bps®

Pharmacotherapy Specialist
Content Outline
FINALIZED JULY 2019/FOR USE ON FALL 2020 EXAMINATION AND FORWARD

Definition and Target Audience

Pharmacotherapy ensures the safe, appropriate and economical use of medications as part of interprofessional treatment teams in a variety of settings, including hospitals and health systems.

The purpose of the BCPS program is to validate that the pharmacist has the advanced knowledge and experience to improve patient outcomes through:

- Evaluation, implementation, monitoring, and optimization of pharmacologic and nonpharmacologic therapy
- Provision of patient-centered, evidence-based therapeutic interventions and information.
- Functioning as a member of an interprofessional team providing direct patient care.
- Collaboration within an interprofessional team to improve quality and safety, in addition to optimization of medication use systems.

Domains

1. Patient-Centered Pharmacotherapy (65% of examination)
2. Application of Evidence to Practice and Education (25% of examination)
3. Healthcare Systems and Population Health (10% of examination)

Domain 1: Patient-Centered Pharmacotherapy (65%)

Task 1. Develop patient-centered, evidence-based pharmacotherapy plans.

Knowledge of:
a. Anatomy and physiology
b. Disease processes, including drug-induced disease and comorbidities
c. Practice guidelines, literature, and standards of care
d. Public health initiatives
e. Transitions-of-care
f. Patient-specific data (e.g., physical exam chart review, labs, allergies, history of drug intolerance)
g. Social determinants of health
h. Pharmacology and toxicology (e.g. side effects and adverse drug reactions)
i. Access to care, including cost, telehealth, and availability
j. Drug interactions
k. Pharmacokinetics, pharmacodynamics
l. Pharmacogenomics
m. Non-prescriptive options (e.g., over the counter options, herbal supplements)
n. Preventative care
o. Non-pharmacologic interventions (e.g., life-style, diet, devices)
p. Prioritization of patient-specific goals
q. Principles of shared decision-making

Task 2. Monitor the patient to ensure safe and effective pharmacotherapy.

Knowledge of:
a. Goals of therapy
b. Response to therapy
c. Patient adherence
d. Changes in clinical status

Task 3. Modify pharmacotherapy plans through ongoing patient assessment.

Knowledge of:
a. Principles for escalation, de-escalation, and maintenance
b. Alternate therapies
c. Goals of therapy
d. Response to therapy
e. Changes in clinical status
f. Barriers to care
g. Principles of shared decision-making

Task 4. Communicate pharmacotherapy plans to patients, caregivers, and interprofessional team members.

Knowledge of:
a. Effective communication techniques
b. Health literacy
c. Cultural competency
d. Documentation methods

Task 5. Educate patients and caregivers on the safe and appropriate use of pharmacotherapy.

Knowledge of:
a. Health literacy
b. Educational techniques (e.g., teach-back, show-me, etc.)
c. Barriers to education
d. Delivery modalities (e.g., handouts, presentations, etc.)
e. Education effectiveness assessment

Domain 2: Application of Evidence to Practice and Education (25%)

Task 1. Retrieve relevant information that addresses pharmacotherapy-related inquiries.

Knowledge of:
a. Key question identification
b. Related questions to be considered
c. Search strategies (Medline and other databases)
d. Relevance of drug information resources and databases
e. Levels of evidence
f. Web-based health information
g. Primary, secondary, and tertiary literature

Task 2. Evaluate pharmacotherapy-related literature and health information.

Knowledge of:
a. Implications of study design on applicability to patient care
b. Power effect on study outcomes
c. Practice guideline interpretation
d. Disease-oriented versus patient-oriented outcomes

e. Primary and secondary outcome differentiation
f. Combined outcome interpretation
g. Trial limitations
h. Bias
i. Statistical versus clinical significance
j. Efficacy versus effectiveness
k. Validity
l. Statistics interpretation (e.g., RRR, ARR, NNT, NNH, CI, HR, p-values, etc.)
m. Pharmacoeconomics (e.g., cost-minimization, cost-efficacy, QALYs, etc.)

Task 3. Disseminate pharmacotherapy-related information to educate healthcare professionals, patients, and caregivers.

Knowledge of:
a. Tailored content
b. Effective verbal and written communication techniques
c. Education effectiveness assessment
d. Health literacy and cultural competence
e. Active learning techniques

Domain 3: Healthcare Systems and Population Health (10%)

Task 1. Implement safe and effective medication use systems to improve healthcare system and population-based outcomes.

Knowledge of:
a. Medication use evaluation
b. Adverse events/medication error reporting
c. Surveillance reports (e.g., antimicrobial stewardship)
d. Local guideline and protocol development
e. Formulary management (including drug shortage/recalls)

Task 2. Utilize technology to promote safe and effective medication use.

Knowledge of:
a. Medication administration (e.g., insulin pumps, infusion devices)
b. Management devices (e.g., reminder/adherence applications)
c. Monitoring devices and point of care tests
d. Clinical decision support

Task 3. Incorporate public health initiatives to improve population health.

Knowledge of:
a. Immunizations/vaccinations
b. Preventative health initiatives
c. Disease surveillance
d. Emergency preparedness

Task 4. Support implementation of pharmacotherapy-related quality improvement projects to foster the safe, effective, and economical use of medications.

Knowledge of:
a. Process improvement tools (e.g., process mapping, failure mode effects analysis, plan-do-study-act, root cause analysis)
b. Population health management
c. Principles of quality improvement
d. Metrics for evaluating quality, safety, service, and cost