Beth Israel Lahey Health

Beth Israel Deaconess Medical Center

PGY2 Critical Care Pharmacy Residency Program Manual

2019-2020

In affiliation with

MCPHS UNIVERSITY

Critical Care Residency Manual (2019-20)
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Beth Israel Deaconess Medical Center
PGY2 Critical Care Pharmacy Residency Program 2019-20

Purpose Statement

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 opportunities to function independently as practitioners by conceptualizing and integrating accumulated experience and knowledge and incorporating both into the provision of patient care or other advanced practice settings. Residents who successfully complete an accredited PGY2 pharmacy residency are prepared for advanced patient care, academic, or other specialized positions, along with board certification.

The PGY2 program at BIDMC provides the resident with in-depth training and practice experience in the core rotations (Medical ICU, Surgical ICU, Neurological ICU, Trauma ICU, Cardiac ICU, Cardiovascular Surgical ICU, Experiential Teaching, Emergency Medicine) as well as with elective rotations (Toxicology, Medication Safety, Antimicrobial Stewardship, Solid Organ Transplant), which are provided to align with our resident's interests and career plans. Longitudinal activities during the residency are designed to expand the resident's experiences in pharmacy and health-system leadership, the formulary and medication use process, drug policy, code response, and medication safety. Additionally, residents will develop their skills to be competent in the provision of clinical and operational services within the acute care setting. Each resident will be responsible for completing a medication use evaluation, a residency project and manuscript. A Teaching Certificate Program is offered in collaboration with MCPHS University.

BIDMC PGY2 Residency Program 2019-20

ASHP Required Competency Areas, Goals, and Objectives
For Postgraduate Year Two (PGY2) Pharmacy Residency in Critical Care
& Additional BIDMC Competencies

Required Competency Areas

R1: Patient Care

a. Goal R1.1: In collaboration with the health care team, provide comprehensive medication management to critically ill patients following a consistent patient care process.
b. Goal R1.2: Ensure continuity of care during transitions of critically ill patients between care settings.
c. Goal R1.3: Manage and facilitate delivery of medications to support safe and effective drug therapy for critically ill patients.

R2: Advancing Practice and Improving Patient

a. Goal R2.1: Demonstrate ability to manage formulary and medication-use processes for critically ill patients, as applicable to the organization.
b. Goal R2.2: Demonstrate ability to conduct a quality improvement or research project.

R3: Leadership and management

a. Goal R3.1: Demonstrate leadership skills for successful self-development in the provision of care for critically ill patients.
b. Goal R3.2: Demonstrate management skills in the provision of care for critically ill patients.

R4: Teaching, Education, and Dissemination of Knowledge

a. Goal R4.1: Provide effective medication and practice-related education to critically ill patients, caregivers, health care professionals, students, and the public (individuals and groups).
b. Goal R4.2: Effectively employ appropriate preceptor roles when engaged in teaching students, pharmacy technicians, or fellow health care professionals in critical care.
c. Goal E1.2 Exercise case-based and other teaching skills essential to pharmacy faculty.

E1: Academia

a. Goal E 1.2: Exercise case-based and other teaching skills essential to pharmacy faculty

R1: Patient Care

a. **Goal R1.1: In collaboration with the health care team, provide comprehensive medication management to critically ill patients following a consistent patient care process.**
   I. **Objective R1.1.1: (Applying) Interact effectively with health care teams to manage critically ill patients' medication therapy**

      Criteria:

      - Interactions are cooperative, collaborative, communicative, and respectful.
      - Demonstrates skills in consensus building, negotiation, and conflict management.
      - Demonstrates advocacy for the patient.
      - Effectively contributes pharmacotherapy knowledge and patient care skills as an essential member of the healthcare team.

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

Criteria:

- Interactions are respectful and collaborative.
- Maintains accuracy and confidentiality of patients' protected health information.
- Uses effective (e.g., clear, concise, accurate) communication skills.
- Shows empathy.
- Empowers patients, family members, and caregivers regarding the patient's well-being and health outcomes.
- Demonstrates cultural competence.
- Communicates with family members to obtain patient information when patients are unable to provide the information.
- Communicates with patient and family about initiation and changes of patient therapies.
- Demonstrates advocacy for caregivers.

III. **Objective R1.1.3: (Analyzing) Collect information on which to base safe and effective medication therapy for critically ill patients.**

Criteria:

- Collection/organization methods are efficient and effective.
- Collects relevant information about medication therapy, including:
    - History of present illness. - Relevant health data that may include past medical history, health and wellness information, biometric test results, and physical assessment findings.
    - Social history.
    - Medication history, including prescription, non-prescription, illicit, recreational, and non-traditional therapies; other dietary supplements; immunizations; and allergies.
    - Patient assessment (examples include, but are not limited to, physiologic monitoring, laboratory values, microbiology results, diagnostic imaging, procedural results, and scoring systems (e.g., RASS, CAM-ICU)
    - Pharmacogenomics and pharmacogenetic information, if available.
    - Adverse drug reactions.
    - Medication adherence and persistence. - Patient lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that affect access to medications and other aspects of care.
- Sources of information are the most reliable sources available, including electronic, face-to-face, and others.
- Recording system is functional for subsequent problem solving and decision making.
- Clarifies information as needed.
- Displays understanding of limitations of information in health records.
- Poses appropriate questions as needed.

IV. **Objective R1.1.4: (Analyzing) Analyze and assess information on which to base safe and effective medication therapy for critically ill patients.**

Criteria:

- Includes accurate assessment of patient's:
    - Health and functional status.
    - Risk factors.
    - Health data.
    - Cultural factors.
    - Health literacy.
    - Access to medications.
    - Immunization status.

- Need for preventive care and other services, when appropriate.
- Other aspects of care, as applicable.

- Identifies medication therapy problems, including:
  - Lack of indication for medication. o Medical conditions for which there is no medication prescribed.
  - Medication prescribed or continued inappropriately for a particular medical condition.
  - Suboptimal medication regimen (e.g., dose, dosage form, duration, schedule, route of administration, method of administration).
  - Medication toxicity requiring medication therapy modifications.
  - Abnormal lab values requiring medication therapy modifications.
  - Therapeutic duplication.
  - Adverse drug or device-related events or the potential for such events.
  - Clinically significant drug–drug, drug–disease, drug–nutrient, drug–DNA test interaction, drug–laboratory test interaction, or the potential for such interactions.
  - Use of harmful social, recreational, nonprescription, nontraditional, or other medication therapies.
  - Patient not receiving full benefit of prescribed medication therapy.
  - Problems arising from the financial impact of medication therapy on the patient.
  - Patient lacks understanding of medication therapy.
  - Patient not adhering to medication regimen and root cause (e.g., knowledge, recall, motivation, financial, system).
  - Patient assessment needed
  - Discrepancy between prescribed medications and established care plan for the patient.
- Prioritize a critically ill patient's health care needs.

V. **Objective R1.1.5: (Creating) Design, or redesign, safe and effective patient-centered therapeutic regimens and monitoring plans (care plans) for critically ill patients.**

Criteria:

- Specify evidence-based, measurable, achievable therapeutic goals that include consideration of:
  - Relevant patient-specific information, including culture and preferences.
  - The goals of other interprofessional team members.
  - The patient's disease state(s).
  - Medication-specific information. o Best evidence, including clinical guidelines and the most recent literature
  - Effectively interprets new literature for application to patient care
  - Ethical issues involved in the patient's care.
  - Quality-of-life issues specific to the patient.
  - End of life issues, when needed.
  - Integration of all the above factors influencing the setting of goals.
- Designs/redesigns regimens that:
  - Are appropriate for the disease states being treated.
  - Reflect:
    - Clinical experience
    - The therapeutic goals established for the patient.
    - The patient's and caregiver's specific needs.
    - Consideration of:
      - Any pertinent pharmacogenomic or pharmacogenetic factors.
      - Best evidence.
      - Pertinent ethical issues.
      - Pharmacoeconomic components (patient, medical, and systems resources).
      - Patient preferences, culture, and/or language differences.

        - Patient-specific factors, including physical, mental, emotional, and financial factors that might impact adherence to the regimen.
        - Drug shortages.
    - Adhere to the health system's medication-use policies.
    - Follow applicable ethical standards.
    - Address wellness promotion and lifestyle modification.
    - Support the organization's or patient's insurance formulary.
    - Address medication-related problems and optimize medication therapy.
    - Engage the patient through education, empowerment, and promotion of self-management.
- Designs/redesigns monitoring plans that:
    - Effectively evaluate achievement of therapeutic goals.
    - Ensure adequate, appropriate, and timely follow-up.
    - Establish parameters that are appropriate measures of therapeutic goal achievement.
    - Reflect consideration of best evidence.
    - Select the most reliable source for each parameter measurement.
    - Have appropriate value ranges selected for the patient.
    - Have parameters that measure efficacy.
    - Have parameters that measure potential adverse drug events.
    - Have parameters that are cost-effective.
    - Have obtainable measurements of the parameters specified.
    - Reflects consideration of compliance.
    - Anticipates future drug-related problems.
    - When applicable, reflects preferences and needs of the patient.
    - Plan represents the highest level of patient care.

VI. **Objective R1.1.6: (Applying) Ensure implementation of therapeutic regimens and monitoring plans (care plans) for critically ill patients by taking appropriate follow-up actions.**

Criteria:

- Effectively recommends or communicates patients' regimens and associated monitoring plans to relevant members of the health care team.
    - Poses appropriate questions as needed.
    - Recommendation is persuasive.
    - Presentation of recommendation accords patient's right to refuse treatment.
    - If patient refuses treatment, pharmacist exhibits responsible professional behavior.
    - Creates an atmosphere of collaboration.
    - Skillfully defuses negative reactions.
    - Communication conveys expertise.
    - Communication is assertive but not aggressive.
    - Where the patient has been directly involved in the design of the plans, communication reflects previous collaboration appropriately.
- Ensures recommended plan is implemented effectively for the patient, including ensuring that the:
    - Plan represents the highest level of patient care.
    - Therapy corresponds with the recommended regimen.
    - Regimen is initiated at the appropriate time.
    - Patient receives their medication as directed.
    - Medications in situations requiring immediacy are effectively facilitated.
    - Medication orders are clear and concise.
    - Activity complies with the health system's policies and procedures.
    - Tests correspond with the recommended monitoring plan.
    - Tests are ordered and performed at the appropriate time.

- Takes appropriate action based on analysis of monitoring results (redesign regimen and/or monitoring plan if needed).
    - Appropriately initiates, modifies, discontinues, or administers medication therapy as authorized.
    - Responds appropriately to notifications and alerts in electronic medical records and other information systems that support medication ordering processes (based on factors such as patient weight, age, gender, comorbid conditions, drug interactions, renal function, and hepatic function).
    - Provides thorough and accurate education to patients and caregivers, when appropriate, including information on medication therapy, adverse effects, compliance, appropriate use, handling, and medication administration.
    - Addresses medication- and health-related problems and engages in preventive care strategies, including vaccine administration.
    - Schedules follow-up care as needed to achieve goals of therapy.

VII. **Objective R1.1.7: (Applying) For critically ill patients, document direct patient care activities appropriately in the medical record, or where appropriate.**

Criteria:

- Accurately and concisely communicates drug therapy recommendations to healthcare professionals representing different disciplines.
- Appropriately documents patient/caregiver communication and all relevant direct patient care activities in a timely manner.

VIII. **Objective R1.1.8: (Applying) Demonstrate responsibility to critically ill patients for patient outcomes.**

Criteria:

- Gives priority to patient care activities.
- Routinely ensures all steps of the medication management process.
- Assumes responsibility for medication therapy outcomes.
- Actively works to identify the potential for significant medication-related problems.
- Actively pursues all significant existing and potential medication-related problems until satisfactory resolution is obtained.
- Ensures appropriate transitions of care.
- Communicates with patients and family members/caregivers about their medication therapy.
- Determines barriers to patient compliance and makes appropriate adjustments.

b. **Goal R1.2: Ensure continuity of care during transitions of critically ill patients between care settings.**

I. **Objective R1.2.1: (Applying) Manage transitions of care effectively for critically ill patients.**

Criteria:

- Participates in thorough medication reconciliation when necessary.
- When appropriate, follows up on identified drug-related problems, additional monitoring, and education in a timely and caring manner.
- Provides accurate, pertinent, and timely follow-up information when patients transfer to another facility, level of care, pharmacist, or provider, as appropriate.
- Takes appropriate and effective steps to help avoid unnecessary hospital admissions and/or readmissions.
- Provides appropriate information to other pharmacists in transitions to mitigate medication therapy problems.

c. **Goal R1.3: Manage and facilitate delivery of medications to support safe and effective drug therapy for critically ill patients.**

I. **Objective R1.3.1: (Applying) Facilitate delivery of medications for critically ill patients following best practices and local organization policies and procedures.**

Criteria:

- Correctly interprets appropriateness of a medication order before preparing or permitting the distribution of the first dose, including: o Identifying, clarifying, verifying, and correcting any medication order errors.
    - Considering complete patient-specific information.
    - Identifying existing or potential drug therapy problems.
    - Determining an appropriate solution to an identified problem.
    - Securing consensus from the prescriber for modifications to therapy.
    - Ensuring that the solution is implemented.
- Prepares medication using appropriate techniques and following the organization's policies and procedures and applicable professional standards, including:
    - When required, accurately calibrating equipment. o Ensures intravenous solutions are appropriately concentrated, without incompatibilities; stable; and appropriately stored.
    - Adhering to appropriate safety and quality assurance practices.
    - Preparing labels that conform to the health system's policies and procedures, as appropriate.
    - Ensuring that medication has all necessary and appropriate ancillary labels.
    - Inspecting the final medication before dispensing for accuracy, as appropriate.
- When dispensing medication products:
    - Follows the organization's policies and procedures.
    - Ensures the patient receives the medication(s) as ordered.
    - Ensures the integrity of medication dispensed.
    - Provides any necessary written and/or verbal counseling for the patient and support/education for relevant interdisciplinary staff (e.g. nursing, respiratory therapy).
    - Ensures the patient receives medication on time.
    - Maintains accuracy and confidentiality of patients' protected health information.
- Obtains agreement on modifications to medication orders when acting in the absence of, or outside, an approved protocol or collaborative agreement.
- Ensures appropriate dosing, preparation, and dispensing the following types of medications: o Blood factor products.
    - Anticoagulant reversal agents.
    - Medications used in emergency response, cardiac arrest, stroke response.
- Assesses appropriate stock of automatic dispensing cabinets.
- References appropriate literature resources to ensure use of proper practices regarding compatibility, fluid overload, and concentrations.

II. **Objective R1.3.2: (Applying) Manage aspects of the medication-use process related to formulary management for critically ill patients.**

Criteria:

- Follows appropriate procedures regarding exceptions to the formulary, if applicable, in compliance with policy.
- Ensures non-formulary medications are evaluated, dispensed, administered, and monitored in a manner that ensures patient safety.

III. **Objective R1.3.3: (Applying) Facilitate aspects of the medication-use process for critically ill patients.**

Criteria:

- Makes effective use of technology to aid in decision-making and increase safety.
- Demonstrates commitment to medication safety.
- Effectively prioritizes workload and organizes workflow.

- Checks accuracy of medications dispensed, including correct patient identification, medication, dosage form, label, dose, number of doses, and expiration dates.
- When needed, checks for proper repackaging and relabeling medications, including compounded medications (sterile and nonsterile).
- Promotes safe and effective drug use on a day-to-day basis.

R2: Advancing Practice and Improving Patient Care

a. **Goal R2.1: Demonstrate ability to manage formulary and medication-use processes for critically ill patients, as applicable to the organization.**

I. **Objective R2.1.1: (Creating) Prepare or revise a drug class review, monograph, treatment guideline, or protocol related to care of critically ill patients, including proposals for medication-safety technology improvements.**

Criteria:

- Displays objectivity.
- Effectively synthesizes information from the available literature.
- Applies evidenced-based principles.
- Consults relevant sources.
- Considers medication-use safety and resource utilization.
- Uses the appropriate format.
- Effectively communicates any changes in medication formulary, medication usage, or other procedures to appropriate parties.
- Demonstrates appropriate assertiveness and timeliness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders.
- When appropriate, may include proposals for medication-safety technology improvements.

II. **Objective R2.1.2: (Evaluating) Participate in a medication-use evaluation related to care for critically ill patients.** (Guidance: This should not be the major project but may be part of the project.)

Criteria:

- Uses evidence-based principles to develop criteria for use.
- Demonstrates a systematic approach to gathering data.
- Accurately analyzes data gathered.
- Demonstrates appropriate confidence and assertiveness in presenting pharmacy concerns, solutions, and interests to internal and external stakeholders.
- Implements approved changes, as applicable.

III. **Objective R2.1.3: (Applying) Participate in the review of medication event reporting and monitoring related to care for critically ill patients.**

Criteria:

- Effectively uses currently available technology and automation that supports a safe medication-use process.
- Appropriately and accurately determines, investigates, reports, tracks, and trends adverse drug events, medication errors, and efficacy concerns using accepted institutional resources and programs.

IV. **Objective R2.1.4: (Analyzing) Identify opportunities for improvement of the medication-use system related to care for critical care patients.**

Criteria:

- Identifies problems and opportunities for improvement and analyzes relevant background data.
- Evaluates data generated by health information technology or automated systems to identify opportunities for improvement.

- Utilizes best practices to identify opportunities for improvements.
- When needed, makes medication-use policy recommendations based on a review of practice standards, guidelines, and other evidence (e.g., National Quality Measures, Institute for Safe Medication Practices alerts, Joint Commission sentinel alerts.)

b. **Goal R2.2: Demonstrate ability to conduct a quality improvement or research project.**

I. **Objective R2.2.1: (Analyzing) Identify and/or demonstrate understanding of a specific project topic to improve care of critically ill patients or a topic for advancing the pharmacy profession or critical care pharmacy.**

Criteria:

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

II. **Objective R2.2.2: (Creating) Develop a plan or research protocol for a practice quality improvement or research project for the care of critically ill patients or a topic for advancing the pharmacy profession or critical care pharmacy.**

Criteria:

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

III. **Objective 2.2.3: (Evaluating) Collect and evaluate data for a practice**

quality improvement or research project for the care of critically ill patients or for a topic for advancing the pharmacy profession or critical care pharmacy.

Criteria:

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

IV. **Objective 2.2.4: (Applying) Implement a quality improvement or research project to improve care of critically ill patients or for a topic for advancing the pharmacy profession or critical care pharmacy.**

Criteria:

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

V. **Objective R2.2.5: (Evaluating) Assess changes or need to make changes to improve care for critical care patients or a topic for advancing the pharmacy profession or critical care pharmacy.**

Criteria:

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

additional changes.

VI. **Objective R2.2.6: (Creating) Effectively develop and present, orally and in writing, a final project or research report suitable for publication related to care for critically ill patients or for a topic related to advancing the pharmacy profession or critical care pharmacy at a local, regional, or national conference.** (The presentation can be virtual.)

Criteria:

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

R3: Leadership and Management

a. **Goal R3.1: Demonstrate leadership skills for successful self-development in the provision of care for critically ill patients.**

I. **Objective R3.1.1: (Applying) Demonstrate personal, interpersonal, and teamwork skills critical for effective leadership in the provision of care for critically ill patients.**

Criteria:

- Demonstrates efficient time management.
- Manages conflict effectively.
- Demonstrates effective negotiation skills.
- Demonstrates ability to lead inter-professional teams.
- Uses effective communication skills and styles.
- Demonstrates understanding of perspectives of various health care professionals.
- Effectively expresses benefits of personal profession-wide leadership and advocacy.
- Effectively provides leadership in patient care related services, including inter-professional teams, code blue, and rapid response teams.

II. **Objective R3.1.2: (Applying) Apply a process of ongoing self-evaluation and personal performance improvement in the provision of care for critically ill patients.**

Criteria:

- Accurately summarizes own strengths and areas for improvement (in knowledge, values, qualities, skills, and behaviors).
- Effectively uses a self-evaluation process for developing professional direction, goals, and plans.
- Effectively engages in self-evaluation of progress on specified goals and plans.
- Demonstrates ability to use and incorporate constructive feedback from others.
- Effectively uses principles of continuous professional development (CPD)

planning (reflect, plan, act, evaluate, record/review).

b. **Goal R3.2: Demonstrate management skills in the provision of care for critically ill patients.**

I. **Objective R3.2.1: (Applying) Contribute to critical care pharmacy departmental management.**

Criteria:

- Helps identify and define significant departmental needs.
  - Manpower/staffing.
  - Staff scheduling and contingencies.
  - Staff qualifications.
  - Assesses and develops educational opportunities for critical care service line staff.
- Helps develop plans that address departmental needs.
  - Orientation
  - Training and supervision.
  - Effectively participate in, or evaluate, strategic plan.
  - Participates effectively on committees or informal work groups to complete group projects, tasks, or goals.
  - Participates effectively in implementing changes, using change management and quality improvement best practices and tools, consistent with team, departmental, and organizational goals.

II. **Objective R3.2.2: (Applying) Manage one's own critical care practice effectively.**

Criteria:

- Review and interpret the most recent primary literature.
- Evaluate clinical practice activities for potential contributions to scholarship.
- Accurately assesses successes and areas for improvement (e.g., a need for staffing projects or education) in managing one's own practice.
- Makes accurate, criteria-based assessments of one's own ability to perform practice tasks.
- Regularly integrates new learning into subsequent performances of a task until expectations are met.
- Routinely seeks applicable learning opportunities when performance does not meet expectations.
- Demonstrates effective workload and time-management skills.
- Assumes responsibility for personal work quality and improvement.
- Is well prepared to fulfill responsibilities (e.g., patient care, projects, management, meetings).
- Sets and meets realistic goals and timelines.
- Demonstrates awareness of own values, motivations, and emotions.
- Demonstrates enthusiasm, self-motivation, and a "can-do" approach.
- Strives to maintain a healthy work–life balance.
- Works collaboratively within the organization's political and decision-making structure.
- Demonstrates pride in and commitment to the profession through appearance, personal conduct, planning to pursue board certification.
- Demonstrates pride in and commitment to critical care through membership in professional organizations related to critical care.
- Demonstrates personal commitment to and adheres to organizational and departmental policies and procedures.

R4: Teaching, Education, and Dissemination of Knowledge

a. **Goal R4.1: Provide effective medication and practice-related education to critically ill patients, caregivers, health care professionals, students, and the public (individuals and groups).**

I. **Objective R4.1.1: (Applying) Design effective educational activities related to critical care pharmacy.**

Criteria:

- Accurately defines educational needs, including learning styles, with regard to target audience (e.g., individual versus group) and learning level (e.g., health care professional versus patient, student versus PGY1 resident).
- Selects topics of significance to critical care pharmacy as outlined in the appendix.
- Defines educational objectives that are specific, measurable, at a relevant learning level (e.g., applying, creating, evaluating), and address the audiences' defined learning needs.
- Plans use of teaching strategies that match learner needs, including active learning (e.g., patient cases, polling).
- Selects content that is relevant, thorough, evidence based (using primary literature where appropriate), timely and reflects best practices.
- Includes accurate citations and relevant references and adheres to applicable copyright laws.

II. **Objective R4.1.2: (Applying) Use effective presentation and teaching skills to deliver education related to critical care pharmacy.**

Criteria:

- Demonstrates rapport with learners.
- Captures and maintains learner/audience interest throughout the presentation.
- Implements planned teaching strategies effectively.
- Effectively facilitates audience participation, active learning, and engagement in various settings (e.g., small or large group, distance learning).
- Presents at appropriate rate and volume and without exhibiting poor speaker habits (e.g., excessive use of "um" and other interjections).
- Body language, movement, and expressions enhance presentations.
- Summarizes important points at appropriate times throughout presentations.
- Transitions smoothly between concepts.
- Effectively uses audio-visual aids and handouts to support learning activities.

III. **Objective R4.1.3: (Applying) Use effective written communication to disseminate knowledge related to critical care pharmacy.**

Criteria:

- Writes in a manner that is easily understandable and free of errors.
- Demonstrates thorough understanding of the topic.
- Notes appropriate citations and references.
- Includes critical evaluation of the literature and knowledge advancements or a summary of what is currently known on the topic.
- Develops and uses tables, graphs, and figures to enhance reader's understanding of the topic when appropriate.
- Writes at a level appropriate for the target readership (e.g., physicians, pharmacists, other health care professionals, patients, the public).

- Creates one's own work and does not engage in plagiarism.

IV. **Objective R4.1.4: (Applying) Appropriately assess effectiveness of education related to critical care pharmacy.**

Criteria:

- Selects assessment method (e.g., written or verbal assessment or self-assessment questions, case with case-based questions, learner demonstration of new skill) that matches activity.
- Provides timely, constructive, and criteria-based feedback to learner.
- If used, assessment questions are written in a clear, concise format that reflects best practices for test item construction.
- Determines how well learning objectives were met.
- Plans for follow-up educational activities to enhance or support learning and (if applicable) ensure that goals were met.
- Identifies ways to improve education-related skills.
- Obtains, reviews, and applies feedback from learners and others to improve effectiveness as an educator.

b. **Goal R4.2: Effectively employ appropriate preceptor roles when engaged in teaching students, pharmacy technicians, or fellow health care professionals in critical care.**

I. **Objective R4.2.1: (Analyzing) When engaged in teaching related to critical care, select a preceptor role that meets learners' educational needs.**

Criteria:

- Identifies which preceptor role is applicable for the situation (direct instruction, modeling, coaching, facilitating). o Selects direct instruction when learners need background content.
- Selects modeling when learners have sufficient background knowledge to understand the skill being modeled.
- Selects coaching when learners are prepared to perform a skill under supervision.
- Selects facilitating when learners have performed a skill satisfactorily under supervision.

II. **Objective R4.2.2: (Applying) Effectively employ preceptor roles, as appropriate, when instructing, modeling, coaching, or facilitating skills related to critical care.**

Criteria:

- Accurately assesses the learner's skill level to determine the appropriate preceptor role for providing practice-based teaching.
- Instructs students, technicians, or others as appropriate.
- Models skills, including "thinking out loud," so learners can "observe" critical-thinking skills.
- Coaches, including effective use of verbal guidance, feedback, and questioning, as needed.
- Facilitates, when appropriate, by allowing learner independence and using indirect monitoring of performance.

E1: Academia

a. **Goal E1.2 Exercise case-based and other teaching skills essential to pharmacy faculty.**

I. **Objective E1.2.1: (Applying) Develop and deliver cases for workshops and**

exercises for laboratory experiences.

Criteria:

- Identifies the appropriate level of case-based teachings for small group instruction.
- Identifies appropriate exercises for laboratory experiences.
- Provides appropriate and timely feedback to improve performance

II. **Objective E1.3.2: (Creating) Prepare a practice-based teaching activity.**

Criteria:

- Develops learning objectives using active verbs and measureable outcomes.
- Plans teaching strategies appropriate for the learning objectives.
- Uses materials that are appropriate for the target audience.
- Organizes teaching materials logically.
- Plans relevant assessment techniques.
- When used, develops examination questions that are logical, well-written, and test the learners' knowledge rather than their test-taking abilities.
- Participates in a systematic evaluation of assessment strategies (e.g., post-exam statistical analysis) when appropriate.
- Ensures activity is consistent with learning objectives in course syllabus

III. **Objective E1.3.3: (Applying) Deliver a practice-based educational activity, including didactic or experiential teaching, or facilitation.**

Criteria:

- Incorporates at least one active learning strategy in didactic experiences appropriate for the topic.
- Uses effective skills in facilitating small and large groups.
- For experiential activities:
    - Organizes student activities (e.g., student calendar).
    - Effectively facilitates topic discussions and learning activities within the allotted time.
    - Effectively develops and evaluates learner assignments (e.g., journal clubs, presentations, SOAP notes.
    - Effectively assesses student performance.
    - Provides constructive feedback.

Beth Israel Deaconess Medical Center
PGY2 Critical Care Pharmacy Residency Program 2019-20
Administration and Governance

PGY2 Critical Care Residency Program Director

I. Mary Eche, PharmD, BCPS, BCCCP, CACP
Pharmacy Clinical Manager: Critical Care/ED

Education: Doctor of Pharmacy from Northeastern University (2004); PGY1 Pharmacy Practice Residency, Beth Israel Deaconess Medical Center (2005); PGY2 Critical Care Pharmacy Residency, The Johns Hopkins Hospital (2006)

Professional Membership: Society of Critical Care Medicine (SCCM), American Society of Health System Pharmacists (ASHP); American College of Clinical Pharmacy (ACCP); Massachusetts Society of Health System Pharmacists (MSHP)

Personal Interests: Running, traveling, photography

Rotation/s Offered: Pharmacy Management/Leadership

Email: ieche@bidmc.harvard.edu

Core Rotation Preceptors

George Abdallah Pharm D, BCCCP
Clinical Pharmacist III: Critical Care

Education: Doctor of Pharmacy from Western New England University (2015); PGY1 Pharmacy Practice Residency, Beth Israel Deaconess Medical Center (2016); PGY2 Critical Care Residency, Beth Israel Deaconess Medical Center (2017)

Professional Membership: American Society of Health System Pharmacists (ASHP); American College of Clinical Pharmacy (ACCP); Massachusetts Society of Health System Pharmacists (MSHP)

Personal Interests: Traveling, walking/hiking, photography, swimming

Rotation/s Offered: Cardiac ICU, Cardiac Surgery ICU

Email: gabdalla@bidmc.harvard.edu

Natalya Asipenko, PharmD, BCPS, BCCCP
Clinical Pharmacist IV: Neurocritical Care

Education: Doctor of Pharmacy from Massachusetts College of Pharmacy and Health Sciences (2005); PGY1 Pharmacy Practice Residency, Beth Israel Deaconess Medical Center (2006)

Professional Membership: Neurocritical Care Society (NCS); Massachusetts Society of Health System Pharmacists (MSHP)

Personal Interests: Traveling, reading, theater-going, piano playing,baking

Rotation/s Offered: Neurocritical Care ICU

Email: nasipenk@bidmc.harvard.edu

Brandon Bair, PharmD
Clinical Pharmacy Specialist: Emergency Department

Education: Doctor of Pharmacy from University of Connecticut (2016); PGY1 Pharmacy Residency at the University of Vermont Health Network- Champlain Valley Physicians Hospital (2017); PGY2 Emergency Medicine Residency at Inova Fairfax Medical Campus (2018)

Professional Membership: American Society of Health System Pharmacists (ASHP)

Personal Interests: Traveling, hiking, movies, board games, beach

Rotation/s Offered: Emergency Medicine
Email: bbair@bidmc.harvard.edu

Gabrielle Cozzi, PharmD, BCCCP
Clinical Pharmacist: Critical Care

Education: Doctor of Pharmacy from University at Buffalo School of Pharmacy and Pharmaceutical Sciences (2017); PGY1 Pharmacy Practice Residency, Hackensack University Medical Center (2018); PGY2 Critical Care Residency, WVU Medicine (2019)

Professional Membership: American Society of Health System Pharmacists (ASHP); American College of Clinical Pharmacy (ACCP); Society of Critical Care Medicine (SCCM)

Personal Interests: Shopping, spending time with family, working out

Rotation/s Offered: Medical ICU

Email: gcozzi@bidmc.harvard.edu

Quynh N. Dang, BS, PharmD, BCCCP
Clinical Pharmacist II: Critical Care

Education: Bachelor of Science from Worcester Polytechnic Institute; Doctor of Pharmacy from Massachusetts College of Pharmacy and Health Science

Professional Membership: American Society of Health System Pharmacists (ASHP); American College of Clinical Pharmacy (ACCP); Massachusetts Society of Health System Pharmacists (MSHP).

Rotation/s Offered: Medical ICU

Email: qndang@bidmc.harvard.edu

Pansy Elsamadisi, PharmD, BCPS, BCCCP
Clinical Pharmacist III: Critical Care

Education: Doctor of Pharmacy from the Arnold and Marie Schwartz College of Pharmacy at Long Island University (2014); PGY1 Pharmacy Practice Residency at The Brooklyn Hospital Center in Brooklyn, New York; PGY1 Pharmacy Practice Residency (2015), Beth Israel Deaconess Medical Center (2018)

Professional Membership: Society of Critical Care Medicine; American Society of Health System Pharmacists (ASHP); American College of Clinical Pharmacy (ACCP); Massachusetts Society of Health System Pharmacists (MSHP)

Personal Interests: Traveling, Eating, Watching Egyptian shows/movies

Rotation/s Offered: Surgical ICU

Email: pelsamad@bidmc.harvard.edu

Holly Reed, PharmD
Clinical Pharmacist: Critical Care

Education: Doctor of Pharmacy from the University of Michigan (2017); PGY1 Pharmacy Practice Residency, Nebraska Medicine (2018); PGY2 Emergency Medicine Residency, Nebraska Medicine (2017)

Professional Membership: American Society of Health System Pharmacists (ASHP); Society of Critical Care Medicine (SCCM)

Personal Interests: Cats

Rotations Offered: Surgical ICU, Trauma ICU

Email: Hreed1@bidmc.harvard.edu

Sandra Rumyantsev, PharmD, BCCCP
Clinical Pharmacist II: Critical Care

Education: Doctor of Pharmacy from Massachusetts College of Pharmacy and Health Sciences (2016); PGY1 Pharmacy Residency- Reading Hospital, Reading, PA (2017); PGY2 Critical Care Pharmacy Residency- Carilion Roanoke Memorial Hospital, Roanoke, VA (2018)

Professional Membership: Society of Critical Care Medicine (SCCM), Massachusetts Society of Health System Pharmacists (MSHP)

Personal Interests: hiking with my dog, mystery novels, museums, brunch

Rotation/s Offered: Trauma ICU

Email: srumyant@bidmc.harvard.edu

Mehrnaz Sadrolashrafi, PharmD, BCCCP
Clinical Pharmacist: Critical Care

Education: Doctor of Pharmacy from MCPHS University (2017); PGY1 Pharmacy Practice Residency, Baystate Medical Center, Springfield, MA (2018); PGY2 Critical Care Residency, Baystate Medical Center, Springfield, MA (2019)

Professional Membership: Society of Critical Care Medicine (SCCM), American Society of Health System Pharmacists (ASHP), American College of Clinical Pharmacy (ACCP), Massachusetts Society of Health System Pharmacists (MSHP)

Personal Interests: I love to travel and find small adventures in all things. Most of all I enjoy food, cooking, but even more so finding that perfect taco restaurant!

Rotation/s Offered: Medical ICU

Email: msadrola@bidmc.harvard.edu

Rachael Scott, PharmD
Clinical Pharmacist: Critical Care

Education: Doctor of Pharmacy from the University at Buffalo (2017), PGY1 Pharmacy Practice Residency at Buffalo General Medical Center (2018), PGY2 Critical Care Residency at Mayo Clinic (2019)

Professional Membership: Neurocritical Care Society (NCS), Society of Critical Care Medicine (SCCM), American College of Clinical Pharmacy (ACCP)

Personal interests: hockey, running, traveling, hiking, reading almost anything

Rotations Offered: Neurocritical Care ICU, Cardiac ICU, Cardiac Surgery ICU

Email: rscott2@bidmc.harvard.edu

Nicole Wex, PharmD, BCCCP
Clinical Pharmacy Specialist: Emergency Department

Education: Doctor of Pharmacy from University of North Carolina (2015); PGY1 Pharmacy Residency at Froedtert and the Medical College of Wisconsin (2016); PGY2 Emergency Medicine Residency at University of Colorado Hospital(2018)

Professional Membership: American Society of Health System Pharmacists (ASHP); American College of Clinical Pharmacy (ACCP)

Personal Interests: Traveling, brunch, hiking, sporting events

Rotation/s Offered: Emergency Medicine

Email: nwex@bidmc.harvard.edu

Adrian Wong, PharmD, MPH, BCPS, BCCCP
Assistant Professor, MCPHS University
Clinical Pharmacist, Medical Intensive Care Unit

Education: Doctor of Pharmacy, Northeastern University (2012); PGY1 Pharmacy Practice Residency, The Johns Hopkins Hospital(2013); PGY2 Critical Care Pharmacy Residency, University of Pittsburgh(2014); Outcomes Research and Pharmacy Informatics Fellowship, Brigham and Women's Hospital/MCPHS University(2017); Master of Public Health, Harvard T.H. Chan School of Public Health (2017)

Professional Membership: American Association of Colleges of Pharmacy (AACP); American College of Clinical Pharmacy (ACCP); Massachusetts Society of Health System Pharmacists (MSHP); Society of Critical Care Medicine (SCCM)

Personal Interests: Beer, cooking, marathon running, travel

Rotation/s Offered: Medical ICU, Pharmacy Student Experiential Education

Email: awong7@bidmc.harvard.edu

Other BIDMC Preceptors:

May Adra, Pharm.D, BCPS
Clinical Coordinator, Medication Safety
Rotation Offered: Medication Safety
617.754.3822
madra@bidmc.harvard.edu

Katelyn Richards, Pharm.D, BCPS
Clinical Specialist, Solid Organ Transplant
Rotation Offered: Solid Organ Transplant
617.754.3823
krrichar@bidmc.harvard.edu

Christopher McCoy, Pharm.D, BCPS, AQ Infectious Disease
Clinical Coordinator, Antibiotic Stewardship
Rotation Offered: Antimicrobial Stewardship
617.754.3817
cmccoy@bidmc.harvard.edu

Diane Soulliard, Pharm.D, BCPS
Clinical Coordinator, Education/Training
Rotation Offered: Orientation
617.754.3828
dsoullia@bidmc.harvard.edu

Yulia Murray, Pharm.D. BCPS
Assistant Professor of Pharmacy Practice
MCPHS University
179 Longwood Avenue
Boston, MA 02115
Rotation Offered: Seminar
617.735.1022
yulia.murray@mcphs.edu

BIDMC Residency Advisory Committee (RAC)

The Residency Advisory Committee governs the residency program. The committee is comprised of preceptors and members of the Pharmacy Administrative Group. The Committee is chaired by the Residency Program Director and meets at least quarterly to review and discuss the progress of the residents. Interactive feedback within the committee is utilized to direct the resident in his/her current and upcoming residency activities and to provide mentoring and guidance in the resident's pharmacy practice. The committee will recommend modifications to the residents' schedule as necessary. Each member of the RAC is expected to:

- Act as an advocate for the resident.
- Provide expertise for the residency project (when possible) or identify other appropriate resources
- Provide feedback and suggestions on improving current rotation sites, as well as identifying future potential rotation sites
- Provide feedback and suggestions on the current structure of the residency program, and offer possibilities for future direction

PGY 2 Resident Advisor

Mentoring and advising are key elements of the BIDMC PGY2 Pharmacy Residency Program. The Residency Advisory Committee governs the residency program and is designed so that the resident will be afforded the opportunity to meet regularly with the committee members at large to discuss and receive feedback on their progress within the residency program and address any issues or concerns that may arise. To provide the resident with the opportunity for individualized mentoring and advising, the RAC will work with each incoming resident to coordinate the selection of an individual Resident Advisor for the academic year.

The principle role of the Resident Advisor is to act as a personal contact for the resident in all matters dealing with the successful completion of the residency program. The Resident Advisor will work with the resident to develop their residency plan and will monitor the plan's progress. The resident and advisor will collaborate and determine the degree of contact and involvement necessary to meet these objectives. Key areas that will be focused on include: advice on projects (initiation, completion, deadlines etc.), elective rotation selection, time management, professional interpersonal relationships and conflict, career opportunities after residency and any other residency-related issues that may arise. The Resident Advisor will collaborate with the RPD (if different) to complete the resident's quarterly assessments.

Determination of a Resident Advisor will be made in alignment with the determination of the resident project. In general, the project advisor works closely with the resident throughout the year and is the most appropriate RAC member to fulfill the mentoring and advising role that is central to the Resident Advisor position.

Should circumstances during the residency year warrant reevaluation of the selection of a resident's advisor, discussion with and approval by the RPD will be required before any changes are made.

BIDMC PGY2 Critical Care Pharmacy Residency Program Structure 2019-20

Core Rotations	Preceptor
Orientation (4 weeks)	George Abdallah, Pharm. D, Diane Souillard, Pharm. D, BCPS
Medical Intensive Care Unit (4 - 5 weeks)	Adrian Wong, Pharm. D, MPH, BCPS, BCCCP, Quynh Dang, PharmD, BS, BCCCP, Gabrielle Cozzi PharmD, BCCCP, Mehrnaz Sadrolashrafi, PharmD, BCCCP
Medical/Oncology Intensive Care Unit (4 – 5 weeks)	Gabrielle Cozzi PharmD, BCCCP, Mehrnaz Sadrolashrafi, PharmD, BCCCP
Cardiac Intensive Care Unit/Heart Failure (4-5 weeks)	George Abdallah, Pharm. D, BCCCP, Rachael Scott, PharmD
Cardiovascular Surgical ICU/ECMO (4-5 weeks)	George Abdallah, Pharm. D, BCCCP
Emergency Medicine (4-5 weeks)	Nicole Wex, Pharm.D, BCCCP, Brandon Bair, Pharm.D
Neurological ICU (4-5 weeks)	Natalya Asipenko, Pharm. D, BCPS, BCCCP, Rachael Scott, PharmD
Transplant/Surgical ICU (4-5 weeks)	Pansy Elsamadisi, Pharm. D, BCPS, BCCCP, Holly Reed, PharmD
Trauma ICU (4-5 weeks)	Sandra Rumyantsev, Pharm. D, BCCCP, Holly Reed, PharmD
Experiential Teaching Rotation: MCPHS (6 weeks)	Adrian Wong Pharm. D, MPH, BCPS, BCCCP
Elective Rotations	**Preceptor**
Antimicrobial Stewardship (4 weeks)	Christopher McCoy, Pharm. D, BCPS AQ-Infectious Disease
Toxicology (4 - 5 weeks)	Nicole Wex, Pharm.D, BCCCP; Brandon Bair, Pharm.D
Infectious Diseases Consult Service (4 weeks)	Ryan Chapin, Pharm. D, BCPID, Nick Mercuro, Pharm.D, BCPID
Nutrition (4 weeks)	Lori DeCosta, RD
Medication Safety/Quality (4 weeks)	May Adra, Pharm. D, BCPS
Solid Organ Transplant (4 weeks)	Katelyn Richards, Pharm. D, BCPS, Kaitlyn Zheng, Pharm.D.
Advanced Medical Intensive Care Unit (4 - 5 weeks)	Adrian Wong, Pharm. D, MPH, BCPS, BCCCP, Quynh Dang, PharmD, BS, BCCCP, Gabrielle Cozzi PharmD, BCCCP, Mehrnaz Sadrolashrafi, PharmD, BCCCP
Longitudinal Learning Experiences	**Preceptor**
Pharmacy Administration/Leadership/Safety • Formulary/Leadership/Project Management	Mary Eche, Pharm. D, BCPS, BCCCP, CACP
• Code Response	Sandra Rumyantsev, Pharm. D, BCCCP Holly Reed, PharmD
• Resident On-Call	Mary Eche, Pharm. D, BCPS, BCCCP, CACP
Resident Report	Residency Advisory Committee
Teaching • Facilitate MCPHS Therapeutics Seminar	Yulia Murray, Pharm. D
Interdisciplinary Management and Communication • Participate in P&T Committee meetings • Participation in Departmental and Rotation-Coordinated Hospital Committee Meetings	Mary Eche, Pharm. D, BCPS, BCCCP, CACP
Drug Information / Communication • Drug Information Questions • Journal Club • Vizient Poster presentation	Residency preceptor (DI aligns with resident report/ rotations) George Abdallah, Pharm. D Mary Eche, Pharm. D, BCPS, BCCCP, CACP
Residency Projects ▪ MUE ▪ Residency Research Project ▪ P&T/Clinical Division Presentations	Residency preceptor/s Mary Eche, Pharm. D, BCPS, BCCCP, CACP

BIDMC PGY2 Critical Care Residency Program Requirements 2019-20

Successful completion of the BIDMC PGY2 Residency Program requires the achievement of the required ASHP Residency Program Residency Learning System Outcomes, Goals and Objectives. Each resident is required to achieve all required and selected elective residency goals by the end of the residency year. Progress towards achieving these goals will be monitored at least quarterly by the Resident Advisor in conjunction with the RPD.

The following are detailed descriptions of required activities:

1. Participation in Residency Orientation/Training Program: **Start of Residency**

A formal orientation program for all residents is scheduled in July of each year. All new residents are expected to attend these sessions. This orientation period is to introduce the incoming residents to the BIDMC Department of Pharmacy, the BIDMC Medical Center at large, MCPHS University; and to outline the expectations for the residency year.

2. Department of Pharmacy Practice-Service: **July 1st – June 30th**

- Each resident is required to complete a pharmacy service component of the residency program. Often referred to as "staffing," the service component of the residency is crucial to the development of professional practice and distribution skills so as to provide safe and effective pharmaceutical care.
- Residents will gain insight into the operations, policies and procedures of an acute-care facility, with specific emphasis on care of critically ill patients
- The staffing requirement will comprise 30 shifts over the course of the residency year. These shifts may include weekends. Staffing may include the completion of 1 week at the end of a 4 week learning experience in the same unit that the resident completed the rotation. Additional shifts may be worked with approval from the residency program director, and will be paid at the rate of a per diem pharmacist.

3. Rotations- Core and Elective: **July 1st - June 30th**

- Each resident is responsible to complete a defined number of core clinical and management rotations as well as a determined number of elective rotations. Rotations will be evaluated using the PharmAcademic web-based software tool.
- One week prior to each rotation, the resident will submit their pre-rotation goals in PharmAcademic so as to provide an opportunity for the preceptor to evaluate, and if possible, to design specific activities to meet the resident's goals. At the beginning of each rotation, the preceptor will provide residents with the rotation: goals and objectives, learning activities and method of evaluation.
- Residents are responsible for coordinating their evaluations with the rotation preceptor. Rotation evaluations should be scheduled during the last week of rotation and are to be completed no later than one week following the conclusion of the rotation. Copies of the evaluation will be maintained in the resident's portfolio.

4. Medication Use Evaluation: **TBD**

Each resident is required to participate in and complete a Medication Use Evaluation (MUE).Topics may be pertaining to direct patient care, quality improvement; fiscal oversight or others.This MUE will be presented at the annual VIZIENT meeting prior to the Midyear Clinical Meeting, and at the relevant multidisciplinary meeting(s) at the institution. The MUE may also be presented at the Critical Care networking poster networking session at ASHP Midyear Clinical Meeting.

5. Residency Project: **Longitudinal**

- Each resident is responsible for the completion of residency project. The project typically takes the form of a research project, including IRB submission/correspondence, data collection, data analysis, and manuscript preparation.
- Each resident will complete a project report using an accepted manuscript style suitable for publication in the professional literature to a pharmacy or critical-care related journal.

6. Participation in Departmental and External Leadership Activities: **Longitudinal**

A number of activities and opportunities for leadership development will be scheduled throughout the residency year to foster an understanding of leadership within the department of pharmacy, within the profession of pharmacy and within the field of healthcare. These include participation in the critical care executive committee and critical care practice committees.

7. Participation in Pharmacy Residency On-Call Program, Code Pager Coverage and Drug Information Services: **Longitudinal**

- The resident will participate in the department's clinical on-call program (out of hospital) approximately every 6 weeks. The pharmacy resident on-call shift covers 4:00 PM to 8:00 AM both weekdays and weekends. Responsibilities include providing answers to drug information questions and following up on pharmacokinetic issues.
- The resident will participate in code pager coverage approximately once every 6 weeks. The code pager shift covers 7:00 AM to 4:00 PM during on weekdays. Responsibilities include responding to in-house code calls and providing the required assistance. Residents are required to be ACLS certified.
- Each resident will participate in several venues to provide drug information, which include but are not limited to Drug Information Questions, Development/update of PPGD, P & T Committee Formulary Reviews, Journal Club and other drug information activities, etc.
- The goal of these activities is to provide the resident with experience in the provision of pertinent drug information in a number of venues.

8. Participation in Teaching Activities: **TBD per MCPHS University calendar**

Resident involvement in the teaching activities fosters clinical development and refinement of the resident's teaching and communication skills.

- The residents will serve as preceptors to MCPHS University students during their 6 week Advanced Pharmacy Practice Experience. The residents will be responsible for developing the rotation goals and objectives for the students as well as coordinating all on-site activities and evaluations.
- The resident will actively participate as a facilitator for MCPHS University Therapeutics Seminar.
- The resident will participate in the longitudinal MCPHS University Teaching Certificate Program if one has not been previously completed.
- Additional teaching activities may be assigned at the discretion of the residency director and MCPHS University Coordinator.

9. Participation in Recruitment Efforts: **November - March**

- Each resident will assist with the new resident recruitment efforts of the department. Because each resident is an important source of information and advice for potential candidates, there will be scheduled time within the interview process for interviewees to interact with current residents.
- Additionally, each resident is required to spend time providing information to interested parties during the ASHP Midyear Clinical Meeting.

10. Attendance – Society of Critical Care Medicine Meeting: **January/February**

- The Society of Critical Care Medicine Conference is held in the winter of the year (generally in Jannuary/Februaury) and is a forum where the resident can continue to develop critical care knowledge while networking with critical care pharmacy practitioners around the country.

11. Participation in Resident Advisory Council (RAC) Meetings: **Longitudinal**

- Residents will attend scheduled RAC meetings to discuss upcoming resident events, other issues pertaining to the residency program, and actions/recommendations made at residency committee meetings, etc.
- Meetings will be scheduled by the Director of the Residency Program.

12. Participation in the New England Critical Care Pharmacy symposium (NECCPS) **(March)**

- Residents will present a clinical pearl at the NECCPS

BIDMC PG2 Critical Care Pharmacy Residency Program 2019-20

Qualification of the Resident

Qualifications for participation in the BIDMC PGY2 Residency Program are in accordance with criteria set forth by the American Society of Health System Pharmacists (ASHP).

- Residents must be graduates of an Accreditation Council for Pharmacy Education (ACPE) accredited degree program (or one in process of pursuing accreditation) or have a Foreign Pharmacy Graduate Equivalency Committee (FPGEC) certificate from the National Association of Boards of Pharmacy (NABP).
- Residents must be licensed or eligible for licensure in order to be licensed in MA within 90 days of the commencement of the residency.
- Residents must be authorized to work in the United States on a full-time basis. Work authorization sponsorship for this position is unavailable.
- Residents must have completed an ASHP-accredited PGY-1 residency program.
- Residents shall participate in and obey the rules of the Residency Matching Program.

Application to the BIDMC Residency Program

For a current PGY1 resident ONLY at BIDMC, an Early Commitment Process, whereby a position in the PGY2 program can be committed to in advance of the matching process can be achieved by fulfilling the following:

- Current PGY1 resident at BIDMC lending to continuous years of employment for the resident
- Completion of the required Critical care rotation and a commitment to complete at least one more elective in critical care before the end of the PGY1 year.
- Applicant should supply the following to the RPD by December 1st.
    - A letter of Intent including a statement of professional goals and reasons for pursuing the PGY2 Pharmacy Practice Residency at BIDMC
    - Curriculum Vitae
- Review of the applicant(s) by the RPD and select preceptors to determine that the resident could fulfill the requirements of the PGY2 program and his/her goals closely match the program goals
- Successful progress towards ACH status for required goals/objectives as reflected in the PharmAcademic system for early match candidates
- Selected candidates will be invited to an abbreviated onsite interview with the RPD, select preceptors and trainers
- Following the interview process, the expedited candidate(s) will be ranked based upon the collaborative input from the RAC with regard to the interviews and qualifications of the candidate
- The number one candidate will be offered the position three days before the early Commitment deadline. In the event that the candidate declines, the next candidate will be offered the position.

Applicants to the BIDMC Residency Program will complete an electronic application in Phorcas and submit by the application deadline. Materials to be included are:

- A one-page letter of Intent including a statement of professional goals and reasons for pursuing the PGY2 Residency
- Curriculum Vitae
- Three Letters of Recommendation
- Official transcript from accredited School/College of Pharmacy

To determine candidates for an on-site interview, completed applications will be reviewed by the residency program director and at least 1 member of the RAC to determine candidates that most closely match the BIDMC program goals and opportunities. The letter of intent, CV, current PGY-1 residency program, scholastic record and letters of recommendation weigh highly in the review process. We also consider work experience, career goals, leadership activities, teaching experience and involvement in professional activities as important factors in our selection process. All completed applications in PhORCAS are scored using the resident

screening form. Each area is scored and weighed accordingly. After review, no more than 6 candidates with the most points will be invited for an onsite interview.

Once invited for an interview, candidates will be scored on a scale of 1-5 by all interviewing parties. Interviewing parties will include program preceptors, critical care physician, clinical director, and residency program director. The average score for each candidate will then be tabulated to create an initial rank list. The rank list is then reviewed by the residency program director in conjunction with the residency advisory committee to determine a final rank order list to be submitted to the National Matching services. The residency program director may exercise discretion with the final rank list based on the overall resident fit for the program.

- A rank list will be submitted to the Resident Matching Program

In the event that the program does not match a candidate after the primary match, the program will enter into the second match process. Candidates for the second match will be screened in PhORCAS in a similar fashion as stated above, and the top 2-4 candidates by point total will be offered an on-line (Skype) interview with the residency director and program preceptors. Once all interviews are completed, the average score for each candidate will be tabulated in the same fashion, and an initial secondary match rank list will be created. The residency program director has the discretion to change the rank list prior to submission based on perceived resident candidate fit with the program.

In the scenario where the program does not match in the secondary match process, the residency program director will accept applications for 1 week and will screen candidates using the same form/process above. The top 2-3 candidates will be invited for an on-line interview with the program director and preceptors, and the top candidate (by average interview score) will be offered the position.

Acknowledgement of Residency Match:

Residents matched to the BIDMC Residency program will receive an acceptance letter acknowledging the match and delineating the general terms and conditions of the residency. Acknowledgment in writing by the resident will constitute acceptance of the match and agreement to fulfill the duties of the residency position for the upcoming year.

Pharmacy Licensure Verification:

Participation in the BIDMC PGY2 Residency Program is contingent on securing and maintaining a license without restriction in the Commonwealth of Massachusetts (MA). It is the expectation that the resident will complete these licensure requirements within 90 days of the commencement of the program. The resident will provide the Residency Program Director confirmation that:

- He/she has already taken or is scheduled to take the NAPLEX and the Multistate Pharmacy Jurisprudence Examination (MPJE), or
- He/she will take the MPJE upon successful transfer of NAPLEX scores from another state, or
- He/she has already has a valid MA pharmacy license.
- Upon notification of successful completion of the NAPLEX and/or MPJE the resident will provide documentation of licensure to the Residency Program Director.
- Failure to attain licensure is grounds for dismissal from the residency program. Residents should contact the Residency Program Director should any issue arise with licensure.

BIDMC PGY2 Pharmacy Residency Program 2019-20

Obligations of the Program to the Resident

The PGY2 residency at BIDMC, in conjunction with the MCPHS University, provides a 12-month advanced education and training experience for the Pharmacy Resident. It is the intent of the pharmacy residency program to provide an exemplary environment conducive to resident learning.

Program Competencies, Goals and Objectives for the BIDMC PGY2 program are in alignment with the ASHP PGY2 Residency required standards. Activities taught and evaluated throughout the program are intended to assure the desired outcomes are achieved through structured learning experiences.

Individualized Resident Plan

Flexibility has been built into the program to allow the resident to select learning experiences to meet their interests and focus on identified areas for improvement. A customized residency plan will be designed and updated during the program for each resident based upon these criteria.

BIDMC PGY 2 Critical Care Pharmacy Residency Evaluations

An essential component of developing the skills of a resident and continuous improvement to the residency program is frequent two-way feedback between residents and preceptors. The goal of such discussion and interaction is to:

- Discuss the resident's achievements in terms of learning objectives established for the rotation
- Provide feedback that may assist the resident with future rotations or practice
- Provide feedback to the preceptors for continuous improvement of preceptor skills, that may strengthen mentoring during future rotations
- Provide feedback to the coordinator, in order to improve the residency program, and coordinator skills.

The preceptors, program director, and residents will frequently provide feedback to one another during individual rotations, resident activities and in general throughout the residency program.
Specific program and rotation feedback may be given via different formats depending upon the learning experience. This will include both oral and written feedback and evaluation.

Evaluations will occur as described below:

1. Resident Self-Evaluation:
   Self-assessment and evaluation is an important component of the learning experience for the resident. For each rotation, the resident will complete pre-rotation goals in PharmAcademic prior to the start of the learning experience. It is the expectation that these goals will provide a focus for self-directed learning for the resident and will assist the preceptor in preparing an individualized plan for the resident. At the conclusion of the rotation/ learning experience, the resident will complete a summative self-evaluation of their progress and attainment in meeting the goals and objectives of that rotation in PharmAcademic. Quarterly self-evaluations by the resident should be submitted to the Resident Advisor one week prior to the scheduled review date with the Advisor.

2. Rotation Summative Evaluations:
   At the end of each rotation, in addition to the resident's summative self-evaluation of his/her performance during that rotation, residents will also complete a preceptor and learning experience summative evaluation in PharmAcademic. Rotation preceptors will utilize PharmAcademic to complete an independent criteria-based, summative assessment of the resident's performance for each of the respective rotation-selected

educational goals and objectives assigned to the learning experience. The resident and preceptor will meet to review and discuss these evaluations together.

3. Criteria Based Assessments:

   Rotation preceptors will provide periodic opportunities for the resident to practice and document criteria-based, formative self-evaluation of aspects of their routine performance and to document criteria-based, summative self-assessments (snap-shots) of achievement of the educational goals and objectives assigned to the learning experience. Feedback and evaluation of such selected activities will be conducted throughout the residency for both rotation and longitudinal activities. These will include but is not limited to:

   - Case Discussion (Primary preceptor during that experience)
   - Communication (Primary preceptor during that experience/Advisor/RPD)
   - Intervention Documentation (Primary preceptor during that experience/Advisor)
   - Problem solving (Primary preceptor during that experience/Advisor)
   - Researched DI Questions (Primary preceptor during that experience)
     - Journal Club (Primary preceptor during that experience/pharmacy staff /students)
     - Other project assignments(evaluation preceptor will be assigned)

4. Quarterly Evaluation:

   These are longitudinal evaluations providing written evaluation of the resident's progress within the residency program. The quarterly evaluation will address progress towards the resident's individual residency goals and objectives as well as the required and longitudinal activities of the program. The resident will complete a quarterly self-assessment and submit this to his/her Resident Advisor one week prior to the scheduled Quarterly Evaluation meeting time with the advisor. Following the review and discussion of the quarterly evaluation between the resident and his/her Advisor, a meeting with the RPD will be scheduled to discuss the resident's overall progress and to complete the quarterly update of the resident's customized plan.

5. Residency Advisory Committee Assessments:
   Immediate feedback on specific topics/issues is provided during each RAC meeting. Throughout the residency year, the resident will seek feedback on various assignments, presentations, drug information questions, project work and other activities. Assessment by committee members will be provided in a number of formats, each contributing to the progress of the resident in achieving his/her residency goals.

6. Custom Evaluations:
   Some residency experiences will be evaluated utilizing custom evaluations that are not in PharmAcademic. Resident's should maintain a copy of each evaluation and these should be filed by the resident in his/her Residency Portfolio

7. Achieved for Residency:
   Achieved for Residency (ACH-R) may only be designated by the program director based upon review and assessment of each individual resident's performance from summative evaluations. Typically, this will be considered when a resident has scored two or more scores of ≥4 for that objective. At least 75% of a resident's monthly or quarterly evaluations should be scored at 3-5 in order to successfully complete the residency program

Evaluation scale definitions to be utilized in the summative rotation and quarterly evaluations:

5- Major Strength: [Excellent]: Resident consistently demonstrates high level of performance for evaluated skill, ability, initiative, or productivity. All associated assignments/responsibilities are completed above the level of expectation

4- Solid Performance: [Very Good]: Resident demonstrates high level of performance for evaluated skill, ability, initiative, or productivity; exceeding requirements in some areas, but not consistently or not without exception. Resident is capable of independent performance the majority of the time with only minimal preceptor intervention.

3- Developing: [Satisfactory] Resident displays an understanding of evaluated skill, ability, initiative, or productivity, however he/she requires additional work to develop and sustain an effective level of performance for the evaluated skill, ability, initiative, or productivity. Resident needs occasional preceptor intervention.

2- Needs Improvement: Resident displays inconsistency in the performance of the evaluated skill, ability, initiative, or productivity review and performance frequently falls below acceptable levels. Frequent preceptor intervention is needed and development is required to meet expected performance level.

1- Unsatisfactory: Resident's performance is consistently below expectations, and/or he/she has failed to make reasonable progress toward agreed upon expectations and goals. Significant improvement is needed in most aspects of their performance. (A plan to improve performance with specified timelines must be outlined and monitored for improvement.)

PGY2 Pharmacy Residency Preceptor Requirements

In alignment with accreditation and practice standards set forth by ASHP, the BIDMC PGY2 residency program is committed to provide residency training precepted by qualified pharmacists. Criteria regarding the required minimum qualifications of preceptors include:

- Preceptors must be licensed pharmacists who have completed an ASHP-accredited PGY-2 residency followed by a minimum of one year of pharmacy practice experience. Alternatively, licensed pharmacists who have not completed an ASHP-accredited residency may be preceptors but must demonstrate mastery of the knowledge, skills, attitudes, and abilities expected of one who has completed a PGY2 residency and have a minimum of three years of pharmacy practice experience.
- Preceptors must have training and experience in the area of pharmacy practice for which they serve as preceptors, must maintain continuity-of-practice in that area, and must be practicing in that area at the time residents are being trained.
- Preceptors must have a record of contribution and commitment to pharmacy practice. Examples of such commitment include but are not limited to:
    - Documented record of improvements in and contributions to the respective area of advanced pharmacy practice (e.g., implementation of a new service, active participation on a committee/task force resulting in practice improvement, development of treatment guidelines/protocols).
    - Appointments to appropriate drug policy and other committees of the department/organization.
    - Formal recognition by peers as a model practitioner (e.g., board certification, fellow status).
    - A sustained record of contributing to the total body of knowledge in pharmacy practice through publications in professional journals and/or presentations at professional meetings.
    - Serving regularly as a reviewer of contributed papers or manuscripts submitted for publication.
    - Demonstrated leadership in advancing the profession of pharmacy through active participation in professional organizations at the local, state, and national levels.
    - Demonstrated effectiveness in teaching (e.g., through student and/or resident evaluations, teaching awards).

- In addition to the aforementioned preceptor qualifications, preceptors must demonstrate a desire and an aptitude for teaching that includes mastery of the four preceptor roles fulfilled when teaching clinical problem solving (instructing, modeling, coaching, and facilitating).
  Further, preceptors must demonstrate abilities to provide criteria-based feedback and evaluation of resident performance. Preceptors must continue to pursue refinement of their teaching skills. Examples of opportunities to enhance precepting and teaching skills are described under preceptor development.

- Select learning experiences in later stages of the residency, (when the primary role of the preceptor is to facilitate resident learning experiences), may be precepted by practitioners who are not pharmacists (e.g., physicians, physician assistants, and certified nurse practitioners.) In these instances, a pharmacist preceptor will work closely with the non-pharmacist preceptor to select the educational goals and objectives as well as participate actively in the criteria-based evaluation of the resident's performance. Such learning experiences will be conducted only at a point in the residency when the RPD and preceptors agree that the resident is ready for independent practice. Evaluations conducted at the end of previous learning experiences will reflect such readiness to practice independently.

Preceptor and Program Development

The RPD will provide preceptors with opportunities to enhance their teaching skills during the residency year. Select Residency Advisory Committee Meetings, the Annual Preceptor Retreat and specific educational programs will be utilized to schedule preceptor development activities.

Additionally, a wide number of Preceptor Development resources are available online and examples include:

- Pharmacist Letter Preceptor Home: http://www.pharmacistsletter.com (on-line access through the schools of pharmacy)
- American Society of Health Systems Pharmacist (ASHP): www.ashp.org
- Precepting tools though the Colleges of Pharmacy (e.g. Preceptors for NEU and have e-value access and access to the Collaborative Education Institute)

To foster ongoing ***individual*** preceptor development, the RPD will review and provide feedback on the preceptor's rotation summaries as well as the preceptor evaluations. Preceptors will be committed to self-reflection and will make active use of feedback provided to them so as to promote continual improvement of their rotations and precepting skills. Issues identified by the RPD in any of these evaluations will be addressed by the RPD with the persons involved. Action steps and corrective actions will be identified and implemented on an as needed basis.

At least annually, the RPD in collaboration with members of the Residency Advisory Committee will consider overall program changes based on evaluations, observations, and other information.

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Expectations and Responsibilities of Residents

Professional Practice:

Professional Conduct:
It is the responsibility and expectation of all Residents participating in the BIDMC Residency to maintain the highest degree of professional conduct at all times. The resident will display an attitude of professionalism in all aspects of his/her daily practice.

Professional Dress:
All residents are expected to dress in an appropriate professional manner whenever they are within the Medical Center or participating in or attending any function as a representative of the BIDMC or MCPHS University. A detailed policy is found in the BIDMC Department of Pharmacy Policies and Procedures. It is the expectation that the resident will wear a clean, pressed white lab coat at all times in patient care areas.

Employee Badges:
BIDMC requires all personnel (including residents) to wear his/her badge at all times when they are within the medical center. Badges will be obtained from the BIDMC Security office during Orientation. If the employee badge is lost the resident must report the loss immediately to Security, and render a fee for replacement.

Communication:
The resident is responsible for promoting good communication between the pharmacists, patients, physicians, and other health care professionals. The resident shall abide by the BIDMC hospital policies regarding the use of hospital and cellular phone within the hospital and in patient care areas.

Constructive criticism is a means of learning and is not meant to embarrass. Any conflicts which may arise between the candidate and preceptor should first be handled by discussing it with one another. If resolution is not achieved, then discussing the situation with the Residency Program Director is the next appropriate step to achieve resolution.

Patient Confidentiality:
Patient confidentiality will be strictly maintained by all residents. Time for completion of HIPPA training will be scheduled during pharmacy practice training. It is the expectation that residents will not discuss patient-specific information with other patients, family members or other person not directly involved in the care of the patient. Similarly, residents will not discuss patients in front of other patients or in areas where people may overhear. Residents will not leave confidential documents (profiles, charts, prescriptions, etc.) in public places. Residents should understand that inappropriate conduct (e.g., breach of confidentiality) may result in disciplinary action.

Attendance:
Residents are expected to attend all functions as required by the Residency Advisory Committee, the Residency Program Director and rotation preceptors. The residents are solely responsible for meeting the obligations of their assigned service commitments (staffing). Specific hours of attendance will be delineated by each preceptor in accordance to the individual rotation requirements.

Duty Hour policies:

Standards have been established by the Accreditation Standard for Pharmacy Residencies regarding the time residents spend performing patient care duties and other activities related to their program. (http://www.ashp.org/DocLibrary/Accreditation/Regulations-Standards/Duty-Hours.aspx)
It is recognized that providing residents with a sound didactic and clinical education must be carefully planned and balanced with concerns for patient safety and resident well-being.

The BIDMC Residency Program is structured so that the learning objectives of the program are not compromised by excessive reliance on residents to fulfill service obligations and that didactic and clinical education have priority in the allotment of residents' time and energy.

Duty hours are defined as all scheduled clinical and academic activities related to the pharmacy residency program. This includes inpatient and outpatient care, in-house call, administrative duties, scheduled and assigned activities, such as conferences, committee meetings, and health fairs that are required to meet the goals and objectives of the residency program. Duty hours must be addressed by a well-documented, structured process. Duty hours do not include: reading, studying, and academic preparation time for presentations, journal clubs; or travel time to and from conferences; and hours that are not scheduled by the residency program director or preceptor.

- Duty hours must be limited to 80 hours per week, averaged over a four-week period, inclusive of all in-house call activities and all moonlighting.
- Mandatory time free of duty: residents must have a minimum of one day in seven days free of duty (when averaged over four weeks). At-home call cannot be assigned on these free days.
- Residents should have 10 hours free of duty between scheduled duties, and must have at a minimum 8 hours between scheduled duty periods.
- Continuous duty periods of residents should not exceed 16 hours. The maximum allowable duty assignment must not exceed 24 hours even with built in strategic napping or other strategies to reduce fatigue and sleep deprivation, with an additional period of up to two hours permitted for transitions of care or educational activities.

External Employment Policy (Moonlighting)

Successful completion of the residency program leading to certification is a function of the successful completion of all the program's requirements, which determine the primary schedule of the resident. It must be understood that he responsibilities of the resident may not correspond to a consistent day to day schedule and at times, extra hours of coverage may be necessary to complete residency requirements. Patient-care rotations, teaching, and service requirements take precedence over scheduling for external employment and thus, the residency program is considered the primary priority of each resident.

- External employment, if desired, may not interfere with the resident's responsibilities or requirements. All additional shifts to be picked up by the resident require approval by the current rotation preceptor as well as the Residency Director.

- There is a provision regarding employment at BIDMC to work as a pharmacist should additional staffing hours be available.

- Working additional hours for BIDMC is considered outside employment and as specified, must not interfere with the activities of the residency program, nor conflict with the Duty Hours Policy.

Resident Disciplinary Action:

Residents are expected to conduct themselves in a professional manner at all times and to follow all relevant departmental and hospital policies and procedures.

Disciplinary action will be initiated if a resident:

- Does not follow policies and procedures of the BIDMC Department of Pharmacy Services, or Residency Program
- Does not present him/herself in a professional manner
- Does not make satisfactory progress on any of the residency goals or objectives
- Does not make adequate progress towards the completion of residency requirements (e.g. residency project, rotation requirements, longitudinal activities, timely licensure, service requirements, etc.)

Disciplinary Action Policy and Procedure:

Disciplinary Actions within the BIDMC Pharmacy Residency Program will align with the BIDMC Corrective Action Policy and the BIDMC GME Policy for Remediation and Discipline.

In the event of the identification of need for disciplinary action of a resident or if a resident fails to make satisfactory advancement in any aspect of the residency program, the following disciplinary steps shall be taken:

1. The Resident will meet with the RPD and/or involved preceptor to discuss the identified issue/s. If the RPD is not involved in the initial discussion, he/she will be notified of the meeting and of the events that transpired. Action steps that will follow include: In conjunction with the resident, an appropriate solution to rectify the behavior, deficiency or action will be determined. **This constitutes a first warning.** A corrective action plan and specific goals for monitoring progress will be determined and outlined. These suggestions will be documented in the resident's personnel file by the RPD. Corrective actions will be in progress before the next scheduled quarterly evaluation.
2. Should another event or deficiency occur, the Resident will meet with the RPD and/or involved preceptor to discuss the identified issue/s. If the RPD is not involved in the initial discussion, he/she will be notified of the meeting and of the events that transpired. Action steps that will follow include: In conjunction with the resident, an appropriate solution to rectify the behavior, deficiency or action will be determined. A corrective action plan and specific goals for monitoring progress must be determined and outlined. These suggestions will be documented in the resident's personnel file by the RPD. Corrective actions will be in progress before the next scheduled quarterly evaluation.
3. The resident will be given a **second warning** if the resident has not improved within the determined time period set forth by the RPD.
4. If the preceptor/RPD determines that the resident may not complete the residency program in the designated time frame, a plan to adequately complete the requirements shall be presented and reviewed with the resident. No action shall be taken against the resident until the Chief of Pharmacy reviews the report and recommendations concerning any final action to be taken. If the Chief of Pharmacy feels that the action recommended by the Preceptor / RPD is appropriate, the action will be implemented. Action may include remedial work or termination.
5. When and if dismissal is recommended by the Residency Program Director, the Chief of Pharmacy will have a meeting with the resident and RPD to discuss the final decision.

6. Failure to attain licensure is grounds for dismissal from the residency program. Residents should contact the Residency Program Director should any issue arise with licensure. Failure to achieve licensure in the State of Massachusetts within 90 days of residency will result in resident dismissal.

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Completion of Program Requirements:

Upon successful completion of all requirements of the residency program, the resident will be awarded a certificate of completion. This certificate will attest that the resident has achieved competencies consistent with and in accordance with accreditation standards as set forth by ASHP and/or other accrediting bodies.

Prior to certification of completion, residents must have all major program requirements "signed off" by their residency director. Return of identification badge, pagers, keys, etc. will also be required prior to receiving the certificate.

BIDMC PGY2 Pharmacy Residency Program 2019-20
General Information:

Salary/Paid Time off (PTO):

- The **2019-20** residents will receive a stipend of $53,000.00, with accrued PTO.
- Residents earn approximately 30 PTO days during their 12-month program, which are used for: Holidays, Sick Time, Vacation Days, Seminars, Interviews and Personal Days.
    - Residents are permitted to take up to 10 days as vacation during the residency year. No more than 5 days of vacation may be taken during any 1 learning experiences.
    - Residents will use PTO days for all holidays. These include, July 4th, Labor Day, Thanksgiving, Christmas, New Year's Day, and Memorial Day.
    - Any PTO not taken at the end of the year from #1, #2, or as sick days will be cashed out to the resident upon completion of the program

Benefits:

- Health Insurance: comprehensive medical, dental and eye coverage
- Public transportation and parking discounts
- Reimbursement for one major national meeting (e.g. ASHP Midyear, SCCM)
- Additional benefits (provided and optional) are detailed in the ***BIDMC Employee Benefits Handbook*** provided by the BIDMC Human Resource Department

Vacation/Personal Days:

- Scheduled time off for vacation and personal days will be used from the resident's earned PTO bank in accordance with the ***BIDMC Employee Benefits Policy*** and will not exceed a total of 2 weeks during the residency year.
- Vacation and personal days must be planned and scheduled in advance with consideration of rotation obligations, staffing and other residency responsibilities.
- Time-off requests **must be received in writing at least two weeks** prior to the scheduled time off.
- **All** requests for time-off, vacation and schedule changes should be directed to and approved by the pharmacy supervisor responsible for scheduling, the preceptor for the rotation during which the time off will occur, and the residency program director.
- Approval for vacation and time off will follow departmental policy and procedures.
- Attendance at the ASHP Midyear or SCCM are considered Professional Absences and do not affect PTO.

Sick Days/ Extended Medical Leave/Personal Leave:

- Sick days must be reported to the Pharmacy Administrator on call (92429) as early as possible as outlined in the Department of Pharmacy Policy and Procedures. In addition, the resident should also notify the current rotation preceptor and Residency Program Director as early as possible of their absence.
- It is the responsibility of the resident to coordinate and make up any missed work associated with preceptor for that rotation.
- If an employee is absent for three consecutive work shifts without notifying her/his supervisor, s/he will be considered to have resigned without notice.
- Illnesses longer than 5 days will follow the Department of Pharmacy Policy: "**Employee Dependability (Attendance and Tardiness) Expectation."** If an employee is absent for five consecutive shifts and has notified her/his supervisor, s/he must report to Employee/Occupational Health Services for evaluation and clearance prior to returning to work.
- Residents are not eligible for FMLA

- In the event of a serious medical or personal condition requiring extended leave, communication with the RPD and Human Resources should be initiated as soon as possible to ensure that the resident is aware of their benefit status and he/she can determine what actions, if any, are available for continued benefits. BIDMC Policies regarding extended illness**, "Employee Paid Time Off (PM-03)" and "Employee Leaves of Absence (PM-11)"** are located on the portal within the **BIDMC Policy Manual.**
- Whereas the residency program is a designed to be completed in a 12 month period, an extended leave may impact the resident's ability to successfully complete the requirements of the program during this 12 month period. Every effort will be made to work with the resident to develop a plan to accomplish making up missed days, however this may not be possible. In situations where an extended leave of absence (greater than 4 weeks) necessitates an extension beyond the 12 months of the residency in order to complete the residency requirements, the resident may petition the RPD and DOP for an extension of their residency end date. **All decisions related to extensions will be made on a case-by-case basis and cannot be guaranteed. (GME Policy for Extension of Training (GME-04)**
- The resident may receive a stipend during an approved extension of training subject to the availability of funding, however this funding cannot be guaranteed. In the event a stipend is paid, it will be at the pay rate the resident received during their residency year. **(GME Policy for Extension of Training (GME-04))**
- If the resident is unable to complete the formulated plan and fulfill the requirements of the program, they will not be awarded a certificate of completion.

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BIDMC Department of Pharmacy

The Department of Pharmacy at BIDMC employs approximately 140 FTEs including: pharmacists, technicians, students and other support personnel who provide pharmacy services to patients and healthcare professionals. In-patient pharmacy services at BIDMC are provided by decentralized clinical pharmacists in a unit-based practice model. Within this model, pharmacists are assigned to cover several patient care areas and are responsible for the pharmaceutical care of the patients on those units. The pharmacy's computer system interfaces with the hospital's Provider Order Entry (POE) computer program, allowing the pharmacists to access patient information throughout the medical center. Unit-based pharmacists screen medication orders for potential problems with dosing, drug allergies, drug interactions, and other drug-related problems and inform prescribers of potential problems and possible drug therapy modification. In addition to medication order processing, pharmacists are actively involved in providing drug information, performing pharmacokinetic evaluation and dosing for select medications, reviewing medications for renal dose adjustment, evaluating patients for potential intravenous to oral medication interchange and monitoring target medications. This spectrum of care includes provision of services to adult and geriatric patient populations as well as premature and full term infants. In addition to the unit-based pharmacy practice, the pharmacy staffs and operates several specialty areas including parenteral nutrition/metabolic support, investigational drug services, oncology, and operating room services. The Department provides 24-hour drug distribution from central pharmacy areas and automated dispensing units throughout the hospital. The department utilizes state of the art technology including Omnicell automated dispensing cabinets and Omnicell Carousel Inventory management.

Medication reliability and safety are integral to the provision of optimal pharmaceutical care and the pharmacy continually reviews medication incident reports, adverse drug events and medication errors to identify potential areas for improvement of systems. Active involvement in multidisciplinary quality assurance programs, assist the pharmacy in evaluating the specific needs of its patients.

The Department of Pharmacy works with the Pharmacy and Therapeutics (P&T) committee to review mediations for formulary status, to perform and review medication use evaluations, to develop medication use policies, and to contribute to clinical resource management activities of the medical center. The P&T Committee provides an interdisciplinary forum that facilitates consistent communication between the members of the Department of Pharmacy and physicians, nurses, and other allied health professionals.

In additional to the provision of inpatient and outpatient pharmaceutical services, the pharmacy also serves as an Advanced Pharmacy Practice Experience and Cooperative Education site for pharmacy students from both MCPHS University and Northeastern University College of Pharmacy.

Mission Statement

To work collaboratively with all members of the Medical Center's healthcare team to promote safe, effective and fiscally responsible pharmacotherapy

Operating Principles

- To always realize that the patient is at the center of all that we do
- To provide pharmaceutical care responsibly, professionally, and with the utmost compassion
- To foster fail-safe medication use through education, research and scholarly activities
- To increase awareness among all members of the healthcare team and among administrators, about the valuable role the pharmacist plays in delivering patient care
- To foster a work environment conducive to the delivery of optimal pharmaceutical care across the continuum of services provided at the Medical Center
- To foster an environment conducive to individual professional development and advancement
- To foster an environment conducive to the education and training of pharmacy students and residents

Beth Israel Deaconess Medical Center
PGY2 Pharmacy Residency Program 2019-20

Rotations

Residents rotate assignments throughout the year and, to the extent possible, areas of assignment are designed around the resident's interests. In all areas to which the residents are assigned, they assume the role and responsibility of team members in the clinical service, as well as teaching and administrative aspects of the unit.

Core Rotations:

Orientation (4 weeks)
Preceptor: George Abdallah, PharmD, BCCCP; Diane Soulliard, PharmD, BCPS,

Rotation Description: Pharmacy Service Orientation and Training is a required learning experience intended to orient and train the resident in: the operations of the BIDMC Department of Pharmacy, departmental workflow, use of departmental and hospital information systems and technology, departmental and hospital policies and procedures, and the skills needed to serve as a clinical pharmacist during the service (staffing) requirement of the residency. Four weeks will be scheduled to allow the resident to learn the core functions and responsibilities of pharmacists in this practice area as well as the information systems at the hospital. Additional unit-based training will be conducted as part of the specific rotation that the PGY-2 will then staff.
In addition to the operational/orientation aspects, the resident will review all of the program's competencies, goals and objectives, design of the program, evaluation procedures, as well as requirements for completion. Residents will complete all mandatory BIDMC hospital and departmental safety and compliance training. This includes, but is not limited to: HIPAA training, Environmental Health and Safety training, Fire Safety, Infection control and others). A training checklist for the various central pharmacy activities to be mastered during the initial training period has been created to assist with the completion and documentation of the resident's ability to perform these functions. Completion and sign off of the individual activities will take place throughout the Learning Experience

Cardiovascular Surgical Intensive Care (4 - 5 weeks)
Preceptor: George Abdallah PharmD, BCCCP

Rotation Description: The PGY 2 Cardiovascular Intensive Care Unit (CVICU) rotation is a 4 - 5 week learning experience at Beth Israel Deaconess Medical Center. The goal of this rotation is to allow the resident to develop expertise in critical care pharmacotherapy with an emphasis on the post-operative care of cardiac and vascular surgery patients. The resident will develop the advanced knowledge and skills necessary for the provision of pharmaceutical care in the CVICU. The resident will review pathophysiology and pharmacologic management strategies of various disease states through utilization of primary literature and patient cases specific to the cardiovascular ICU population. As the rotation progresses, it is expected that the resident will assume complete clinical and operational responsibility for patient care and develop autonomy as a CVICU pharmacist.

The CVICU rotation utilizes CVICU A and CVICU B which are two 8 bed ICUs primarily servicing post-operative cardiac and vascular patients. Both units are located side by side on the 6th floor of the Rosenberg building. Critical care services are coordinated by the mid-level practitioners in conjunction with the anesthesia critical care team. The resident is expected to develop a good working relationship with all members of the team, participate at multidisciplinary rounds/meetings, monitor and present assigned patients and ensure positive drug therapy outcomes. Following rounds the resident will be required to follow up on patient specific issues and work on projects assigned for the rotation.

The clinical pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the team, including active participation on rounds, education of mid-levels, physicians, nurses and pharmacy trainees, participation on organizational, pharmacy department and nursing unit-based

medication policy and continuous quality improvement committees. When a pharmacy resident is on service, they will assume the roles of the clinical pharmacist with supervision. The clinical pharmacist is available to the resident for any questions or assistance as needed. By week 1 of the rotation experience, the resident will also be asked to process all medication orders for the CVICU team on which they are rounding as well as complete all departmental drug monitoring requirements. The fifth week of the rotation is spent independently staffing the site that is associated with the CVICU.

Cardiac Intensive Care Unit (4 - 5 weeks)
Preceptor: George Abdallah, PharmD, BCCCP; Rachael Scott, PharmD

Rotation Description: The PGY 2 Cardiac Intensive Care (CCU) rotation is a 4 - 5 week learning experience at Beth Israel Deaconess Medical Center. The goal of this rotation is to allow the resident to develop expertise in critical care pharmacotherapy with an emphasis on the acute management of critically ill cardiac patients. The resident will develop the advanced knowledge and skills necessary for the provision of pharmaceutical care in the CCU. The resident will review pathophysiology and pharmacologic management strategies of various disease states through utilization of primary literature and patient cases specific to the cardiac ICU population. As the rotation progresses, it is expected that the resident will assume complete clinical and operational responsibility for patient care and develop autonomy as a CCU pharmacist.

The rotation utilizes the CCU which is a 8 bed ICU primarily servicing patients admitted with cardiovascular related issues. The CCU is located on the 6th floor of the Rosenberg building. Critical care services are coordinated by medical residents in conjunction with the cardiology fellows and attendings. The resident is expected to develop a good working relationship with all members of the team, participate at multidisciplinary rounds/meetings, monitor and present assigned patients and ensure positive drug therapy outcomes. Following rounds the resident will be required to follow up on patient specific issues and work on projects assigned for the rotation.
The clinical pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the team, including active participation on rounds, physicians, nurses and pharmacy trainees, participation on organizational, pharmacy department and nursing unit-based medication policy and continuous quality improvement committees. When a pharmacy resident is on service, they will assume the roles of the clinical pharmacist with supervision. The clinical pharmacist is available to the resident for any questions or assistance as needed. By week 1 of the rotation experience, the resident will also be asked to process all medication orders for the CCU team on which they are rounding as well as complete all departmental drug monitoring requirements. The fifth week of the rotation is spent independently staffing the site that is associated with the CCU.

Emergency Medicine (4 - 5 weeks)
Preceptor: Nicki Wex, PharmD, BCCCP; Brandon Bair, PharmD

Rotation Description
The PGY2 Toxicology/Emergency Medicine (EM) rotation is a 4 – 5 week learning experience at Beth Israel Deaconess Medical Center. The goal of this rotation is to allow the resident to develop expertise in emergency medicine pharmacotherapy. The resident will develop the advanced knowledge and skills necessary for the provision of pharmaceutical care in the emergency department. The resident will review pathophysiology and pharmacologic management strategies of various disease states through utilization of primary literature and patient cases specific to the emergency medicine population. As the rotation progresses, it is expected that the resident will assume complete clinical and operational responsibility for patient care and develop autonomy as an EM pharmacist.
This rotation is structured to provide exposure and training in the management of acutely ill patients within an emergency department. Direct interactions with patients, staff, and other healthcare providers will enhance the resident's ability to initiate and monitor pharmacotherapeutic regimens. The resident will participate in various activities including:

1. Provisions of rational drug therapy to patients in the Emergency Department

2. Cardiopulmonary arrest, code stroke, and trauma code response
3. Drug information
4. Develop teaching skills suitable to disseminate information to providers of all levels of care

Medical Intensive Care Unit (8 - 10 weeks)
Preceptor: Adrian Wong, PharmD, MPH, BCPS, BCCCP;Quyhn Dang, BS, PharmD, BCCCP, Gabrielle Cozzi, PharmD, BCCCP; Mehrnaz Sadrolashrafi, PharmD, BCCCP

Rotation Description: The PGY 2 Medical Intensive Care Unit rotation is a required 8 - 10 week learning experience at Beth Israel Deaconess Medical Center. The goal of this rotation is to allow the resident to develop expertise in critical care pharmacotherapy with an emphasis on the care of the critically ill patient with medical-associated critical illness. The resident will develop the advanced knowledge and skills necessary for the provision of pharmaceutical care in the MICU. The resident will review pathophysiology and pharmacologic management strategies of various disease states through utilization of primary literature and patient cases specific to the medical ICU population. As the rotation progresses, it is expected that the resident will assume complete clinical and operational responsibility for patient care and develop autonomy as a MICU pharmacist thereby ensuring positive drug therapy outcomes.

The rotation primarily utilizes MICU A - an 8 bed ICU located on the 7th floor of the Rosenberg building. Depending on the census, additional patients may be admitted to other ICUs. The MICU blue team consists of an attending pulmonologist, a pulmonary fellow, 3 medical residents, nurses, clinical pharmacist(s), and a respiratory therapist. A team "huddle with physical therapy and case management occurs daily between 7:40am and 7:50am. Interdisciplinary rounds begin at 8:30 am and typically ends between 11am and 11:30am depending on the volume and acuity of patients. Weekend rounds begin at 8am. Didactic teaching sessions take place from 8:00 – 8:30 AM Monday through Friday.
The resident will meet daily with the preceptor to discuss all patients on service and their respective treatment plans. The resident will also serve as a resource to physicians/nurses in the unit both during and after rounds.

Medical/Oncology Intensive Care (4 - 5 weeks)
Preceptor: Gabrielle Cozzi, PharmD, BCCCP; Mehrnaz Sadrolashrafi, PharmD, BCCCP

Rotation Description: This rotation consists of rounding with the Finard ICU team. The Finard ICU team consists of an attending pulmonologist, 3 medical residents, 3 medical interns, nurses, a clinical pharmacist, and a respiratory therapist. A team "huddle with physical therapy and case management occurs daily between 7:40 am and 7:50am. Interdisciplinary rounds begin at 8:30 am and typically ends between 11am and 11:30am depending on the volume and acuity of patients. Weekend rounds begin at 8am. Didactic teaching sessions take place from 8:00 – 8:30 AM Monday through Friday

The clinical pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the team, including active participation on rounds, education of physicians, nurses and pharmacy trainees, participation in organizational, pharmacy department and nursing unit-based medication policy and continuous quality improvement committees. When a pharmacy resident is on service, they will assume the roles of the clinical pharmacist with supervision. The clinical pharmacist is available to the resident for any questions or assistance as needed. By week 1 of the rotation experience, the resident will also be asked to process all medication orders for the FICU team on which they are rounding as well as complete all departmental drug monitoring requirements. The fifth week of the rotation is spent independently staffing the site that is associated with the FICU.

Neurological Intensive Care (4 - 5 Weeks)
Preceptor: Natalya Asipenko, PharmD, BCPS, BCCCP

Rotation Description: The PGY 2 Neuroscience Intensive Care Unit (NSICU) rotation is a 4 - 5 week learning experience at Beth Israel Deaconess Medical Center (BIDMC). The goal of this rotation is to allow the resident to develop expertise in comprehensive pharmaceutical care of the critically ill patients with various neurological diseases. The resident will review pathophysiology and pharmacologic management strategies of various disease states through utilization of primary literature and patient cases specific to the neuroscience ICU population. As the rotation progresses, it is expected that the resident will assume complete clinical and operational responsibility for patient care and develop autonomy as a NSICU pharmacist thereby ensuring positive drug therapy outcomes.

The rotation primarily utilizes NSICU, an eight bed ICU located on the 6th floor of the Farr building. Depending on the census, additional patients may be admitted to NIMU (neuroscience intermediate care unit), adjacent to NSICU. The NSICU team consists of an attending, an anesthesia fellow, NSICU resident, NSICU nurse practitioners, a neurology resident, nurses, medical students and a clinical pharmacist. Interdisciplinary rounds begin at 7:30am and typically end between 11am and 11:30am depending on the volume and acuity of patients.

The clinical pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the team, including active participation on rounds, education of physicians, nurses and pharmacy trainees, participation in organizational, pharmacy department and nursing unit-based medication policy and continuous quality improvement committees. When a pharmacy resident is on service, they will assume the roles of the clinical pharmacist with supervision. The clinical pharmacist is available to the resident for any questions or assistance as needed. By week 1 of the rotation experience, the resident will also be asked to process all medication orders for the NSICU team on which they are rounding as well as complete all departmental drug monitoring requirements. The fifth week of the rotation is spent independently staffing the site that is associated with the NSICU.

Surgical Intensive Care (4 - 5 weeks)
Preceptor: Pansy Elsamadisi, PharmD, BCPS, BCCCP

Rotation Description: The PGY 2 Surgical Intensive Care Unit (SICU) rotation is a 4 - 5 week learning experience at Beth Israel Deaconess Medical Center. The goal of this rotation is to allow the resident to develop expertise in critical care pharmacotherapy with an emphasis on the care of the critically ill patient with primary surgery related issues. The resident will develop the advanced knowledge and skill set necessary for the provision of pharmaceutical care in the SICU. The resident will review pathophysiology and pharmacologic management strategies of various disease states through utilization of primary literature and patient cases specific to the surgical ICU population. As the rotation progresses, it is expected that the resident will assume complete clinical and operational responsibility for patient care and develop autonomy as a SICU pharmacist thereby ensuring positive drug therapy outcomes.

The rotation primarily utilizes the SICU, an 8 bed ICU located on the 7th floor of the Rosenberg building. Depending on the census, there may be medical ICU patients in the SICU (boarders), which the resident will not round on. Very rarely, additional SICU patients may be admitted to other ICUs. The SICU team typically consists of a critical care or anesthesia attending, a fellow, 3 surgery or anesthesia residents, nurses, clinical pharmacist(s), a respiratory therapist, and occasionally a medical student. Interdisciplinary rounds begin at 7:30am daily, with the exception of Wednesdays when rounds start after surgery M&M- typically around 8:30am or 9:00am. Rounds may end anywhere from 10:00am to afternoon. Weekend rounds begin between 7:00am and 7:30am, depending on the attending.

The clinical pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the team, including active participation on rounds, education of physicians, nurses and pharmacy trainees, participation in organizational, pharmacy department and nursing unit-based medication policy and continuous quality improvement committees. When a pharmacy resident is on service, they will

assume the roles of the clinical pharmacist with supervision. The clinical pharmacist is available to the resident for any questions or assistance as needed. By week 1 of the rotation experience, the resident will also be asked to process all medication orders for the SICU team on which they are rounding as well as complete all departmental drug monitoring requirements. The fifth week of the rotation is spent independently staffing the site that is associated with the SICU.

Trauma Intensive Care (4 - 5 weeks)
Preceptor: Sandra Rumyantsev, PharmD

Rotation Description: The PGY2 Trauma Surgical Intensive Care Unit (TSICU) rotation is a 4 - 5 week learning experience at Beth Israel Deaconess Medical Center (BIDMC). The goal of this rotation is to allow the resident to develop expertise in critical care pharmacotherapy with an emphasis on the care of the critically ill patient requiring surgical interventions. The resident will develop the advanced knowledge and skills necessary for the provision of pharmaceutical care in the TSICU. The resident will review pathophysiology and pharmacologic management strategies of various disease states through utilization of primary literature and patient cases specific to the trauma surgical ICU population. It is expected that the resident will assume complete clinical and operational responsibility for patient care and develop autonomy as a TSICU pharmacist thereby ensuring positive drug therapy outcomes.

The rotation primarily utilizes TSICU a 10 bed ICU located on the 5th floor (CC5B) of the Rosenberg building. Depending on the census, additional patients may be admitted to other ICUs. The TSICU team consists of an attending, a fellow, three residents (surgical, anesthesia, emergency medicine), nurses, and a clinical pharmacist. Interdisciplinary rounds begin at 7:00 am each day (except on Wednesdays where rounds begin following teaching conference at ~9:00 am) and end at varying times depending on the volume and acuity of patients.

The clinical pharmacist on the team is responsible for ensuring safe and effective medication use for all patients admitted to the team, including active participation on rounds, education of physicians, nurses and pharmacy trainees, participation in organizational, pharmacy department and nursing unit-based medication policy and continuous quality improvement committees. When a pharmacy resident is on service, they will assume the roles of the clinical pharmacist with supervision. The clinical pharmacist is available to the resident for any questions or assistance as needed. By week 1 of the rotation experience, the resident will also be asked to process all medication orders for the TSICU team on which they are rounding as well as complete all departmental drug monitoring requirements. The fifth week of the rotation is spent independently staffing the site that is associated with the TSICU.

MCPHS University APPE Preceptor, BIDMC (Teaching Rotation-Required) (6 weeks)
Preceptor: **Adrian Wong, PharmD, MPH BCPS, BCCCP**

Rotation Description: BIDMC is one of the Advanced Pharmacy Practice Experience (APPE) sites for 6th year PharmD students from MCPHS. The resident will be involved in providing experiential education to the clerkship students, including teaching and student assessment as it relates to providing pharmaceutical care. One of the main goals of the rotation is for each resident to effectively develop essential teaching skills utilizing his/her own experience and guidance from the teaching rotation preceptor. The rotation will allow the resident to use a variety of learning activities that meet MCPHS objectives for the in-patient APEP rotation. The resident will design a syllabus incorporating those learning activities and formulate site-specific goals and objectives for student-centered activities. During the rotation the resident will guide students in developing professional skills required for in-patient pharmacy activities and assess student performance in accordance with the MCPHS PharmD experiential program guidelines.

Elective Rotations:

Antimicrobial Stewardship (4 weeks)
Preceptor: Christopher McCoy, PharmD, BCPS, BCIDP

Rotation Description: The Antimicrobial Stewardship (AST) rotation provides the resident with the opportunity to gain insight in the management of a broad range of Infectious Diseases, to develop problem-solving skills in the pharmacotherapy of these diseases, and to establish a firm knowledge base in antimicrobial pharmacokinetics and pharmacodynamics. The resident works with the Antimicrobial Stewardship team at daily rounds and independently, maintaining a responsibility to survey key drugs and infections in order to promote effective and evidence based use of antimicrobials with the ultimate goals of improving patient care and maintaining cost effectiveness. This includes setting durations of antibiotic therapy, ensuring compliance with hospital pathways and national guidelines. Additionally, surveillance of resistance throughout the institution will be important. The AST sees a wide variety of patients from many different backgrounds (medical service, critical care, oncology, HIV, etc). The resident will also participate in the P&T antibiotic subcommittee as well as in current medication use evaluations and other research activities within the Pharmacy and ID Departments.

Infectious Disease Consult Service (4 weeks)
Preceptor: Ryan Chapin, PharmD, BCPID, Nick Mercuro, PharmD, BCPID

Rotation Description: The Infectious Diseases (ID) rotation is an elective 4 week learning experience at the Beth Israel Deaconess Medical Center. BIDMC has 649 licensed beds, located on two campuses. There are two ID teaching teams: one focusing on the immunocompromised patient and the other on the immunocompetent patient. Each team includes an attending physician and 2 ID fellows. Additional team members may include medical interns, medical residents, medical students, pharmacists and/or pharmacy students. The ID consult service sees a wide variety of patients from many different backgrounds (medical service, critical care, oncology, HIV, etc.).

The resident works with the ID consult team at daily rounds, maintaining a responsibility to optimize anti-infective therapy for the consult patients. This includes dosing recommendations based on organ function, avoidance or mitigation of adverse reactions, and daily monitoring of anti-infective therapies, including performing kinetics consultations. While on rotation, the resident will also participate in the P&T Antimicrobial Subcommittee as well as in current medication use evaluations and other research activities within the Pharmacy and ID Departments.

Good communication and intrapersonal skills are vital to success in this experience. The resident must devise efficient strategies for accomplishing the required activities in a limited time frame.

Advanced Medical Intensive Care (4 - 5 weeks)
Preceptor: TBD

Rotation Description: The advanced Medical Intensive Care Unit (MICU Blue) rotation is a 4 week elective learning experience at Beth Israel Deaconess Medical Center. This rotation builds upon the skills and knowledge gained in the required MICU rotation in the following ways:

- The resident will be fully responsible for the entire MICU service beginning on day 2. (Day 1 is spent with the preceptor with introductions to the team, unit, nursing staff, and workflow.)
- The resident will be fully responsible for all medication orders entered by the team on rounds
- The resident will be fully responsible for all drug monitoring assignments for the team
- The resident will conduct at least 1 in-service for house staff, (usually sedation/analgesia) and 1 in-service for nursing staff
- The resident will be fully responsible for completing the personalized team census with the intent of providing a comprehensive sign out to the evening clinical pharmacist covering the ICU.

The goal of this rotation is to allow the resident to continue their development of expertise in critical care pharmacotherapy with an emphasis on the care of the critically ill patient with primary medical issues. The resident will refine the advanced knowledge and skills necessary for the provision of pharmaceutical care in the

MICU. Specifically, the resident will evaluate his/her knowledge across the organ-system related content document to ensure that identified knowledge areas in need of development are discussed and applied as appropriate.

Medication Safety/Quality (4 weeks)
Preceptor: May Adra, PharmD, BCPS

Rotation Description: Medication Safety is a 4 week learning experience. The goal of the medication safety rotation is to offer the resident experience in identifying methods to enhance the medication use system to minimize the risk of adverse drug events. During this elective rotation, the resident will gain knowledge and experience in identifying and analyzing medication errors, adverse drug reactions and adverse drug events. The resident will identify opportunities for improvement in the organization's medication-use system by comparing the medication-use system to relevant best practices using the Institute for Safe Medication Practices newsletters or other recent literature on patient safety as a comparator. The resident will have the opportunity to develop and implement safe medication practices. Activities will include participating in medication error reporting, performing a root cause analysis, and when feasible completing a failure mode and effects analysis. The resident will work collaboratively with members of the medication safety subcommittee and other quality improvement committees in the hospital. The resident's responsibilities will include preparing meeting agendas, taking minutes, analyzing medication events, publishing a medication safety newsletter, performing quality improvement initiatives, and providing educational sessions on safe medication practices.

Acute Care Transplant (4 weeks)
Preceptor: Katelyn Richards, PharmD, BCPS

Rotation Description: The Acute Care Transplant Rotation is a 4 week learning experience at Beth Israel Deaconess Medical Center (BIDMC). The kidney transplant program at BIDMC performs approximate 60-70 kidney transplants per year and approximately 5-10 pancreas transplants per year. The transplant surgery team consists of an attending surgeon, one PGY5 chief surgery resident, one PGY3 surgery resident, one PGY1 surgical intern, two nurse practitioner and medical students. The kidney transplant medicine team consists of an attending physician, 1 general nephrology fellow, the transplant nephrology fellow, one medical resident and one medical intern. The liver transplant program at BIDMC performs approximate 20-30 liver transplants per year. The liver transplant medicine team consists of an attending physician, 1 general hepatology fellow, the transplant hepatology fellow, one medical resident and one medical intern. The majority of our transplant medicine patients are follow by the Epstein Trey Service on Far10, occasionally patients are admitted to other general medicine services. The majority of our transplant medicine patients are follow by the Epstein Trey Service on Far10, occasionally patients are admitted to other general medicine services. Other disciplines on the medical and surgical team include the clinical pharmacist, pharmacy students/residents, clinical transplant nurse coordinators, clinical dietician and social worker.

Additional Required Longitudinal Experiences:
***Management, Drug Information, Research and Teaching Experiences*:**

Activity	Advisor	Description
P & T Committee (2 months)	Mary Eche, PharmD,	▪ Develop and present a drug monograph/ guideline for formulary consideration ▪ Present findings of MUE and residency project to the committee ▪ Contribute to hospital drug information communications
Resident Report (weekly)	Residency Advisory Committee members	▪ Develop oral and written skills through a variety of clinical skills activities

Research Project	Residency Advisory Committee members	▪ Design and execute an original pharmacy related research project and present findings at Residency Advisory Committee members
Medication Use Evaluation	Residency Advisory Committee members	▪ Develop and complete a MUE
Emergency Code Response	Sandra Rumyantsev, PharmD Holly Reed, PharmD	▪ Develop competency in responding to various medical emergencies
Pharmacy Resident On-Call Program	Mary Eche, PharmD	▪ Provide clinical and operational support to the department
Drug Information (# Questions-TBD)	Residency Advisory Committee members	▪ Research and write drug information responses to question (may be assigned or from clinical rotations/ staffing/other
Critical Care Journal Club	George Abdallah, PharmD	▪ ~~American College of Clinical Pharmacy Virtual Poster Symposium in May~~Review and critique recent critical care literature. ▪ Facilitate discussion during critical care pharmacy meeting
MCPHS University Therapeutics Seminar Facilitator	Yulia Groza, PharmD	▪ The resident will serve as an instructor in PPB 551, Pharmacotherapeutics Seminar, during the fall and spring semester. The course requires the resident to be at the College for three hours per week. The goal of this rotation is for the resident to gain experience in problem based learning techniques and small classroom facilitation. The resident will facilitate a weekly case based discussion with fifth year PharmD students to assist in the students' development of professional problem solving skills. During each class, the resident will be expected to encourage an open forum for discussion to help enhance the students' ability to communicate and to help them develop life-long learning skills
MCPHS University Teaching Certificate Program (if not previously completed)	Snehal Bhatt, PharmD	▪ The aim of the Residency Teaching Certificate Program (RTCP) is to motivate and prepare the resident to be a proficient clinical educator. The RTCP will provide residents with a foundation of core educational principles presented in live and online didactic modules. Mentored by an academic faculty preceptor, the resident will also gain practical teaching experience in a variety of educational settings (large/small classroom, clerkship, laboratory, or seminar). Residents will also develop, with the assistance of their faculty mentor, a formative teaching portfolio that will document their progress and enhance the learning experience.

Beth Israel Deaconess Medical Center
PGY2 Pharmacy Residency Program 2019-20
Resident Project

Overview:

Each resident is responsible for the completion of a residency project. The project may be in the form of original research, a problem-solving exercise, or the development, enhancement or evaluation of some aspect of pharmacy operations or patient care services. The resident will be expected to work on his/her project between rotations. Completed residency projects will be presented American College of Clinical Pharmacy Virtual Poster Symposium in May. An abstract of the completed project will also be submitted to the Society of Critical Care Medicine (SCCM) in June for consideration.

Project selection / Scope of projects/ Approval:

A list of potential projects will be generated by the Residency Advisory Committee and distributed to the residents for consideration. It is the aim of the committee to provide the resident with a number of research topics related to: current activities and/or clinical practice issues at the medical center, current issues in pharmaceutical care, medication safety, pharmacy services and/or other areas of interest of the sponsoring committee members. In addition to projects submitted by RAC members, projects may be submitted by any College of Pharmacy faculty member, BIDMC pharmacy administrator, pharmacy staff personnel and/or others as appropriate. Alternately, the resident may independently select a project and submit this to the RAC committee for approval.

The Residency Advisory Committee will approve the final list of potential projects before it is distributed to the residents.

Project Advisor/s:

Project advisor/s function as project mentors and co-principal investigators. They will work directly with the resident to oversee the initiation, development, and completion of the research project. The advisor will collaborate on the research project itself and serve as a resource for the resident, as they would with any other research undertaking. It is expected that the advisor will participate in all committee meetings, provide periodic feedback to the resident and committee, critically review all data collection and presentations, and perform any other functions of a collaborator.

Beth Israel Deaconess Medical Center
PGY2 Pharmacy Residency Program 2019-20
Resident Project Timeline

General Project Timeline:
Project management is a significant component of the Residency Project. The following timeline will serve as general template for the resident to prepare his/her own individual timeline and project deadlines.

July 1st - August 15th: The resident, in conjunction with his/her Residency Program Director / Coordinator, and/or potential project preceptor(s), will identify a residency project A written summary of the project's goals, methods, and anticipated impact on services signed by the project preceptor must be submitted to his/her residency director no later than **August 15th**.
(See attached form). Earlier submission is encouraged. If changes are needed, comments will be returned to the resident no later than two weeks from receipt of the proposal

August 15th-September 1st: The resident, in collaboration with the project advisor, will develop the study design and methods and present to the RAC for review and comments.

September 1st- October 1st: The resident is responsible for developing a personal project timeline to be reviewed and submitted to the project advisor and/or the Residency Director by: September 15th. The project timeline will include specific time points for data collection, data analysis and presentation preparation.)

Additionally, during this time period, the resident will prepare an abstract, pertinent to the study, for application to the ASHP Midyear Residency Poster Session (refer to the ASHP website for specific deadline.) All abstracts must be submitted to the project coordinator and/or RAC for review at least 2 weeks prior to the final ASHP deadline.

October 1st – February 28th: The resident will submit an application to the BIDMC IRB for review and approval of their project. Pending approval, the resident will commence/continue working on their project; or should a project be denied, the resident will work with the project coordination and Residency Director to make the appropriate changes to attain approval or if necessary, select an alternate project.

The resident will work within his/her individual timeline to complete data collection, data analysis, and final project summaries. Status reports from the resident and the project preceptor should be completed and presented to the Residency Director and RAC Committee as part of the quarterly evaluation.

February 28th – March 17th : In preparation for the American College of Clinical Pharmacy virtual symposium poster presentation, the resident will present a study synopsis with project results to the RAC for review. Prior to virtual poster session the resident will present, in full, the poster of their project to the RAC for final review and approval. During this time, consideration should be given to presenting study results to the BIDMC division/clinical area which may be most closely involved in the study or impacted by the study results. Completed projects will be presented to the BIDMC Pharmacy and Therapeutics Committee.

Project Completion:
The project will be considered complete when the stated objectives have been met. A residency certificate will not be awarded until the project is completed.

Beth Israel Deaconess Medical Center
Pharmacy Practice Residency: Resident Project Approval Sheet

Part I: Project Approval

Resident: _____

Project title: _____

_____

Project Advisor(s): _____

_____

_____

Project objective(s) including primary and secondary endpoints, if applicable:

Methods to be used to complete project including patient population and number of subjects, if applicable:

Signatures:

Resident: _____ **Date:** _____

Project Advisor: _____ **Date:** _____

Residency Program Director: _____ **Date:** _____

Beth Israel Deaconess Medical Center Pharmacy Practice Residency
Residency Program Resident Project Completion Sheet

Resident: _____

Part II: Completion of Project components
(Include updates in the Quarterly Evaluation with RPD)

Project Timeline/Sign off **Date:**

Project Advisor:

1. **Project Submission to RAC Committee:** _____ _____
2. **Submission to IRB:** _____ _____
3. **Project Timeline to Project Advisor/RPD** _____ _____
4. **Abstract presented to RAC for Review:** _____ _____
5. **Abstract Submitted to ASHP for Poster Presentation:** _____ _____
6. **Poster submitted to RAC Committee for review:** _____ _____
7. **Data Collection:** _____ _____
8. **Completed Project submitted to RAC for review:** _____ _____
9. **Completed Project submitted to pertinent BIDMC Committee/department for review:** _____ _____
10. **Completed Project presented to P&T:** _____ _____

Beth Israel Deaconess Medical Center
Current and Past Resident Research Projects

- 2016-17: George Abdallah: Phenobarbital loading dose pharmacokinetics in the critically ill
- 2017-18: Pansy Elsamadisi: Evaluation of dose equivalency between fentanyl and hydromorphone infusions in the critically ill adult.
- 2018-19: Sarah Krizan: A Comparison of the Effect of Two Nurse-driven Cisatracurium Dosing Protocols

Beth Israel Deaconess Medical Center
Resident Continuing Education (CE) Program Guideline

Each resident will present one formal CE program during the residency year. Several residency goals will be addressed within this residency requirement. Upon successful completion of this residency requirement, the resident will demonstrate proficiency in:

1. Critical evaluation of the literature pertaining to the presentation topic
2. Enhancement of presentation, teaching and communication skills
3. Understanding of the provision of CE programs for pharmacists and other health care professionals
4. Development of skills in responding to audience questions and comments
5. Familiarization with different audiovisual equipment and techniques

CE Topic:
The CE topic will be chosen by the resident, with guidance from the Residency Program Director and Residency Advisory Committee. The topic selected should involve a current therapeutic or pharmacy practice management controversy, developing clinical or practice management research, or therapeutic area. The resident will be responsible for identifying a residency program preceptor to serve as "preceptor" for their CE program.

CE Format:
The date, time, location, and title of the Resident CE program will be determined by 60 days prior to the assigned presentation date.

The length of the Resident CE Program will be limited to one hour, with at least 10 minutes of this time reserved for questions and/or comments from the audience.

Handouts should be prepared in advance and reviewed with the CE preceptor prior to the presentation.

Approval for CE credit:
The resident will coordinate with the Pharmacy Administration Team to secure CE credits from the MA Board of Pharmacy for their CE program. A template application form is available for submission for CE credit.

At least **eight weeks prior to the presentation** the resident should submit the following CE program information to the Board: Presentation title; Educational Objectives; Date and time of presentation; Location of presentation; His/Her curriculum vitae; The Resident's CE preceptor's curriculum vitae.

A sign-in sheet is required to document attendance of participants seeking CE credit for the program. (found on shared drive, residency, forms)

CE Evaluation:
Each resident will receive an evaluation of the CE presentation from a minimum of two preceptors –at least one other than the CE preceptor). The evaluation will be discussed with the resident immediately following the CE program.

The audience will also be encouraged to submit written comments to the resident using the Oral Presentation Evaluation form. (found on shared drive, residency, forms)

Post Program:
1. Review the audience evaluation forms with CE preceptor.
2. Deliver the audience evaluation forms to the CE coordinator.
3. Return sign in sheets to CE Coordinator, so that attendees receive CE credit.

Customized Plan (2019-20) - Current Resident

ENTERING CHARACTERISTICS / 1st QUARTER (INITIAL) PLAN

Strengths (list):

Areas for Improvement (list):

Career Goals (list):

Interests (lists):

Changes to Program:

2nd QUARTER UPDATE/PLAN

Strengths:

Areas for Improvement:

Career Goals:

Interests:

Resident Progress:

- **Rotations:**
- **MUE:**
- **Research:**
- **CE**:
- **P&T:**
- **Residency Report**:
- **Journal Club:**
- **MCPHS seminar:**
- **Code Pager:**
- **Staffing:**
- **On-Call:**
- **Additional teaching opportunities:**

Changes to Program:

3rd QUARTER UPDATE/PLAN

Strengths:

Areas for Improvement:

Career Goals:

Interests:

Resident Progress:

- **Rotations:**
- **MUE:**
- **Research:**
- **CE**:
- **P&T:**
- **Residency Report**:
- **Journal Club:**
- **MCPHS seminar:**
- **Code Pager:**
- **Staffing:**
- **On-Call:**
- **Additional teaching opportunities:**

Changes to Program:

4th QUARTER UPDATE/PLAN

Strengths:

Areas for Improvement:

Career Goals:

Interests:

Resident Progress:

Changes to Program:

- **Rotations:**
- **MUE:**
- **Research:**
- **CE**:
- **P&T:**
- **Residency Report**:
- **Journal Club:**
- **MCPHS seminar:**
- **Code Pager:**
- **Staffing:**
- **On-Call:**
- **Additional teaching opportunities:**

Score Evaluation		
1-Limited-level of understanding	5- Moderate- level of understanding	10- High-level of understanding

Pulmonary

Topic & Knowledge-Base Assessment (Score 1-10)	Quarter 1	Quarter 2	Quarter 3	Quarter 4
*Acute respiratory distress syndrome				
*Severe asthma exacerbation				
*Acute COPD exacerbation				
*Acute pulmonary embolism				
*Acute pulmonary hypertension				
*Drug-induced pulmonary diseases				
*Mechanical ventilation				
Chronic severe pulmonary hypertension				
Pneumothorax and hemothorax				
Chest tubes				
Cystic fibrosis				
Inhaled medication administration				

Cardiovascular

Topic & Knowledge-Base Assessment (Score 1-10)	Quarter 1	Quarter 2	Quarter 3	Quarter 4
*Advanced cardiac life support				
*Arrhythmias (atrial and ventricular)				
*Acute decompensated heart failure				
*Acute Coronary Syndromes				
*Hypertensive emergencies and urgencies				
*Shock syndrome				
Acute aortic dissection				
Pericardial tamponade				

Mechanical devices (e.g., intra-arterial balloon pumps, ECLS, ECMO)				
Invasive and non-invasive hemodynamic monitoring				
PALS				

Renal				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
*Acute kidney injury				
*Acid-base imbalance				
*Fluid and electrolyte disorders				
*Contrast-induced nephropathy				
*Drug-induced kidney diseases				
Rhabdomyolysis				
Syndrome of inappropriate antidiuretic hormone				
Continuous renal replacement therapies/hemodialysis				

Neurology				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
*Status epilepticus				
*Ischemic stroke				
*Subarachnoid hemorrhage				
*Intracerebral hemorrhage				
*Critical illness polyneuropathy				
Intracranial pressure management				
Spinal cord injury				
Central diabetes insipidus				
Cerebral salt wasting				
Encephalopathy in coma				
EEG or bispectral monitoring for level of sedation				
Ventriculostomies				
Targeted temperature				

management/induced hypothermia				

Gastrointestinal				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
*Acute upper and lower gastrointestinal bleeding				
*Acute pancreatitis				
Fistulas				
Ileus				
Abdominal compartment syndrome				

Hepatic				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
*Acute liver failure				
*Complications of cirrhosis				
*Drug-induced liver toxicity				

Dermatology				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Burns				
Stevens John Syndrome				
Toxic epidermal necrolysis				
Erythema multiforme				
Drug reaction (or rash) with eosinophilia and systemic symptoms (DRESS)				

Immunology				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
Acute transplant rejection				
Graft-versus-host disease				
Management of the immunocompromised patient				
Acute management of a solid organ or bone				

marrow transplant patient				
Medication allergies/desensitization				

Endocrine				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
*Relative adrenal insufficiency				
*Hyperglycemic crisis				
*Glycemic control				
Thyroid storm/ICU hypothyroid states				

Hematology				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
***Acute venothromboembolism				
*Coagulopathies				
*Drug-induced thrombocytopenia				
*Blood loss and blood component replacement				
Anemia of critical illness				
Drug-induced hematologic disorders				
Sickle cell crisis				
Methemoglobinemia				

Toxicology				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
*Toxidromes				
*Withdrawal syndromes				
Drug overdose				
Antidotes/decontamination strategies				

Infectious Diseases				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
*CNS infections				
*Complicated intra-abdominal infections				
*Pneumonia				

*Endocarditis				
*Sepsis				
*Fever				
*Antibiotic stewardship				
*Clostridium difficile associated diarrhea				
Skin and soft-tissue infection				
Urinary tract infections				
Wound infection				
Catheter-related infections				
Infections in the immunocompromised				
Pandemic diseases				
Febrile neutropenia				
Acute osteomyelitis				

Supportive Care				
Topic & Knowledge-Base Assessment (Score 1-10)	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
*Pharmacokinetic and pharmacodynamic alterations in critically ill				
*Nutrition (enteral, parenteral nutrition, considerations in special patient populations)				
*Analgesia				
*Sedation				
*Delirium				
*Sleep disturbances				
*Rapid sequence intubation				
*Venous thromboembolism prophylaxis				
*Stress ulcer prophylaxis				
Pharmacogenomic implications				
Oncologic emergencies				
Intravascular devices				
Peripheral nerve stimulators				
IV pumps				

BIDMC Critical Care PGY2 Longitudinal Activity Log

This tracking tool is intended to assist in the planning and documentation of longitudinal activities and requirements assigned throughout the residency. This tool should be maintained and kept up to date so that it can be provided to your advisor and the RAC membership at large to assist in the tracking of your progress towards completion of these activities and your achievement of the associated residency goals and objectives.

Resident: Sarah Krizan

Residency Longitudinal Activities:		**Completed in:**			
	Due Date:	**Quarter 1**	**Quarter 2**	**Quarter 3**	**Quarter 4**
		Signature	**Signature**	**Signature**	**Signature**
CE Program					
Topic Selection					
Submission Diane and BOP for CE					
Slide Review with preceptor/s					
CE Presentation					
Drug Information Questions					
DI Question 1					
DI Question 2					
DI Question 3					
DI Question 4					
DI Question 5					
NECSS Clinical Pearl					
COBTH Clinical Pearl					
Other					
Leadership Activities					
BIDMC Leadership Meeting					
Other					
Medication Safety					
Quarterly Medication Event Report					
ISMP Quarterly Action Summary Review					
Med Safety Meeting/s					
Medical Peer Review Committee					
IV Guideline					
Other					

MUE					
Selection					
Data Collection					
Data Analysis					
Poster					
Presentation of Results					
P&T Committee					
Project Presentation					
MUE Presentation					
P&T Formulary Review					
Development/Update of PPGD					
Presentations (Resident Report)					
Case Presentation					
Journal Club					
PBL					
SOAP					
Med Safety					
Clinical Pearl					
Preceptor Pearl					
Project					
CITI Training					
New Investigator Training					
Project Selection					
Draft Methods					
Abstract for Vizient Poster (MUE)					
Abstract for ASHP Poster (MUE)					
IRB					
Poster					
Patient Identification					
Data Collection Tool					
Interim analysis					
ACCP Virtual Poster					
Manuscript					
Data Analysis					
Presentation to Committees					
Project presentation to P&T					
ASHP Vizient (MUE)					
Other					
Other					

Case Report					
Critical Care M&M					
Other					
Quarterly Evaluation					
Initial Plan					
QTR1					
QTR2					
QTR3					
QTR4					

BIDMC CRITICAL CARE PHARMCY RESIDENCY
PROGRAM YEAR 2019-20

Tentative Timelines for Residents

(Dates are subject to change based on individual resident goals/assigned tasks)
****This may not be all inclusive – watch your residency requirements tracking form!****

July:

- ☐ Residency Program Orientation
- ☐ Finalize dates for taking the MPJE
- ☐ Review ASHP Residency Standards
  - Initial self-assessment (Entering resident goals and objectives)
  - Establish Resident Account in PharmAcademic
- ☐ Begin Pharmacy Practice Training
- ☐ Meet regularly with RPD to review issues and verify how training is going
- ☐ Schedule meeting and orientation with MCPHS University
- ☐ Review Early Core Rotation schedule/verify dates/timelines with preceptors
- ☐ Review / schedule longitudinal experiences (P&T, CE, Med Safety, Drug Information, etc.)
- ☐ Start evaluation and selection process for topic for longitudinal Residency Project
- ☐ Establish Practice Management Goals/Activities (MUE, policy development, P&T/Med Safety, meetings with the DOP, Leadership activities, lecture opportunities at MCPHS etc.)

August:

- ☐ Attend MCPHS University Orientation
- ☐ Begin MCPHS University Teaching Certificate Program
- ☐ Project topic/preceptor confirmed **(Due August 15th)**
- ☐ Register for ASHP Midyear Meeting
- ☐ Establish personal deadlines for various projects, assignments, longitudinal work (P&T minutes, newsletter articles, CE program for pharmacists, etc.)
- ☐ Establish meeting times for RAC
- ☐ Begin Clinical Rotations (ensure pre/post rotation goals/evaluations completed)

September:

- ☐ Project Design/Methods write-up
- ☐ Project Proposal Summary and begin IRB application
- ☐ Begin working on abstract for ASHP poster application
- ☐ Begin MCPHS longitudinal activities (facilitate Therapeutics Seminar)
- ☐ Begin working on recruitment information for prospective new residents: area showcases are in November

October:

- ☐ Submit project application to IRB if not already done (**deadline October 15th**)
- ☐ ASHP poster abstract for residents **due October 1st**
- ☐ Complete 1st Quarter Self-Evaluations and meet with Advisor
- ☐ Schedule time with RPD for review of Residency Plan

November:

- ☐ Discuss CV preparation and interview opportunities at midyear
- ☐ Prepare poster for ASHP midyear presentation. Present to RAC for review by committee
- ☐ Complete recruitment materials for ASHP Residency/MCP Showcase

December:

- ☐ ASHP Midyear – Present MUE Posters at Vizient and Critical Care networking session, residency showcase
- ☐ Determine 3rd Quarter Rotations (core and elective)
- ☐ Complete 2nd Quarter Self-Evaluations and meet with Advisor
- ☐ Schedule time with RPD for review of Residency Plan
- ☐ Coordinate MCPHS activities for upcoming block (seminar, etc.)

January:

- ☐ Continue project work-data collection and analysis
- ☐ Determine medication safety activities, MUE and CE program for staff if not already planned
- ☐ Review MCPHS activities for Spring Semester
- ☐ Begin to prepare materials for teaching rotation
- ☐ Begin preparing clinical pearl for NECCPS (verify deadline for submission)
- ☐ Finalize remaining rotations
- ☐ Coordinate recruitment activities of new residents with RPD

February:

- ☐ Participate in interview activities of new residents with RPD
- ☐ Continue project work-data collection and analysis

March:

- ☐ Finalize any outstanding project work.
- ☐ Complete analysis of residency project
- ☐ Review Residency Requirement List and determine what outstanding projects need to be completed
- ☐ Complete 3rd Quarter Self-Evaluations and meet with Advisor
- ☐ Schedule time with RPD for review of Residency Plan

April:

- ☐ Determine what hospital committees/persons would be targets audience for project presentation
- ☐ Project presentation to RAC or other relevant committee

May:

- ☐ Eastern States or ACCP virtual poster presentation
- ☐ P&T presentation (May or June)
- ☐ Completed residency projects will be presented American College of Clinical Pharmacy Virtual Poster Symposium in May

June:

- ☐ Submit project abstract to SCCM
- ☐ All Residency Requirements completed by Jun 15.
- ☐ Residency Portfolio to RPD/Uploaded to pharmacademic by June 15th
- ☐ MCPHS presentations
- ☐ Complete 4th Quarter Self-Evaluations and meet with Advisor
- ☐ Schedule final residency review with RPD

CRITICAL CARE RESIDENT SCHEDULE 2017-2018		
Date (PGY2)	**Resident –Pansy Elsamadisi**	**Weeks**
July 5- August 4	Residency Orientation	5
Aug 7- Sept 8	Neurological ICU	5
Sept 11-Oct 13	Finard ICU (Medical ICU)	5
Oct 16 –Nov 30	Surgical ICU	5
Dec 1 –Dec7	ASHP Midyear	1
Dec 11- Dec 29	Medication Safety	3
Jan 2 – Feb 9	Trauma SICU	5
Feb 12 – Mar 9	Cardiac ICU	5
Feb 12-Mar 23	Teaching	6
Mar 12 – April 20	Cardiovascular Surgical ICU	5
April 23 – May 25	Solid Organ transplant	5
May 28 – June 29	Advanced MICU	5
***Preceptors and Rotations TBD**		

CRITICAL CARE RESIDENT SCHEDULE 2018-2019		
Date (PGY2)	**Resident –Sarah Krizan**	**Weeks**
July 2- July 20	Residency Orientation	3
July 23 – Aug 17	Antimicrobial Stewardship	4
Aug 20 - Sept 14	Neuro ICU	4
Sept 17 – Sept 21	Neuro ICU Staffing	1
Sept 24 – Oct 19	Trauma ICU	4
Oct 22 - Nov 16	Surgical ICU	4
Nov 19 - Nov 30	Trauma/SICU Staffing	~ 1
Dec 1 –Dec7	ASHP Midyear	1
Dec 10 - Dec 28	Medication Safety	3
Jan 3 – Feb 8	Medical ICU/Teaching	6
Feb 11 – Feb 15	MICU Staffing	1
Feb 18 – Mar 15	Cardiac ICU	4
Mar 18 - Apr 12	Cardiovascular Surgical ICU	4
April 15 – Apr 19	CCU/CVICU Staffing	1
Apr 22 – May 24	Emergency Medicine	5
May 27 – June 28	Advanced Medical ICU/Staffing	5
***Preceptors and Rotations TBD**		

CRITICAL CARE RESIDENT SCHEDULE 2019-2020		
Date (PGY2)	**Resident –**	**Weeks**
July 1- July 26	Residency Orientation	4
July 29 - Aug 30		5
Sept 2 -Oct 4		5
Oct 7 –Nov 8		5
Nov 11 –Dec 6		4
Dec 8 – Dec 12	ASHP Midyear	1

Dec 16- Jan 3	Staffing/Holiday	3
Jan 6 – Feb 14	Teaching/MICU	6
Feb 16 – Feb 19	SCCM Orlando	
Feb 17 – Mar 20		5
Mar 23 – April 24		6
April 27 – May 29		5
June 1 – June 30		4
***Preceptors and Rotations TBD**		