bps Board of Pharmacy Specialties®

CONTENT OUTLINE FOR THE ONCOLOGY PHARMACY CERTIFICATION EXAMINATION

Domain 1: Patient Management and Therapeutics
Optimize drug therapy for patients with cancer through the design, recommendation, implementation, monitoring, and modification of individualized pharmacotherapeutic plans in collaboration with the multidisciplinary healthcare team. **(57% of the examination)**

Tasks:

1 Collect and assess comprehensive patient information (e.g., medication history, disease and cancer treatment history and related toxicities, pertinent physical findings) necessary to design a pharmacotherapeutic plan.
2 Establish oncologic and supportive care therapeutic goals in collaboration with the patient, caregivers, and the multidisciplinary healthcare team.
3 Design/modify, communicate, and implement an evidence-based pharmacotherapeutic plan for patient-specific problem(s) through the integration of pathophysiological, pharmacogenomic, pharmacokinetic, pharmacodynamic, pharmacoeconomic, and patient-specific considerations.
4 Design/modify, communicate, and implement a treatment-monitoring plan.
5 Assess outcomes (e.g., effectiveness, toxicities) and other treatment-related issues (e.g., adherence, financial impact) relative to the oncologic and supportive care therapeutic plans and goals in order to modify monitoring plans and treatment goals.
6 Identify and prevent/respond to potential treatment- or disease-related problems that may arise during treatment.
7 Provide education and counseling to patient and caregiver(s) regarding oncologic pharmacotherapy and supportive care, and assess patient and caregiver understanding.
8 Establish short-term post-therapy goals (e.g., vaccinations, infection prevention) and long-term survivorship goals (e.g., cardiovascular health, preservation of bone health and fertility) and develop management strategies in collaboration with the patient and caregiver(s), and the multidisciplinary healthcare team.

Knowledge Statements:

1 Cancer pathology
2 Cancer-related molecular biology and testing
3 Etiology and pathophysiology of cancer and cancer-related complications
4 Cancer pharmacotherapies, including chemotherapies, biologic therapies, hormonal therapies, molecular targeted therapies, and radiopharmaceuticals (labeled and off-label uses)
5 Cancers, including staging, diagnosis, prognosis, and treatments
6 Factors that may influence treatment and outcomes (e.g., age, organ function, biology of the disease, genetics, comorbidities, social and cultural factors, adherence)
7 Pharmacotherapies related to supportive care (e.g., growth factors, chemoprotectants, antiemetics, anti-infectives, analgesics)
8 Pharmacology, pharmaceutics, pharmacokinetics, pharmacodynamics, pharmacogenomics, and pharmacoeconomics of anticancer and supportive-care agents

9 Nonpharmacological treatments (e.g., radiation therapy, surgery, observation)
10 Hematopoietic stem-cell transplantation (e.g., graft sources, complications, conditioning regimens, immunosuppression)
11 Complementary/alternative medicines (e.g., herbals, vitamins, acupuncture) and other nonprescription medications
12 Drug interactions
13 Clinical trials as a treatment option
14 Expected outcomes based on patient- and disease-specific factors
15 Complications of cancer treatment, including both early and late effects
16 Survivorship care (e.g., vaccinations, bone health, smoking cessation, secondary cancers, fertility)
17 Toxicity grading and assessment
18 Drug administration and routes of delivery
19 Diagnostic, prognostic, and monitoring tests related to cancer and cancer treatment
20 Palliative and end-of-life care
21 Patient and caregiver education, and counseling techniques, including assessing health literacy and verifying understanding

Domain 2: Research and Education
Contribute to the care of patients with cancer through generation, interpretation, integration, and dissemination of knowledge related to oncology, and the education of patients, caregivers, healthcare providers, and trainees. **(22% of the examination)**

Tasks:
1 Evaluate and critique the oncology literature with regard to study design, methodology, statistical analysis, and applicability of results to oncology population.
2 Integrate new information with existing information to develop recommendations for clinical use.
3 Develop, modify, and evaluate patient educational materials for approved and investigational therapies.
4 Provide education and consultation to healthcare professionals and other stakeholders concerning issues related to the care of oncology patients.
5 Provide oncology education and training for practicing pharmacists, fellows, residents, student pharmacists, and students in other health professions.
6 Participate in the oncology drug development process and clinical research activities (e.g., research protocol development, recruitment and monitoring of patients, data collection and analysis, publication of results).
7 Contribute to the oncology body of knowledge (e.g., participate in peer-review process, publish, deliver poster/platform presentations).

Knowledge Statements:

1 Appropriate resources for oncology information
2 Study design and methodology, including clinical trial methodology unique to oncology
3 Oncology study endpoints (e.g., objective response, time to progression, adverse events, quality of life, overall survival)
4 Application of research results to the oncology population
5 Statistical methods

6 Education, training, and precepting methods
7 Regulatory and ethical issues related to conducting research (e.g., confidentiality, informed consent, patient rights)
8 Drug development and approval process
9 Audience-specific medical writing
10 Venues and processes for disseminating new knowledge (e.g., publication, presentation)

Domain 3: Practice Administration and Development
Establish, implement, and monitor systems, policies and procedures to ensure the safe, effective, and appropriate use of medications for patients with cancer. **(17% of the examination)**

Tasks:
1 Design, implement, evaluate, and modify pharmacy services appropriate to the needs of patients across the cancer-care continuum.
2 Ensure that oncology pharmacy services comply with established regulations and standards.
3 Develop and/or modify institutional drug-use guidelines, policies, and procedures, in collaboration with other providers and/or agencies that are consistent with national clinical practice guidelines and standards.
4 Establish and modify systems (i.e., technology and processes) to ensure the safe use of oncology medications.
5 Perform quality-improvement activities aimed at enhancing the safety and effectiveness of medication-use processes in oncology patient care.
6 Develop and implement a process to optimize drug availability for oncology patients.
7 Justify and document clinical and financial value of oncology pharmacy services.

Knowledge Statements:
1 Clinical practice guidelines for cancer treatment and supportive care published by organizations such as ASCO, NCCN, IDSA, and MASCC
2 Methods for developing and evaluating clinical practice guidelines
3 Professional practice standards and guidelines (e.g., ASCO-ONS Standards for Safe Chemotherapy Administration, ASHP Guidelines on Handling Hazardous Drugs)
4 National accreditation and regulatory organizations and requirements (e.g., Joint Commission, CMS, NIOSH, USP 797, OSHA, OBRA, DEA, FDA) and their impact on the care of cancer patients
5 Medication reimbursement and patient assistance programs
6 Quality improvement strategies (e.g., MUE/DUE, failure mode and effects analysis, root cause analysis, ISMP recommendations) to enhance the safety and effectiveness of medication-use processes
7 Methods for handling and disposal of hazardous drugs and related materials
8 Investigational drug management (e.g., protocol review, inventory control, documentation, reconciliation)
9 Capabilities and limitations of electronic health information systems
10 Ethics and patient rights for oncology patients (e.g., informed consent, confidentiality)
11 Metrics for evaluating value of oncology pharmacy services (e.g., patient and caregiver satisfaction, length of stay, medication adherence and errors)

Domain 4: Public Health and Advocacy
Raise awareness regarding cancer-related issues and the role of the oncology pharmacist.
(4% of the examination)

Tasks:

1 Advocate for the role and contribution of oncology pharmacists to the public, healthcare providers, health systems, and policy makers.
2 Provide information and guidance to the public regarding cancer-related issues (e.g., cancer risk factors, prevention, screening).
3 Refer the public to appropriate sources of information, cancer-support organizations, and agencies.

Knowledge Statements:

1 Populations at risk for cancer
2 Cancer prevention strategies
3 Cancer screening guidelines
4 Clinical trial options for at-risk populations
5 Professional organizations and their roles and resources related to patient advocacy (e.g., American Cancer Society [ACS], National Cancer Institute [NCI], Leukemia and Lymphoma Society [LLS], National Coalition for Cancer Survivorship [NCCS])
6 Pharmacy advocacy organizations (e.g., HOPA, ASHP, ACCP, APhA)
7 Public health resources related to cancer