registered) pharmacists who,

- have three or more years of hospital pharmacy practice experience; **or**,
- have completed an ASHP-accredited International Pharmacy Practice Residency followed by a minimum of one year of hospital pharmacy practice experience; **or**,
- have completed an ASHP-accredited PGY1 residency; **or**,
- have completed an ASHP-accredited PGY1 residency followed by an ASHP-accredited PGY2

residency.

3.7 Preceptors' Responsibilities
　　Preceptors serve as role models for learning experiences. They must:
　　　3.7.a. contribute to the success of residents and the program;
　　　3.7.b. provide learning experiences in accordance with Standard 6;
　　　3.7.c. participate actively in the residency program's continuous quality improvement processes;
　　　3.7.d. demonstrate practice expertise, preceptor skills, and strive to continuously improve;
　　　3.7.e. adhere to residency program and department policies pertaining to residents and services; and,
　　　3.7.f. demonstrate commitment to advancing the residency program and pharmacy services.

3.8 Preceptors' Qualifications
　　Preceptors must demonstrate the ability to precept residents' learning experiences by meeting one or more qualifying characteristics in all of the following six areas:
　　　3.8.a. demonstrating the ability to precept residents' learning experiences by use of clinical teaching roles (i.e., instructing, modeling, coaching, facilitating) at the level required by residents;
　　　3.8.b. the ability to assess residents' performance;
　　　3.8.c. recognition in the area of pharmacy practice for which they serve as preceptors (e.g., Board certification, recognition by their college faculty or professional pharmacy organizations);
　　　3.8.d. an established, active practice in the area for which they serve as preceptor; maintenance of continuity of practice during the time of residents' learning experiences; and,
　　　3.8.e. on-going professionalism, including a personal commitment to advancing the profession.

3.9 Preceptors-in-Training
　　　3.9.a. Pharmacists new to precepting roles who do not meet the qualifications for residency preceptors in sections 3.6, 3.7, and 3.8 above (also known as preceptors-in-training) must:
　　　　　3.9.a.(1) be assigned an advisor or coach who is a qualified preceptor; and,
　　　　　3.9.a.(2) have a documented preceptor development plan to meet the qualifications for becoming a residency preceptor within two years.

3.10 Non-pharmacist preceptors
　　 When non-pharmacists (e.g., physicians,) are utilized as preceptors:
　　　3.10.a. the learning experience must be scheduled following the RPD and preceptors agreement that residents are ready for independent practice; and,
　　　3.10.b. a pharmacist preceptor works closely with the non-pharmacist preceptor to select the educational goals and objectives for the learning experience and to provide formative feedback and written summative evaluations.

Standard 4: Responsibilities of the Program to the Resident

4.1 Programs must be a minimum of twelve months and a full-time practice commitment.

4.2 Programs must comply with the ASHP duty hour standards[2].

4.3 The RPD must provide residents who are accepted into the program with a letter outlining their acceptance to the program;

    4.3.a. Information on the pre-employment requirements for their organization (e.g., licensure and human resources requirements,) and other relevant information (e.g., benefits, stipend) must be provided;

    4.3.b. Acceptance by residents of these terms and conditions, requirements for successful completion, and expectations of the residency program must be documented prior to the beginning of the residency, and shared with the resident applicant during the interview process, as well as with residents who enroll in the program during orientation.

4.4 The residency program must provide qualified preceptors to ensure appropriate training, supervision, and guidance to all residents to fulfill the requirements of the standards.

4.5 The residency program must provide residents an area in which to work, references, an appropriate level of relevant technology (e.g., clinical information systems, workstations, databases), access to extramural educational opportunities (e.g., a pharmacy association meeting), and sufficient financial support to fulfill the responsibilities of the program.

4.6 The RPD will award a certificate of residency only to those who complete the program's requirements.

4.7 The certificate provided to residents who complete the program's requirements must be issued in accordance with the provisions of the *ASHP Regulations on Accreditation of Pharmacy Residencies*[1]*,* and signed by the RPD and the chief executive officer of the organization or an appropriate executive with ultimate authority over the residency;

    4.7.a. Reference must be made on the residency certificate that the program is accredited by ASHP as an International Postgraduate Year One Pharmacy Residency Program.

4.8 The RPD must maintain the program's compliance with the provisions of the current version of the *ASHP Regulations on International Accreditation of Pharmacy Residencies*[1] throughout the accreditation cycle.

Standard 5: Requirements and Selection of Residents

5.1 The residency program director or designee must evaluate the qualifications of applicants to pharmacy residencies through a documented, formal, procedure based on predetermined criteria.

5.2 The predetermined criteria and procedure used to evaluate applicants' qualifications must be used by all involved in the evaluation and ranking of applicants.

5.3 Applicants to pharmacy residencies should be graduates or candidates for graduation of an accredited, or certified by an appropriate body for the country, pharmacy degree program (or one in process of pursuing accreditation or certification). At a minimum, the graduate must have completed a 5-year collegiate program with at least 4 years devoted to pharmacy curriculum or 4-year collegiate program of pharmacy curriculum plus at least one year of pharmacy practice experience, or be a graduate of a Pharm.D program.

5.4 Applicants to pharmacy residencies must be licensed or eligible for licensure (or equivalent designation for the country conducting the residency, e.g., registered) in the state, country, or jurisdiction in which the program is conducted.

5.5 Consequences of residents' failure to obtain appropriate licensure (or equivalent process) either prior to or within 90 days of the start date of the residency must be addressed in written policy of the residency program.

5.6 Requirements for successful completion and expectations of the residency program must be documented and provided to applicants invited to interview, including policies for professional, family, and sick leaves and the consequences of any such leave on residents' ability to complete the residency program, and for dismissal from the residency program;
    5.6.a. These policies must be reviewed with residents and be consistent with the organization's human resources policies for pharmacists.

Standard 6: Design and Conduct of the Residency Program

6.1 Residency Purpose and Description
    The residency program must be designed and conducted in a manner that supports residents in achieving the following purpose and the required educational competency areas, goals, and objectives described in the remainder of the standard.

    Residency Program Purpose: International pharmacy practice residency programs build on pharmacy education and outcomes to contribute to the development of clinical pharmacists responsible for medication- related care of patients with a wide range of conditions and to have a leadership role in advancing pharmacy practice in their country.

6.2 Competency Areas, Educational Goals and Objectives
    6.2.a. The program's educational goals and objectives must support achievement of the residency's purpose;
    6.2.b. Programs may select additional competency areas that are required for their program. If so, they must be required for all residents in the program.

6.3 Resident Learning
    6.3.a. Program Structure
            6.3.a.(1) A written description of the structure of the program must be documented formally;
                    6.3.a.(1)(a) The description must include required learning experiences and the length of time for each experience;
                    6.3.a.(1)(b) Elective experiences must also be listed in the program's design;
            6.3.a.(2) The program's structure must facilitate achievement of the program's educational goals and objectives;
            6.3.a.(3) The structure must permit residents to gain experience and sufficient practice with diverse patient populations, a variety of disease states, and a range of patient problems;
            6.3.a.(4) No more than one-third of the twelve-month pharmacy residency program may

deal with a specific patient disease state and population (e.g., critical care, oncology, cardiology);

6.3.a.(5) Residents must spend two thirds or more of the program in direct patient care activities;

6.3.b Orientation

Residency program directors must orient residents to the residency program. The orientation to the residency program must be considered a learning experience that includes the assignment of a preceptor, educational goals and objectives, and appropriate activities assigned to the objectives;

6.3.c Learning Experiences

6.3.c.(1) Learning experience descriptions must be documented and include:

6.3.c.(1)(a) a general description, including the practice area and the roles of pharmacists in the practice area;

6.3.c.(1)(b) expectations of residents;

6.3.c.(1)(c) educational goals and objectives assigned to the learning experience;

6.3.c.(1)(d) for each objective, a list of learning activities that will facilitate its achievement; and,

6.3.c.(1)(e) a description of evaluations that must be completed by preceptors and residents;

6.3.c.(2) Preceptors must orient residents to their learning experience using the learning experience description;

6.3.c.(3) During learning experiences, preceptors must use the four preceptor roles (direct instruction, modeling, coaching, facilitating) as needed based on residents' needs;

6.3.c.(4) Learning experiences must be designed and appropriately sequenced to facilitate residents' progress over the course of the residency to be more efficient, effective, and able to work independently in providing direct patient care.

6.4 Evaluation

The extent of residents' progression toward achievement of the program's required educational goals and objectives must be evaluated.

6.4. a. Initial assessment

6.4.a.(1) At the beginning of the residency, the RPD in conjunction with preceptors, must assess each resident's entering knowledge and skills related to the educational goals and objectives;

6.4.a.(2) By the end of the orientation period, the results of residents' initial assessments must be documented by the program director or designee in each resident's development plan and taken into consideration when determining residents' learning experiences, learning activities, evaluations, and other changes to the program's overall plan;

6.4.b. Formative (on-going, regular) assessment

6.4.b.(1) Preceptors must provide on-going feedback to residents about how they are progressing and how they can improve. The feedback must be frequent, immediate, specific, and constructive;

6.4.b.(2) Preceptors must make appropriate adjustments to residents' learning activities in response to information obtained through day-to-day informal observations, interactions, and assessments;

6.4.c. Summative evaluation

6.4.c.(1) At the end of each learning experience, preceptors must discuss with residents their verbal and written assessment on the extent of the resident's progress toward achievement of assigned educational goals and objectives, using specific criteria for performance;

6.4.c.(2) For learning experiences greater than or equal to 12 weeks in length, a documented summative evaluation must be completed by the preceptor at the end of 12 weeks or if a longer learning experience, at least every three months;

6.4.c.(3) If more than one preceptor is assigned to a learning experience, all preceptors must provide input into residents' evaluations. A lead or primary preceptor must collect and aggregate this information;

6.4.c.(4) For preceptors-in-training, both the preceptor-in-training and the preceptor advisor/coach must sign evaluations;

6.4.c.(5) Residents must complete and discuss at least one evaluation of each preceptor at the end of the learning experience;

6.4.c.(6) Residents must complete and discuss an evaluation of each learning experience at the end of the learning experience;

6.4d Residents' development plans

6.4.d.(1) Each resident must have a resident development plan documented by the RPD or designee by the end of the resident orientation period;

6.4.d.(2) On a quarterly basis, the RPD or designee must assess residents' progress and determine if the development plan needs to be adjusted;

6.4.d.(3) The development plan and any initial and quarterly adjustments must be documented and shared with all preceptors;

6.5 Continuous Residency Program Improvement

6.5.a. The RPD, residency advisory committee (RAC), and director or chief of pharmacy must engage in an on-going process of assessment of the residency program including a formal annual program evaluation;

6.5.b. The RPD or designee must develop and implement program improvement activities to respond to the results of the assessment of the residency program;

6.5.c. The residency program's continuous quality improvement process must evaluate whether residents fulfill the purpose of an international pharmacy practice residency program through graduate tracking;

6.5.c.(1) Information tracked must include initial employment, and may include changes in employment, surveys of past graduates, or other applicable information.

Glossary

Assessment: Measurement of progress on achievement of educational objectives.

Certification of an individual: A voluntary process by which a nongovernmental agency or an association grants recognition to an individual who has met certain predetermined qualifications specified by that organization. This formal recognition is granted to designate to the public that the individual has attained the requisite level of knowledge, skill, or experience in a well-defined, often specialized, area of the total discipline. Certification usually requires initial assessment and periodic reassessments of the individual's qualifications.

Certification of a degree program: ACPE's definition to be inserted.

Clinical pharmacist: Clinical pharmacists work directly with physicians, other health professionals, and patients to ensure that the medications prescribed for patients contribute to the best possible health outcomes. Clinical pharmacists practice in health care settings where they have frequent and regular interactions with physicians and other health professionals, contributing to better coordination of care. *(American College of Clinical Pharmacy)*

Competency area: Category of residency graduates' capabilities.

Complex condition: Patients with complex conditions are those who are being treated with high-risk medications, high numbers of medications, and/or have multiple disease states.

Criteria: Examples intended to help preceptors and residents identify specific areas of successful skill development or needed improvement in residents' work.

Educational Goal: Broad statement of abilities.

Educational Objective: Observable, measurable statement describing what residents will be able to do as a result of participating in the residency program.

Evaluation: Judgment regarding quality of learning.

Formative assessment: On-going feedback to residents regarding their progress on achievement of educational objectives for the purpose of improving learning.

Formulary: A formulary includes, but is not limited to, a list of medications and medication-associated products or devices, medication-use policies, important ancillary drug information, decision-support tools, and organizational guidelines. The formulary system is the ongoing process through which a health care organization establishes policies on the use of drugs, therapies, and drug-related products and identifies those that are most medically appropriate and cost-effective to best serve the health interests of a given patient population.

Interdisciplinary team: A team composed of members from different professions and occupations with varied and specialized knowledge, skills, and methods. The team members integrate their observations,

bodies of expertise, and spheres of decision making to coordinate, collaborate, and communicate with one another in order to optimize care for a patient or group of patients. (Institute of Medicine. Health professions education: a bridge to quality. Washington, DC: The National Academy Press; 2001.)

Multiple-site residency: A residency site structure in which multiple organizations or hospitals are involved in the residency program. Examples include programs in which: residents spend greater than 25% of the program away from the sponsoring organization/main site at another single site; or there are multiple residents in a program and they are home-based in separate sites.

1. To run a multiple-site residency there must be a compelling reason for offering the training in a multiple-site format (that is, the program is improved substantially in some manner). For example:
    a. RPD has expertise, however the site needs development (for example, site has a good variety of patients, and potentially good preceptors, however the preceptors may need some oversight related to the residency program; or services need to be more fully developed);
    b. quality of preceptorship is enhanced by adding multiple sites;
    c. increased variety of patients/disease states to allow wider scope of patient interactions for residents;
    d. increased administrative efficiency to develop more sites to handle more residents across multiple sites/geographic areas;
    e. synergy of the multiple sites increases the quality of the overall program;
    f. allows the program to meet all of the requirements (that could not be done in a single site alone); and,
    g. ability to increase the number of residents in a quality program.
2. A multiple-site residency program conducted in multiple hospitals that are part of a health-system that is considering CMS pass-through funding should conduct a thorough review of 42CFR413.85 and have a discussion with the finance department to ensure eligibility for CMS funding.
3. In a multiple-site residency program, a sponsoring organization must be identified to assume ultimate responsibility for coordinating and administering the program. This includes:
    a. designating a single residency program director (RPD);
    b. establishing a common residency purpose statement to which all residents at all sites are trained;
    c. ensuring a program structure and consistent required learning experiences;
    d. ensuring the required learning experiences are comparable in scope, depth, and complexity for all residents, if home based at separate sites;
    e. ensuring a uniform evaluation process and common evaluation tools are used across all sites;
    f. ensuring there are consistent requirements for successful completion of the program;
    g. designating a site coordinator to oversee and coordinate the program's implementation at each site that is used for more than 25% of the learning experiences in the program (for one or more residents); and,
    h. ensuring the program has an established, formalized approach to communication that includes at a minimum the RPD and site coordinators to coordinate the conduct of the program across all sites.

Non-traditional residency: Residency program that meets requirements of a 12-month residency program in a different timeframe.

Pharmacist Executive: The person who has ultimate responsibility for the residency hospital/pharmacy in which the residency program is conducted. (In some settings this person is referred to, for example,

as the *director of pharmacy*, the *pharmacist-in-charge*, the *chief of pharmacy services*) In a multiple-site residency, a sponsoring organization must be identified to assume ultimate responsibility for coordinating and administering the program.

Preceptor: An expert pharmacist who gives practical experience and training to a pharmacy resident. Preceptors have responsibility for the evaluation of residents' performance.

Preceptor-in-training*:* Pharmacists who are new to precepting residents who have not yet met the qualification for a preceptor in an accredited program. Through coaching and a development plan, they may be a preceptor for a learning experience and become full preceptors within two years.

Residency Advisory Committee (RAC): The residency Advisory Committee (RAC) is commonly a standing committee within the pharmacy department. It may also be a subcommittee of a pharmacy department education committee. Its members include the residency program director (RPD) and preceptors that represent different components of the residency program (e.g., clinical rotations, administrative, medication policy, the project, orientation and staffing learning experiences and more). The RAC generally meets monthly and has a general purpose to oversee all aspects of the program design and conduct, and for continuous quality improvement efforts of the residency program. The RAC may also assume roles for resident recruitment and selection, monitoring resident progress during the program, preceptor development, and managing residency program policies.

Residency program director (RPD): The pharmacist responsible for direction, conduct, and oversight of the residency program. In a multiple-site residency, the residency program director is a pharmacist designated in a written agreement between the sponsoring organization and all of the program sites.

Resident's Development Plan: Record of modifications to residents' program based on their learning needs.

Self-evaluation: A process of reflecting on one's progress on learning and/or performance to determine strengths, weaknesses, and actions to address them.

Service commitments: Clinical and operational practice activities. May be defined in terms of the number of hours, types of activities, and a set of educational goals and objectives.

Single-site residency: A residency site structure in which the hospital assumes total responsibility for the residency program. In a single-site residency, the majority of the resident's training program occurs at the site; however, the resident may spend assigned time in short elective learning experiences off-site.

Site: The actual practice location where the residency experience occurs.

Site Coordinator: A preceptor in a multiple-site residency program who is designated to oversee and coordinate the program's implementation at an individual site that is used for more than 25% of the learning experiences. This individual may also serve as a preceptor in the program. A site coordinator must:
  1. be a licensed pharmacist who meets the minimum requirements to serve as a preceptor (meets the criteria identified in Principle 5.9 of the appropriate pharmacy residency accreditation standard);

2. practice at the site at least ten hours per week;

3. have the ability to teach effectively in a clinical practice environment; and,

4. have the ability to direct and monitor residents' and preceptors' activities at the site (with the RPD's direction).

Sponsoring organization: The organization assuming ultimate responsibility for the coordination and administration of the residency program. The sponsoring organization is charged with ensuring that residents' experiences are educationally sound and are conducted in a quality practice environment. The sponsoring organization is also responsible for submitting the accreditation application and ensuring periodic evaluations are conducted. If several organizations share responsibility for the financial and management aspects of the residency (e.g., school of pharmacy, health-system, and individual site), the organizations must mutually designate one organization as the sponsoring organization.

Staffing: See "Service commitments."

Summative evaluation: Final judgment and determination regarding quality of learning.

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