

2020 Geriatric Pharmacy Preparatory Review and Recertification Course

Learning Objectives

After participating in this CPE activity, learners should be able to:

Principles of Aging

ACPE Number: 0204-9999-20-900-H04-P

- Summarize the spectrum of aging and physiological heterogeneity of older adults.
- Apply the knowledge of physiologic changes associated with aging to the clinical use of medications (e.g., pharmacokinetics and pharmacodynamics).
- Describe social and financial issues that impact therapeutic recommendations for geriatric patients.
- Select the appropriate treatment and monitoring for a patient with frailty.

Complex Case: Ambulatory-Geriatric Clinic

ACPE Number: 0204-9999-20-901-H01-P

- Interpret results of screening and assessments in the management of the geriatric patient.
- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including: Chronic obstructive pulmonary disease, Osteoarthritis, Depression, Urinary tract infection, Glaucoma and Herpes Zoster.
- Evaluate strategies to promote evidence-based approaches for screening, immunizations, health promotion, and disease prevention for older adults.
- Assess a patient medication list, including prescription and over-the-counter medications, and complementary and alternative therapies.
- Identify the components of an interprofessional, comprehensive geriatric assessment and the roles individual disciplines play in conducting and interpreting a comprehensive geriatric assessment.
- Assess specific risks to older adult safety, including falls, abuse, physical/chemical restraints, and other environmental hazards.
- Explain the role of advanced directives and living wills, do not resuscitate, power of attorney, and other substitute decision-makers documents in medication use decisions.

Complex Case: Inpatient-Surgery to Skilled Nursing Facility

ACPE Number: 0204-9999-20-902-H01-P

- Interpret results of screening and assessments in the management of the geriatric patient.
- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including: Delirium, Deep vein thrombosis prophylaxis, Pneumonia, Anxiety, Pain management (acute), Fluid & electrolyte disorder and Falls.
- Define the continuum of care available to geriatric patients, such as community resources, home care, assisted living facilities, nursing facilities, sub-acute care facilities, hospice care, and hospitals.
- Explain the need for continuity of treatment and communication across the spectrum of services and during transitions between care settings.
- Identify potential hazards of hospitalization for older adults, including immobility, delirium, medication side effects, malnutrition, pressure ulcers, procedures, and hospital acquired infections.
- Describe specific risks to older adult safety, including falls, abuse, physical/chemical restraints, and other environmental hazards.
- Recognize iatrogenic conditions (e.g., healthcare associated infections, falls, pressure ulcers, medication-induced).

Complex Case: Skilled Nursing Care

ACPE Number: 0204-9999-20-903-H01-P

- Interpret the results of screening and assessments in the management of the geriatric patient.
- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including: Anemia, Anxiety, Deep vein thrombosis prophylaxis, Osteoporosis, Pain management, SIADH, Falls and Constipation.
- Explain the need for continuity of treatment and communication across the spectrum of services and during transitions between care settings.
- Identify potential medication-related causes of declining physical and cognitive function
- Select methods to facilitate medication reconciliation during transitions of care.
- Summarize limitations of biomedical information for the care of older adults.
- Apply outcomes of investigations to optimize care of older adults.
- Develop strategies to prevent or resolve iatrogenic conditions.
- Recognize elder abuse/neglect (e.g., physical, psychological, and financial).
- Identify resources to assist in prevention, reporting, and treatment of elder abuse/neglect.

Complex Case: Long-term Care

ACPE Number: 0204-9999-20-904-H01-P

- Interpret the results of screening and assessments in the management of the geriatric patient.
- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including: Alzheimer's with behaviors, Hypertension, T2DM, Geriatric syndromes – malnutrition/failure to thrive/weight loss and Renal dysfunction/CKD.

- Summarize ethical issues that arise during therapy with individuals who have diminished decision-making capacity.
- Identify potential medication-related causes of declining physical and cognitive function.
- Identify clinical situations where life expectancy, functional status, patient preference or goals of care should override standard recommendations for screening/ treatment.
- Summarize care need priorities considering severity of illness, patient preference, quality of life, and time to benefit.
- Select interventions and behaviors that promote physical and mental health, nutrition, function, safety, social interactions, independence, and quality of life to older adults and their caregivers.
- Assess specific risks to older adult safety, including falls, abuse, physical/chemical restraints, and other environmental hazards.
- Apply the findings of research to the care of older adults.
- Evaluate the relevancy of clinical practice guidelines and standards of care for older adults.
- Describe the medication utilization process in the long-term care setting as it relates to the consultant pharmacist.

Complex Case: Hospice/Palliative Care

ACPE Number: 0204-9999-20-905-H01-P

- Interpret results of screening and assessments in the management of the geriatric patient.
- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including: Parkinson's disease, Pressure ulcers, Dry mouth, Peripheral vascular disease and Pain management.
- Summarize care need priorities considering severity of illness, patient preference, quality of life, and time to benefit.
- Recognize iatrogenic conditions (e.g., healthcare associated infections, falls, pressure ulcers, medication-induced conditions).
- Apply cultural competency concepts (e.g., ethnic/racial, religion, spiritual, age-related, language) and guidelines to healthcare decisions.
- Identify clinical situations where life expectancy, functional status, patient preference or goals of care should override standard recommendations for screening/ treatment.
- Recognize need for referral of patients to other healthcare professionals.
- Explain the altered benefit-risk ratio of medications at the end of life.
- Discuss end of life issues as they relate to medication appropriateness.

Complex Case: Inpatient to Family Medicine Clinic

ACPE Number: 0204-9999-20-906-H01-P

- Interpret the results of screening and assessments in the management of the geriatric patient.
- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including: Atrial fibrillation, Post-myocardial infarction, Heart failure, Hypertension, Hyperlipidemia, Insomnia, Drug induced urinary retention, Dry eyes and Clostridium difficile infection.
- Identify potentially inappropriate medications (PIM) for older adults, as well as medications that contribute to geriatric syndromes or conditions (e.g., falls, cognitive impairment).

- Assess biomedical information considering study design and methodology, statistical analysis, and significance of reported data and conclusions.

Complex Case: Ambulatory-Family Medicine Clinic

ACPE Number: 0204-9999-20-907-H01-P

- Interpret the results of screening and assessments in the management of the geriatric patient.
- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including: Atrial fibrillation, post-MI, Heart failure, Coronary artery disease, Hypothyroidism, Diabetes mellitus, new onset, Benign prostatic hyperplasia, Hypotension and Gastroesophageal reflux disease
- Evaluate financial and reimbursement issues (e.g., formularies, insurance coverage) when making therapeutic recommendations.
- Describe steps to assist a patient with payment issues for medications, medication therapy management services, and medical equipment.
- Describe strategies to assess caregiver knowledge and expectations regarding advanced age and disease on health risks, needs, and treatment of health conditions.
- Evaluate the appropriateness of care plans and services based on older adults' and caregivers' changes in age, health status, and function; assist caregivers in altering plans and actions as needed.
- Apply strategies for improvement of adherence in older adults, their caregivers and the interprofessional care team.
- Demonstrate collaboration with older adults, their caregivers, and the healthcare team during care planning and implementation.
- Explain the need for continuity of treatment and communication across the spectrum of services and during transitions between care settings.
- Select methods to facilitate medication reconciliation during transitions of care.
- Apply outcomes of investigations to optimize care of older adults.

Statistics, Evidence-based Medicine, and Research Design

ACPE Number: 0204-9999-20-908-H04-P

- Given an excerpt from a study:
 - Evaluate quality and appropriateness, with specific attention to study design, statistical analysis, internal/external validity, source of bias/confounders, and quality of conclusions and interpretation of graphs.
 - Explain why a statistical test is appropriate or not appropriate, based on the sample distribution, data type, and study design.
 - Interpret clinical and statistical significance for results from commonly used statistical tests.
 - Explain the strengths and limitations of different types of measures of central tendency (mean, median, and mode) and data spread (standard deviation, standard error of the mean, range, and interquartile range).
 - Evaluate odds ratio, risk/incidence rate, relative risk, number needed to treat, number needed to harm, and other risk estimates.
 - Determine whether the study applies to a specified patient population.

Geriatric Practice Administration

ACPE Number: 0204-9999-20-909-H04-P

- Describe integration of evidence-based geriatric literature into institutional guidelines and processes.
- Develop a plan to monitor and evaluate compliance with, and impact of, policies and guidelines (e.g., institutional, evidence based).
- Select quality assurance methods, metrics, and improvement activities, including needs assessment techniques, aimed at enhancing the safety and effectiveness of medication-use processes in the geriatric settings.
- Explain regulatory/IRB requirements relative to conducting geriatric research.
- Describe regulatory requirements and organizational structure of long term care facilities as it relates to the consultant pharmacist.
- Design education programs/materials/tools for geriatric patient populations.
- Assess formulary management protocols in geriatric practice settings.
- Develop systems to identify risk factors and prevention for adverse drug events/medication incidents/errors in the geriatric patient population.
- Apply protocols for managing high-risk medications in the elderly.
- Identify factors that enhance the education and training of geriatric pharmacists available in published documents from relevant professional societies (e.g., ASHP, ACCP, SCP, AGS etc.).

Complex Case: Assisted Living

ACPE Number: 0204-9999-20-910-H01-P

- Interpret the results of screening and assessments in the management of the geriatric patient.
- Select the appropriate treatment and monitoring for a complex patient-case with multiple conditions, including: urinary incontinence, dysphagia, stroke, neuropathic pain, gout, seizure disorder and substance abuse.
- Evaluate self-care capacity, including medication self-administration.
- Recognize signs of substance and medication misuse/abuse in older adults.
- Assess the impact of social behaviors, including use of tobacco, caffeine, alcohol, and illicit drugs.
- Recognize a need for referral of patients to other healthcare professionals.
- Apply verbal and nonverbal communication strategies to overcome potential sensory, language, and cognitive limitations in older adults.
- Evaluate improvement strategies for adherence in older adults, their caregivers and the interprofessional team."

Antimicrobial Stewardship-Considerations and Limitations in Geriatric Care Settings

ACPE Number: 0204-9999-20-911-H04-P

- Describe regulations and government guidance statements calling for use of antimicrobial stewardship in geriatric care settings.

- Apply current literature describing antimicrobial stewardship techniques in the geriatric care setting.
- Discuss the implications of infectious disease guidelines for use of antimicrobial agents in the geriatric patient population.
- Select appropriate antibiotic therapy for a geriatric patient, taking into consideration infectious-diseases management principles and patient-specific variables.
- Formulate appropriate antimicrobial-monitoring recommendations for a geriatric patient based on patient-specific variables and antimicrobial stewardship principles.
- Develop methods for monitoring trends and identifying opportunities for improvement in antimicrobial use within a geriatric healthcare facility.