ASCP GERIATRIC PHARMACY CURRICULUM GUIDE

FOURTH EDITION

Updated January, 2021
INTRODUCTION

The American Society of Consultant Pharmacists (ASCP) Geriatric Curriculum Guide is a peer-reviewed resource designed to prepare pharmacy students and pharmacists with the education needed to care for older adults. Additionally, it serves as a resource for those designing or seeking experiences in the geriatric practice setting through coursework, residency, or personal career development.

Building on the appendices added in the 3rd edition, the 4th edition adds an appendix with the Pharmacists Patient Care Process (PPCP) created by the Joint Commission of Pharmacy Practitioners.

In the learner pyramid, an additional level was added for those who have specialized in geriatrics looking for further self-development entitled ‘Beyond BCGP’. Additionally, the PGY2 section was expanded to include recommendations for geriatrics content to be included in non-Geriatrics specialty residencies.

The resources section has expanded with materials published since the last revision as well as the addition of deprescribing and pharmacogenomic references.

In addition to the revision committee below, the authors wish to acknowledge the peer reviewers who volunteered their time reviewing the guide who belong to the ASCP Education Advisory Council.

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# I. FOUNDATIONAL PRINCIPLES OF AGING

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<thead>
<tr>
<th>Competency</th>
<th>Associated ACPE Outcome</th>
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<tbody>
<tr>
<td><strong>A. Demographics</strong></td>
<td></td>
</tr>
<tr>
<td>1. Define the demographic, economic and medical characteristics of older adults (e.g., gender, ethnicity, geographic, socioeconomic, multimorbidity, disability, and medication use patterns).</td>
<td>2.4, 3.5</td>
</tr>
<tr>
<td>2. Recognize the heterogeneity of the older adult population.</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>B. Biology of Aging</strong></td>
<td></td>
</tr>
<tr>
<td>1. Recognize the spectrum of aging from healthy aging to frailty.</td>
<td>2.4</td>
</tr>
<tr>
<td>2. Describe the biology of aging and discuss common theories of aging.</td>
<td>1.1</td>
</tr>
<tr>
<td>3. Discuss the physiologic changes and how they impact the pharmacokinetic, pharmacodynamic and therapeutic use of medications.</td>
<td>1.1</td>
</tr>
<tr>
<td>4. Educate an individual on factors to consider when evaluating an intervention to slow the aging process.</td>
<td>2.3, 3.2</td>
</tr>
<tr>
<td><strong>C. Socioeconomics of Aging</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Social Determinants of Health</strong></td>
<td></td>
</tr>
<tr>
<td>1. Describe the interrelationship between social determinants of health and aging (e.g., family, cultural, community, housing, access to care, policy issues).</td>
<td>2.3, 3.5</td>
</tr>
<tr>
<td>2. Recognize signs of substance and medication misuse/abuse in older adults.</td>
<td>2.3</td>
</tr>
<tr>
<td>3. Identify and manage the social issues of medication use for an older adult’s therapy.</td>
<td>2.3</td>
</tr>
<tr>
<td>4. Describe the interrelationship between an older adult and their formal and informal care givers.</td>
<td>2.3</td>
</tr>
<tr>
<td>5. Recognize available resources and develop strategies to support older adults and care givers.</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Ethics</strong></td>
<td></td>
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<tr>
<td>6. Recognize ethical dilemmas through a systematic decision-making process based on clearly articulated ethical theories and principles (e.g., self-determination, autonomy, justice in the distribution of resources).</td>
<td>4.4</td>
</tr>
<tr>
<td>7. Promote person-centered decisionmaking and care.</td>
<td>2.4, 3.3, 3.4</td>
</tr>
<tr>
<td>8. Describe advanced directives, living wills and the role of a power of attorney.</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Elder Abuse</strong></td>
<td></td>
</tr>
<tr>
<td>9. Define elder abuse/neglect (e.g., physical, psychological, and financial).</td>
<td>2.3</td>
</tr>
<tr>
<td>10. Recognize and report the signs of elder abuse/neglect.</td>
<td>2.3, 3.3</td>
</tr>
<tr>
<td><strong>Economic Issues</strong></td>
<td></td>
</tr>
<tr>
<td>11. Describe the options for coverage and benefits older adults may utilize (e.g., Medicare, Medicaid and supplemental coverage).</td>
<td>3.3</td>
</tr>
<tr>
<td>12. Consider financial/reimbursement issues (e.g., formularies, insurance coverage) when making therapeutic recommendations.</td>
<td>2.3, 3.3</td>
</tr>
<tr>
<td>Cultural Competency</td>
<td>13. Value and appreciate ethnic, racial and cultural differences in the older adult population.</td>
</tr>
<tr>
<td></td>
<td>14. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals.</td>
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<tr>
<td></td>
<td>15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population.</td>
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<tr>
<td></td>
<td>16. Discuss the concept of ageism and how it may impact the treatment of patients.</td>
</tr>
</tbody>
</table>

| D. Communication | 1. Communicate drug and adherence information to older adults, their caregivers and the interprofessional team. | 2.1, 3.2, 3.4, 3.6 |
| | 2. Recognize the prevalence of limited health literacy in the older adult population. | 2.3, 2.4, 3.1, 3.5 |
| | 3. Demonstrate proficiency to interview and counsel older adults with varying degrees of health literacy as well as cognitive and communication abilities. | 2.1, 3.2, 3.5, 3.6 |
| | 4. Recognize barriers to effective communication (e.g., cognitive, sensory, cultural, and language). | 3.1, 3.2, 3.5, 4.1 |

| E. Continuum of Care | 1. Define the continuum of care available to older adults such as community resources, home care, formal and informal caregiving, assisted living facilities, nursing facilities, sub-acute care facilities, hospice care, and hospitals. | 2.2 |
| | 2. Participate in interprofessional decision making regarding appropriate levels of care for individual patients. | 2.3, 3.4, 4.2 |
| | 3. Facilitate medication reconciliation to improve transitions across the continuum of care. | 2.2 |
| | 4. Discuss the philosophy and practice of hospice/palliative care. | 2.4 |
| | 5. Incorporate life expectancy and end-of-life issues in the decision-making of appropriate use of medications. | 2.4 |

| F. Wellness & Health-Promotion | 1. Describe and advocate health care initiatives related to wellness and health promotion (e.g., nutrition, physical activity, medication adherence, immunizations, and health screenings). | 2.3, 3.2, 3.3 |
| | 2. Counsel an older adult on the utility of health screenings and preventive measures. | 2.3, 3.2, 3.6 |
| | 3. Conduct a comprehensive medication review to minimize the impact of drug-related falls. | 2.1, 2.3, 3.6 |

| II. ESSENTIAL COMPETENCIES FOR THE PRACTICE OF GERIATRIC CARE |
| A. Epidemiology | Describe incidence and prevalence of diseases in the older adult population. | 2.4 |
| B. Pathophysiology | 1. Recognize the atypical clinical presentation and progression of common diseases found in older adults. | 2.1 |
| | 2. Identify symptoms of drug-induced diseases and geriatric syndromes. | 2.1 |
### C. Geriatric Assessment

1. Identify basic cognitive, functional, physical, and safety assessments for common diseases in the older adult population. 2.1
2. Demonstrate the ability to conduct basic cognitive, functional, physical, and safety assessments for common diseases in the older adult population. 2.1, 3.6
3. Assess social and cultural determinants of health outcomes. 2.3, 3.5
4. Apply knowledge of geriatric syndromes and medication-related problems when interpreting assessment results. 2.1
5. Obtain and interpret a comprehensive medication history in relation to patient’s current health status. 2.1, 3.6
6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug event, underuse, potentially inappropriate prescribing). 2.1, 3.1
7. Appropriately recommend laboratory monitoring and interpret laboratory results for an older adult patient. 2.1
8. Identify and recognize potential functional barriers to the older adult patient (e.g., transportation, housing, economics, and social support structure). 3.1
9. Identify potential environmental causes of decline in activities of daily living (ADL), instrumental activities of daily living (IADL), and cognitive function. 3.1
10. Develop a problem list and prioritize care based upon severity of illness, patient preference, quality of life, and time to benefit. 2.1
11. Identify patients who need referrals to other health and non-health professionals or services. 3.3, 3.4
12. Identify when appropriate to recommend deprescribing in an older adult. 2.1, 3.1, 3.3

### D. Treatment

1. Define therapeutic goals incorporating patient-specific principles (e.g., age, functionality, patient preference, pharmacogenomics, cultural). 2.1
2. Evaluate the appropriateness of standards of practice or treatment guidelines for an older adult patient. 1.1
3. Determine therapeutic options and the risk/benefit to the patient (e.g., no treatment, non-pharmacologic interventions, non-prescription medications, complementary and alternative medicine, and prescription medications). 2.1
4. Apply principles of pharmacokinetic and pharmacodynamic changes associated with aging to the design of the pharmacotherapy regimen. 1.1, 2.1
5. Design and recommend age/person specific regimen including medication, dose, dosage form, dosing interval, and route of administration. 2.1
6. Resolve and/or prevent medication-related problems in a given older adult patient. 2.1
7. Optimize a medication regimen to minimize polypharmacy, prescribing cascades, and anticholinergic burden. 3.1

### E. Monitoring

1. Develop and implement an older person-specific monitoring plan. 2.1, 3.1
2. Revise therapeutic plans based upon changes in patient status. 2.1, 3.1
### F. Education

1. Utilize educational material appropriate to the specific patient/care giver.  
2. Ensure understanding of medication use and its role in the overall treatment plan.  
3. Educate patient/care giver regarding potential problems with patient care management and administration of medications.  
4. Assist the patient/care giver in identifying, procuring, and utilizing adherence strategies and devices.  
5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles.

<table>
<thead>
<tr>
<th>G. Document Actions and Outcomes</th>
<th>1. Document rationale, actions, and outcomes from medication therapies for the healthcare team.</th>
<th>2.1, 3.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Write an action plan for use by the patient/care giver.</td>
<td>2.1</td>
<td></td>
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<tr>
<td>3. Perform and document comprehensive medication reconciliation across the continuum of care.</td>
<td>2.2, 3.6</td>
<td></td>
</tr>
<tr>
<td>4. Acknowledge different systems for documentation and tracking of intervention data which can generate evidence of care.</td>
<td>2.2, 3.6</td>
<td></td>
</tr>
</tbody>
</table>

### III. APPROACH TO PRACTICE & CARE OF OLDER ADULTS

#### A. Evidence-Based Practice & Practice Evaluation

1. Identify reputable sources of information for the care of an older adult patient.  
2. Evaluate medication utilization at the system level to ensure safe and effective drug therapy.  
3. Utilize a documentation system to evaluate outcomes of pharmacist intervention.  
4. Evaluate and apply evidence from primary literature as it pertains to the care of older adult patients.  
5. Evaluate the relevancy of clinical practice guidelines, standards of care and quality measures related to geriatric care.

<table>
<thead>
<tr>
<th>B. Practice Opportunities</th>
<th>1. Identify existing and emerging models of practice in geriatric care.</th>
<th>4.3</th>
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<tr>
<td>2. Recognize emerging opportunities for geriatric practice.</td>
<td>3.4, 4.3</td>
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</tr>
<tr>
<td>3. Understand the roles and responsibilities of the pharmacist and other health-care professionals within the interprofessional team.</td>
<td>2.3, 3.4, 4.2</td>
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<tr>
<td>4. Discuss board certifications available for pharmacists providing geriatric care (e.g., BCGP, CDE, other advanced training).</td>
<td>4.4</td>
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</tr>
</tbody>
</table>

#### C. Regulatory

1. Identify agencies and organizations integral in the development and enforcement of geriatric public policy.  
2. Identify and adhere to site-specific regulations for geriatric care.  
3. Develop strategies for keeping up to date on regulatory changes and their impact on geriatric care.  
4. Promote advocacy for geriatric patient care and the pharmacy profession.  
5. Demonstrate decision making skills when implementing care for older adults to improve outcomes and quality measures.

#### D. Financial Factors

1. Develop, implement and assess formulary management/protocols as they pertain to the care of the older adult.  
2. Demonstrate knowledge of sources and processes of compensation for geriatric pharmacy services.
LEARNER IN GERIATRICS: DIDACTIC

GENERAL TOPICS
Topics and Disease states covered in this section should be covered either as stand-alone lectures or emphasized within a larger topic as best fits the model of a pharmacy program.

ELECTIVE TOPICS
The aim of this section is to suggest topics/disease states in an elective course which focuses on care for older adults by going beyond what is discussed in the general curriculum.

GENERAL TOPICS (*=STAND-ALONE LECTURE)

- Introduction to Geriatrics and Geriatric Syndromes
  - *Introduction to Geriatrics (epidemiology, biology of aging, pharmacokinetics, pharmacodynamics, elder abuse)
  - *Introduction to Geriatric Syndromes (falls/gait problems, weakness/frailty, dizziness/syncope, functional/cognitive decline, sensory deficit, appetite/weight loss/malnutrition/dysphagia, medication-induced disease, polypharmacy)
  - Explicit Criteria for Prescribing (Beers Criteria, START/STOOP)
- Cardiology (ACS, arrhythmias, cardiomyopathy, CAD, CHF, hyperlipidemia, hypertension, PAD)
  - CVA (accurate history needed including medications)
  - Hyperlipidemia (new guidelines do not include aged >75, statin benefits vs risk)
  - Hypertension (relaxed BP goal, hypotension)
- Dermatology (psoriasis, other common skin disorders)
- *Head, Eyes, Ears, Nose, and Throat (glaucoma, Macular degeneration, hearing loss, dysphagia)
- Endocrine (adrenal disorders, diabetes mellitus, disorders of hypothalamus, sexual/erectile dysfunction, hormone therapy, thyroid disease)
  - Diabetes (relaxed A1c goal, hypoglycemia)
  - Thyroid disease (Sub-clinical hyper/hypothyroidism)
- Gastrointestinal Disorders
  - *Bowel-related Issues (constipation, diarrhea, fecal incontinence)
  - (diverticular disease, GERD/PUD, non-hepatitis hepatic disorders, inflammatory bowel disease, irritable bowel disease, nausea/vomiting, pancreatitis)
- Hematology/Oncology (anemia, disorders of hemostasis/platelets/WBC, cancers)
- Infectious Disease (HIV/AIDS, bone/joint infection, endocarditis, genitourinary, GI infection, herpes zoster, hepatitis, influenza, meningitis, nosocomial infections, ophthalmic infection, pneumonia, STIs, skin/soft tissue infection, tuberculosis, respiratory infections)
  - STIs (common in older adults → unprotected sex)
- Musculoskeletal and Inflammatory Disorders
  - *Osteoarthritis
  - *Osteoporosis (Paget's Disease, Vitamin D/PTH disorders)
  - (gout/hyperuricemia, rheumatoid arthritis, systemic inflammatory disease)
- Neurology
  - *Dementia (Alzheimer's disease, vascular-dementia, Lewy Body dementia, other)
    - Dementia (Cognitive function tests, cognitive impairment)
  - *Parkinson's disease / Movement Disorders
    - (pain, CVA/TIA, headache/migraine, MS, neuropathies, seizures, traumatic brain injury, fluid/electrolytes)
- Nephrology
  - *Chronic Kidney Disease / End-Stage Renal Disease
    - (acid-base disorders, acute renal failure)
- Psychiatry
  - *Delirium
    - (anxiety, bipolar, depression, schizophrenia, sleep disorders, substance abuse/misuse)
    - Depression (slower onset of action of SSRIs, geriatric depression scale)
- Respiratory (Asthma, COPD, cough/cold/allergy)
- *Urology (bladder outlet obstruction, urinary incontinence)
- Non-Therapeutic Issues (ethics, economics/insurance/Medicare, cultural competencies, continuum of care, wellness/health promotion, health literacy)

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### ELECTIVE TOPICS

**Topics (Lecture)**

- **Advanced Geriatric Syndromes** (falls/gait problems, weakness/frailty, dizziness/syncope, functional/cognitive decline, sensory deficit, appetite/weight loss/malnutrition/dysphagia, medication-induced disease, polypharmacy)
- **Cardiology** (Atrial fibrillation, CAD, CHF, isolated systolic hypertension/diastolic dysfunction, hyperlipidemia, HTN, thromboembolic disorder)
- **Dermatology** (pressure ulcers)
- **Endocrine** (diabetes, hyponatremia, menopause/andropause)
- **Gastrointestinal** (Diverticular disease, GERD/PUD, IBS, pancreatitis, N/V, alternative feeding modalities [nasogastric, PEG tubes])
- **Head, Eyes, Ears, Nose, and Throat** (hearing loss and aids; cataracts, dry eyes, macular degeneration, eye inflammation/surgical medications)
- **Hematologic** (anemias)
- **Infectious Disease** (Endocarditis, genitourinary, GI infection, hepatitis, herpes zoster, influenza, pneumonia, skin/soft tissue infection, URI)
- **Musculoskeletal and Inflammatory Disorders** (pain, palliative care)
- **Neurology** (dementias, CVA/TIA, Parkinson's/Movement disorders, neuropathies, seizures)
- **Psychiatry** (anxiety, depression, sleep disorders, substance abuse/misuse, delirium, agitation/behavior and psychological issues in dementia)
- **Respiratory** (asthma, COPD, cough/cold/allergy)
- **Non-Therapeutic Issues** (advance directives, consulting/regulations, durable medical equipment, elder abuse, ethics, economic issues/insurance/Medicare, cultural competencies, communication, health literacy, continuum/ transitions of care, options of care/dwelling, wellness/health promotion, end of life/hospice, medication adherence, interprofessional team roles and responsibilities, aging research)

### Practice Opportunities

- **See IPPE**
**LEARNER IN GERIATRICS: EXPERIENTIAL**

**Introductory Pharmacy Practice Experience (IPPE)**
For the purposes of this document, the aim for the learner in geriatrics in IPPE is to understand differences in older adults compared to younger adults, understand issues with communication, and empathy towards their care.

**Advanced Pharmacy Practice Experience (APPE)**
For the purposes of this document, the aim for the learner in geriatrics in APPE is to understand and apply pharmacodynamics/kinetics to an older adult population, monitor outcomes appropriately, and recommend appropriate treatment for older adults.

**INTRODUCTION TO PHARMACY PRACTICE EXPERIENCE (IPPE)**

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<td><strong>Topic Discussions</strong></td>
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<tr>
<td>Geriatrics Topics          (how older adults are different, communication with older adults)</td>
</tr>
<tr>
<td>Medicare Part D            (medications in older adults, overview of MTM, differentiate Medicare A,B, C, D)</td>
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</table>

<table>
<thead>
<tr>
<th>PRACTICE OPPORTUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Geriatric Medication Game (see the game by St. Louis College of Pharmacy)</td>
</tr>
<tr>
<td>Generation Rx (see the Senior Toolkit at the far right bottom marked “Seniors”)</td>
</tr>
<tr>
<td>STAMP Out Prescription Drug Misuse &amp; Abuse (From ASCP)</td>
</tr>
<tr>
<td>Adopt-a-Patient Project (Semester long project where students “adopt” a real patient and work with him/her to make recommendations relating to medications and overall health)</td>
</tr>
<tr>
<td>Reviewing Medicare Part D Education (Explain Part D plans for beneficiaries, perform MTM)</td>
</tr>
<tr>
<td>Vial of Life (Bring the Vial of Life into Your Home)</td>
</tr>
<tr>
<td>IPPE SOAR (Student and Older Adult Relationship Project, University of Arizona College of Pharmacy)</td>
</tr>
<tr>
<td>Helpwithmymeds.org (Consumer website through ASCP Foundation to help seniors manage their medications and educate about senior care pharmacists. There are various resources too)</td>
</tr>
<tr>
<td>Computer skills for patients (Ensure patients are comfortable with technology to access necessary telehealth platforms)</td>
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</tbody>
</table>
### GERIATRIC ROTATION

#### Site Discussion Activities

**Topic Discussions**
- **Introduction to Geriatrics and Geriatric Syndromes**
  - Introduction to Geriatrics (epidemiology, biology of aging, pharmacokinetics, pharmacodynamics, elder abuse)
  - Introduction to Geriatric Syndrome (falls/gait problems, weakness/frailty, dizziness/syncope, functional/cognitive decline, sensory deficit, appetite/weight loss/weight loss/malnutrition/dysphagia, medication-induced disease, polypharmacy)
  - Explicit Criteria for Prescribing (Beer’s Criteria, START/STOPT)
- **Cardiology**
  - CVA (accurate history needed including medications)
  - Hyperlipidemia (new guidelines do not include aged >75, statin benefit vs. risks)
  - Hypertension (relaxed BP goal, hypotension)
- **Head, Eyes, Ears, Nose, and Throat**
  - glaucoma, Macular degeneration
- **Endocrine**
  - Diabetes (relaxed A1c goal, hypoglycemia)
  - Thyroid disease (Sub-clinical hyper/hypothyroidism)
- **Gastrointestinal Disorders**
  - constipation, diarrhea, fecal incontinence
- **Infectious Disease**
  - STIs (common in older adults → unprotected sex)
- **Musculoskeletal and Inflammatory Disorders**
  - Osteoarthritis
  - Osteoporosis (Paget’s Disease, Vitamin D/PTH disorders)
- **Neurology**
  - Dementia (Alzheimer’s disease, vascular-dementia, Lewy Body dementia, other; cognitive function tests, cognitive impairment)
  - Parkinson’s disease / Movement Disorders
- **Nephrology**
  - Chronic Kidney Disease / End-Stage Renal Disease
- **Psychiatric Disorders**
  - Delirium
  - Depression (slower onset of action of SSRIs and higher incidence of uncommon adverse effects, geriatric depression scale)
- **Urology**
  - Bladder outlet obstruction, urinary incontinence

#### Practice Opportunities

- **Journal Club & Older Adult Education on Outcomes** (converting Journal Club to Layperson terms)
- **Comprehensive MTM**
- **Verbal Geriatric Assessment** (Pain scale, Geriatric Depression Scale, Memory Scales)
- **Physical Geriatric Assessment** (Inhaler technique, glucometer)
- **Outreach** (Brown Bag assessment, Fall–Risk/FRAX Assessment)
- **SOAP/Progress notes/Documentation**
- **In-services to Providers/Staff**
- **Interprofessional Participation** (Medication safety meeting, interdisciplinary rounds, P&T meetings, care plan meetings, falls meetings)
- **Transitions of Care** (medication reconciliation, admission/discharge counseling)
- **EMR education** - site specific as needed, to ensure patients are comfortable accessing their medical information
## Site Discussion Activities

### Topic Discussions
- **Cardiology** (ACS, arrhythmias, cardiomyopathy, CAD, CHF, hyperlipidemia, hypertension, PAD)
- **Dermatology** (psoriasis, other common skin disorders)
- **Endocrine** (adrenal disorders, diabetes mellitus, disorders of hypothalamus, sexual/erectile dysfunction, hormone therapy, thyroid disease)
- **Gastrointestinal Disorders** (diverticular disease, GERD/PUD, non-hepatitis hepatic disorders, inflammatory bowel disease, irritable bowel disease, nausea/vomiting, pancreatitis, alternative feeding modalities [nasogastric tubes, PEG tubes])
- **Hematology/Oncology** (anemia, disorders of hemostasis/platelets/WBC, cancers)
- **Infectious Disease** (HIV/AIDS, bone/joint infection, endocarditis, genitourinary, GI infection, herpes zoster, hepatitis, influenza, meningitis, nosocomial infections, ophthalmic infection, pneumonia, STIs, skin/soft tissue infection, tuberculosis, respiratory infections)
- **Musculoskeletal and Inflammatory Disorders** (gout/hyperuricemia, rheumatoid arthritis, systemic inflammatory disease)
- **Neurology** (pain, CVA/TIA, headache/migraine, MS, neuropathies, seizures, traumatic brain injury, fluid/electrolytes)
- **Nephrology** (acid–base disorders, acute renal failure)
- **Psychiatric Disorders** (anxiety, bipolar, depression, schizophrenia, sleep disorders, substance abuse/misuse, PTSD)
- **Respiratory** (Asthma, COPD, cough/cold/allergy)
- **Non-Therapeutic Issues** (ethics, economics/insurance/Medicare, cultural competencies, continuum of care, wellness/health promotion, health literacy, adherence, interprofessional team)

### Practice Opportunities
- **Journal Club** (on geriatric topic, medication, or population)
- **SOAP/Progress notes/Documentation**
- **In-services to Providers/Staff**
- **Interprofessional Participation** (Med safety meeting, interdisciplinary rounds, P&T meetings)
- **Transitions of Care** (medication reconciliation, admission/discharge counseling)
LEARNER IN GERIATRICS: ADVANCED TRAINING

POST-GRADUATE YEAR – 1
The aims for the PGY-1 learner in geriatrics are to understand and apply pharmacodynamics/kinetics to an older adult population, monitor outcomes appropriately, and recommend appropriate treatment for older adults.

POST-GRADUATE YEAR – 2 (GERIATRICS)
The aims for the PGY-2 learner in geriatrics are to understand, apply, and teach/educate (students/patients/caregivers) pharmacodynamics/kinetics of an older adult population, monitor outcomes appropriately, and recommend appropriate treatment for older adults.

POST-GRADUATE YEAR- 2 (NON-GERIATRICS)
The aims for the PGY-2 learner are to understand, apply, and teach/educate (students/patients/caregivers) on geriatric principles or concepts core to their specialty.

BOARD CERTIFIED GERIATRIC SPECIALIST (BCGP)
The aims for the Advance Training towards BCGP learner in geriatrics are to understand, apply, and teach/educate (patients/caregivers) pharmacodynamics/kinetics of an older adult population, monitor outcomes appropriately, and recommend appropriate treatment for older adults.

ADVANCED TRAINING FOR THE CLINICAL SPECIALIST
The aims for the advanced training for the clinical specialist is to provide opportunities beyond geriatric board certification for professional enhancement.
### Topic Discussions

- **Introduction to Geriatrics and Geriatric Syndromes**
  - Introduction to Geriatrics (epidemiology, biology of aging, pharmacokinetics, pharmacodynamics, elder abuse)
  - Introduction to Geriatric Syndromes (falls/gait problems, weakness/frailty, dizziness/syncope, functional/cognitive decline, sensory deficit, appetite/weight loss/malnutrition/dysphagia, medication-induced disease, polypharmacy)
  - Explicit Criteria for Prescribing (Beers Criteria, START/STOPP)
- **Cardiology** (ACS, arrhythmias, cardiomyopathy, CAD, CHF, hyperlipidemia, hypertension, PAD)
  - CVA (accurate history needed including medications)
- **Hyperlipidemia** (new guidelines do not include aged >75, statin benefits vs risk)
- **Hypertension** (relaxed BP goal, hypotension)
- **Dermatology** (psoriasis, other common skin disorders)
- **Head, Eyes, Ears, Nose, and Throat** (glaucoma, Macular degeneration, hearing loss, dysphagia)
- **Endocrine** (adrenal disorders, diabetes mellitus, disorders of hypothalamus, sexual/erectile dysfunction, hormone therapy, thyroid disease)
  - **Diabetes** (relaxed A1c goal, hypoglycemia)
  - **Thyroid disease** (Sub-clinical hyper/hypothyroidism)
- **Gastrointestinal Disorders**
  - Bowel-related Issues (constipation, diarrhea, fecal incontinence)
  - (diverticular disease, GERD/PUD, non-hepatitis hepatic disorders, inflammatory bowel disease, irritable bowel disease, nausea/vomiting, pancreatitis)
- **Hematology/Oncology** (anemia, disorders of hemostasis/platelets/WBC, cancers)
- **Infectious Disease** (HIV/AIDS, bone/joint infection, endocarditis, genitourinary, GI infection, herpes zoster, hepatitis, influenza, meningitis, nosocomial infections, ophthalmic infection, pneumonia, STIs, skin/soft tissue infection, tuberculosis, respiratory infections)
  - **STIs** (common in older adults → unprotected sex)
- **Musculoskeletal and Inflammatory Disorders**
  - Osteoarthritis
  - Osteoporosis (Paget’s Disease, Vitamin D/PTH disorders)
  - (gout/hyperuricemia, rheumatoid arthritis, systemic inflammatory disease)
- **Neurology**
  - Dementia (Alzheimer’s disease, vascular-dementia, Lewy Body dementia, other)
    - Dementia (Cognitive function tests, cognitive impairment)
  - Parkinson's disease / Movement Disorders
    - (pain, CVA/TIA, headache/migraine, MS, neuropathies, seizures, traumatic brain injury, fluid/electrolytes)
- **Nephrology**
  - Chronic Kidney Disease / End-Stage Renal Disease
    - (acid-base disorders, acute renal failure)
- **Psychiatry**
  - Delirium (anxiety, bipolar, depression, schizophrenia, sleep disorders, substance abuse/misuse)
  - Depression (slower onset of action of SSRIs and higher incidence of uncommon adverse effects, geriatric depression scale)
- **Respiratory** (Asthma, COPD, cough/cold/allergy)
- **Urology** (bladder outlet obstruction, urinary incontinence)
## Practice Opportunities

- **Journal Club & Older Adult Education on Outcomes** (converting Journal Club to Layperson terms)
- **Comprehensive MTM**
- **Verbal Geriatric Assessment** (Pain scale, Geriatric Depression Scale, Memory Scales)
- **Physical Geriatric Assessment** (Inhaler technique, glucometer)
- **Outreach** (Brown Bag assessment, Fall-Risk/FRAX Assessment)
- **SOAP/Progress notes/Documentation**
- **In-services to Providers/Staff**
- **Interprofessional Participation** (Medication safety meeting, interdisciplinary rounds, P&T meetings, care plan meetings, falls meetings)
- **Transitions of Care** (medication reconciliation, admission/discharge counseling)
- **Complete geriatric related Medication/Drug Utilization Evaluation**
- **Attend a local, regional, or national meeting focused in geriatrics**
- **Participate in networking opportunities with experts in geriatrics**

## NON-GERIATRICS SPECIFIC ROTATION

### Site Discussion Activities

#### Topic Discussions
- **Cardiology** (ACS, arrhythmias, cardiomyopathy, CAD, CHF, hyperlipidemia, hypertension, PAD)
- **Dermatology** (psoriasis, other common skin disorders)
- **Endocrine** (adrenal disorders, diabetes mellitus, disorders of hypothalamus, sexual/erectile dysfunction, hormone therapy, thyroid disease)
- **Gastrointestinal Disorders** (diverticular disease, GERD/PUD, non-hepatitis hepatic disorders, inflammatory bowel disease, irritable bowel disease, nausea/vomiting, pancreatitis, alternative feeding modalities [nasogastric tubes, PEG tubes])
- **Hematology/Oncology** (anemia, disorders of hemostasis/platelets/WBC, cancers)
- **Infectious Disease** (HIV/AIDS, bone/joint infection, endocarditis, genitourinary, GI infection, herpes zoster, hepatitis, influenza, meningitis, nosocomial infections, ophthalmic infection, pneumonia, STIs, skin/soft tissue infection, tuberculosis, respiratory infections)
- **Musculoskeletal and Inflammatory Disorders** (gout/hyperuricemia, rheumatoid arthritis, systemic inflammatory disease)
- **Neurology** (pain, CVA/TIA, headache/migraine, MS, neuropathies, seizures, traumatic brain injury, fluid/electrolytes)
- **Nephrology** (acid–base disorders, acute renal failure)
- **Psychiatric Disorders** (anxiety, bipolar, depression, schizophrenia, sleep disorders, substance abuse/misuse, PTSD)
- **Respiratory** (Asthma, COPD, cough/cold/allergy)
- **Non-Therapeutic Issues** (ethics, economics/insurance/Medicare, cultural competencies, continuum of care, wellness/health promotion, health literacy, adherence, interprofessional team)

### Practice Opportunities

- **Journal Club** (on geriatric topic, medication, or population)
- **SOAP/Progress notes/Documentation**
- **In-services to Providers/Staff**
- **Interprofessional Participation** (Med safety meeting, interdisciplinary rounds, P&T meetings)
- **Transitions of Care** (medication reconciliation, admission/discharge counseling)
**Geriatric Pharmacotherapy Residency**

The resident should be able to facilitate the following activities:

- **Introduction to Geriatrics and Geriatric Syndromes**
  - Introduction to Geriatrics (epidemiology, biology of aging, pharmacokinetics, pharmacodynamics, elder abuse)
  - Introduction to Geriatric Syndromes (falls/gait problems, weakness/frailty, dizziness/syncope, functional/cognitive decline, sensory deficit, appetite/weight loss/malnutrition/dysphagia, medication-induced disease, polypharmacy)
  - Explicit Criteria for Prescribing (Beers Criteria, START/STOPP)

- **Cardiology** (ACS, arrhythmias, cardiomyopathy, CAD, CHF, hyperlipidemia, hypertension, PAD)
  - CVA (accurate history needed including medications)
  - Hyperlipidemia (new guidelines do not include aged >75, statin benefits vs risk)
  - Hypertension (relaxed BP goal, hypotension)

- **Dermatology** (psoriasis, other common skin disorders)

- **Head, Eyes, Ears, Nose, and Throat** (glaucoma, Macular degeneration, hearing loss, dysphagia)

- **Endocrine** (adrenal disorders, diabetes mellitus, disorders of hypothalamus, sexual/erectile dysfunction, hormone therapy, thyroid disease)
  - Diabetes (relaxed A1c goal, hypoglycemia)
  - Thyroid disease (Sub-clinical hyper/hypothyroidism)

- **Gastrointestinal Disorders**
  - Bowel-related Issues (constipation, diarrhea, fecal incontinence)
  - (diverticular disease, GERD/PUD, non-hepatitis hepatic disorders, inflammatory bowel disease, irritable bowel disease, nausea/vomiting, pancreatitis)

- **Hematology/Oncology** (anemia, disorders of hemostasis/platelets/WBC, cancers)

- **Infectious Disease** (HIV/AIDS, bone/joint infection, endocarditis, genitourinary, GI infection, herpes zoster, hepatitis, influenza, meningitis, nosocomial infections, ophthalmic infection, pneumonia, STIs, skin/soft tissue infection, tuberculosis, respiratory infections)
  - STIs (common in older adults → unprotected sex)

- **Musculoskeletal and Inflammatory Disorders**
  - Osteoarthritis
  - Osteoporosis (Paget’s Disease, Vitamin D/PTH disorders)
  - (gout/hyperuricemia, rheumatoid arthritis, systemic inflammatory disease)

- **Neurology**
  - Dementia (Alzheimer’s disease, vascular-dementia, Lewy Body dementia, other)
    - Dementia (Cognitive function tests, cognitive impairment)
  - Parkinson’s disease / Movement Disorders
  - (pain, CVA/TIA, headache/migraine, MS, neuropathies, seizures, traumatic brain injury, fluid/electrolytes)

- **Nephrology**
  - Chronic Kidney Disease / End-Stage Renal Disease
  - (acid–base disorders, acute renal failure)

- **Psychiatry**
  - Delirium
    - (anxiety, bipolar, depression, schizophrenia, sleep disorders, substance abuse/misuse)
  - Depression (slower onset of action of SSRIs and higher incidence of uncommon adverse effects, geriatric depression scale)

- **Respiratory** (Asthma, COPD, cough/cold/allergy)

- **Urology** (bladder outlet obstruction, urinary incontinence)
**Practice Opportunities**

- Journal Club & Older Adult Education on Outcomes (converting journal club to layperson terms)
- Comprehensive MTM
- Verbal Geriatric Assessment (pain scale, Geriatric Depression Scale, memory scales)
- Physical Geriatric Assessment (Inhaler technique, glucometer)
- Outreach (Brown Bag assessment, Fall-Risk, Assessment)
- SOAP/Progress notes/Documentation
- In-services to Providers/Staff
- Interprofessional Participation (medication safety meetings, interdisciplinary rounds, P&T meetings)
- Transitions of Care (medication reconciliation, admission/discharge counseling)
- Complete geriatric related research project/MUE/DUE and manuscript for publication
- Attend national pharmacy and geriatric meetings (American Society of Consultant Pharmacists [ASCP], American Geriatrics Society [AGS], American Society of Health-System Pharmacists [ASHP], American Association of Colleges of Pharmacy, Gerontological Society of America [GSA])
- Visit pharmacy organization headquarters (ASCP)
- Become an active member in state and national pharmacy committees and/or geriatric societies
- Network/Collaborate with experts in geriatrics
- Teach at local pharmacy school (lectures, small group discussion, seminar, labs)

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**ASHP's Educational Outcomes, Goals, and Objectives in PGY-2 Geriatrics Residency**

- Serve as an authoritative resource on the optimal use of medications used with geriatric patients
- Optimize the continuum-of-care of geriatric patients; recognizing diseases, disorders, syndromes, and psychosocial needs unique to this population; by providing evidence-based, patient-centered therapy as an integral part of an interdisciplinary team.
- Manage and improve medication-use systems across the continuum of care for geriatric patients
- Demonstrate leadership and practice management skills
- Demonstrate excellence in the provision of training and educational activities for health care professionals, health care professionals in training, and the public
- Contribute to the body of geriatric pharmacotherapy knowledge
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<td>Statin risk vs benefit in patients &gt;75 years old</td>
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<td>Geriatric Pharmacokinetic and Pharmacodynamic changes on genomic outcomes</td>
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<td>Critical Care</td>
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<td>Out of hospital directives</td>
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<td>Emergency Medicine</td>
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<td>GEMS</td>
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<td>Non-verbal pain assessment</td>
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<td>Prescribing Cascades</td>
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<td>Altered disease presentation in older adults</td>
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<td>Health System Administration</td>
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<td>Create or assess need for a geriatric service</td>
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<td>and Leadership</td>
<td>Coordination of care with nursing homes, rehab facilities, or home health agencies</td>
<td>Role justification of a BCGP</td>
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<td>Adherence packaging</td>
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<td>Infectious Disease</td>
<td>STIs in older adults</td>
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<td>Atypical infectious presentation of older adults</td>
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<td>Herpes zoster</td>
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<td>Informatics</td>
<td>Shared medication information systems with common older adult systems</td>
<td>Integration of anticholinergic scores in Clinical Decision Support (CDS)</td>
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<td>Long term care systems</td>
<td>Development of tools to identify prescribing cascades</td>
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<td>Nursing home automation</td>
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<td>Internal Medicine</td>
<td>Relaxed goals/targets in older adults</td>
<td>Provide education to a stroke support group or other geriatric prevalent disease</td>
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<td>Prevention of delirium</td>
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<td>Anticholinergic burden assessment</td>
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<td>Investigational Drugs and</td>
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<td>Research</td>
<td>Advocate for nursing home patients to be in clinical trials</td>
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<td>Medication- Use Safety and</td>
<td>Prescribing cascades</td>
<td>Create or assess need for a geriatric service</td>
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<td>Policy</td>
<td>Coordination of care with nursing homes, rehab facilities, or home health agencies</td>
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<td>Neurology</td>
<td>End of Life care</td>
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<td>Geriatric Depression</td>
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| Nutrition Support | Dysphagia in dementia  
Strategic use of ‘sweet’ in older adults |
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<tr>
<td>Oncology</td>
<td>Routine screening appropriateness in older adults</td>
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</table>
| Pain Management and Palliative Care | Scheduled therapy needs in dementia  
Elder abuse through pain medicine denial  
NSAID dangers in older adults |
| Pharmacotherapy | Relaxed goals/targets in older adults  
Prevention of delirium  
Anticholinergic burden  
Non-verbal pain assessment  
Functional Incontinence  
Dose de-escalation  
Anticholinergic burden assessment |
| Pharmacy Outcomes and Healthcare Analytics | Analytics in a nursing home  
Tools, guidelines or measures to maximize appropriateness in older adults such as Beers criteria, fall risk assessment, anticholinergic assessment, and deprescribing |
| Population Health Management and Data Analytics | Ageism  
Tools, guidelines or measures to maximize appropriateness in older adults such as Beers criteria, fall risk assessment, anticholinergic assessment, and deprescribing  
Nursing home federal regulations |
| Psychiatric | Dementia related behaviors  
PK/PD impact on psychiatric medications |
|                   | Provide education to a stroke support group or other geriatric prevalent disease |
|                   | Partnership with ASCP  
Long term care pharmacy PBMs |
|                   | Geriatric focused project |
|                   | Geripsych units or clinics  
Projects to improve antipsychotic utilization in older adults |
## Geriatrics Rotation

### Facilitate the Following:

#### Topic Discussions
- Introduction to Geriatrics (epidemiology, biology of aging, pharmacokinetics, pharmacodynamics, elder abuse)
- Introduction to Geriatric Syndrome (falls/gait, weakness/frailty, dizziness/syncope, functional/cognitive decline, sensory deficit, appetite/weight loss/malnutrition/dysphagia, medication-induced disease, polypharmacy)
- Bowel-related Issues (constipation, diarrhea, fecal incontinence)
- Chronic Kidney Disease / End-Stage Renal Disease
- Delirium
- Dementia (Alzheimer’s disease, vascular-dementia, Lewy Body dementia, other)
- Ophthalmology (glaucoma/Macular degeneration)
- Osteoarthritis
- Osteoporosis (Paget’s Disease, Vitamin D/PTH disorders)
- Parkinson’s disease / Movement Disorders
- Urology (bladder outlet obstruction, urinary incontinence)

#### Topic Discussions
- Depression (slower onset of action of SSRIs, geriatric depression scale)
- Diabetes (relaxed A1c goal, hypoglycemia)
- CVA (accurate history needed included medications)
- Hyperlipidemia (new guidelines do not include aged >75)
- Hypertension (relaxed BP goal, hypotension)
- STIs (common in older adults → unprotected sex)
- Thyroid disease (Sub-clinical hyper/hypothyroidism)

#### Practice Opportunities
- Comprehensive MTM
- Verbal Geriatric Assessment (Pain scale, Geriatric Depression Scale, Memory Scales)
- Physical Geriatric Assessment (Inhaler technique, glucometer)
- Outreach (Brown Bag assessment, Fall-Risk, Assessment)
- In-services to Providers/Staff
- Interprofessional Participation (Med safety meeting, interdisciplinary rounds, P&T meetings)
- Transitions of Care (medication reconciliation, admission/discharge counseling)
- Complete geriatric related research project/MUE/DUE and manuscript for publication
- Attend national pharmacy and geriatric meetings (American Society of Consultant Pharmacists (ASCP), American Geriatric Society, American Society of Health-System Pharmacists (ASHP), American Association of Colleges of Pharmacy, Gerontological Society of America)
- Become an active member in state and national pharmacy committees
- Network/Collaborate with experts in geriatrics
- Teach at local pharmacy school (lectures, small group discussion, seminar, labs)
ADVANCED/SPECIALTY TRAINING FOR THE GERIATRIC SPECIALIST

The advanced geriatric pharmacist may be interested in expanding their clinical expertise in focused areas through continuing education programs, additional certifications, leadership experiences, and additional training. Below is a not an all-inclusive list of programs but could be a starting point for continuing professional development.

ADDITIONAL BOARD CERTIFICATIONS THROUGH THE BOARD OF PHARMACY SPECIALTIES (BPS):

Based on data from BPS from 2016-2019, many BCGP have dual or triple certification in pharmacotherapy, ambulatory care, psychiatry, critical care, nutrition support, and oncology among others.

Certificate programs:
- Pharmacogenomics (ACCP, ASHP)
- Medication reconciliation (ASHP)
- Medication therapy management (APhA)
- Medication safety (ASHP)
- Nutrition support (ASHP)
- Pharmacy informatics (ASHP)
- Pain management (ASHP)
- Diabetes management (ASHP)
- Anticoagulation (ASHP)
- Cardiovascular disease risk management (APhA)
- Patient-centered diabetes care (APhA)
- Health care fraud investigator (National Health Care Anti-Fraud Association)
- Health data analyst (American Health Information Management Association)
- American College of Sports Medicine
- Specialty pharmaceuticals (SPCB, NASP)
- Using Evidence to Advance your Practice (APhA)
- Advanced Preceptor Training (APhA)
- Advanced Clinical Pharmacy Practice (University of Arizona)
- Antimicrobial stewardship, long-term care or acute care (SIDP)

BECOME A CERTIFIED EDUCATOR IN:
- Pain (CPE)
- Diabetes (CDE)
- Anticoagulation specialist (CACP)

PROFESSIONAL DESIGNATIONS:
- Fellowship (national and local organizations)

LEADERSHIP:
- Leadership institute (APhA)
- Tideswell-AGS-ADGAP Emerging Leaders in Aging (AGS)
ABBREVIATIONS

A1C: Glycated Hemoglobin
ACPE: Accreditation Council for Pharmacy Education
ACS: Acute Coronary Syndrome
ADL: Activities of Daily Living
AIDS: Acquired Immunodeficiency Syndrome
ALS: Amyotrophic Lateral Sclerosis
APPE: Advanced Pharmacy Practice Experience
ASCP: American Society of Consultant Pharmacists
ASHP: American Society of Health-System Pharmacists
BCACP: Board Certified Ambulatory Care Pharmacists
BCPS: Board Certified Pharmacotherapy Specialist
BP: Blood Pressure
CAD: Coronary Artery Disease
CAPE: Center for the Advancement of Pharmaceutical Education
CDC: Centers for Disease Control and Prevention
CGP: Certified Geriatric Pharmacist
CHF: Congestive Heart Failure
COPD: Chronic Obstructive Pulmonary Disease
CVA: Cerebrovascular Accident
DUE: Drug Use Evaluation
FRAX: Fracture Risk Assessment Tool
GERD: Gastroesophageal Reflux Disease
GI: Gastrointestinal
HEENT: Head, Eyes, Ears, Nose and Throat
HIV: Human Immunodeficiency Virus
IADL: Instrument Activities of Daily Living
IBD: Inflammatory Bowel Disease
IPPE: Introductory Pharmacy Practice Experience
MS: Multiple Sclerosis
MTM: Medication Therapy Management
MUE: Medication Use Evaluation
N/V: Nausea/Vomiting
PAD: Peripheral Artery Disease
PEG: Percutaneous Endoscopic Gastronomy
PGY1: Postgraduate Year One
PGY2: Postgraduate Year Two
P&T: Pharmacy and Therapeutics
PTH: Parathyroid Hormone
PTSD: Post Traumatic Stress Disorder
PUD: Peptic Ulcer Disease
SOAP: Subjective Objective Assessment Plan
SSRI: Selective Serotonin Reuptake Inhibitor
STI: Sexually Transmitted Infection
START: Screening Tool to Alert doctors to the Right Treatment
STOPP: Screening Tool of Older People's potentially inappropriate Prescriptions
TIA: Transient Ischemic Attack
URI: Upper Respiratory Infection
WBC: White Blood Cell
RESOURCES

GENERAL RESOURCES

American Society of Consultant Pharmacists Practice Resource Center

ASCP-NCOA Falls Risk Reduction Toolkit


CDC: STEADI – Older Adult Fall Prevention


The Senior Care Pharmacist (née The Consultant Pharmacist) is the peer-reviewed journal of the American Society of Consultant Pharmacists (ASCP) and offers relevant information relating to geriatric education and senior-care pharmacist practice based information. It provides case studies that can be used as examples and discussion topics. The journal is dedicated to the medication therapy needs of older adults.

The American Journal of Pharmaceutical Education (AJPE) is the official scholarly publication of the American Association of Colleges of Pharmacy (AACP). This journal features articles that support all areas of pharmaceutical education.

Useful Position Statements/Practice Guidelines/General Background for Geriatrics

POSITION STATEMENTS


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HYPERTENSION GUIDELINES


DIABETES GUIDELINES


POTENTIALLY INAPPROPRIATE MEDICATIONS


GENERAL BACKGROUND FOR GERIATRICS


Elder Care Interprofessional Provider Sheets. Arizona Center on Aging.


TeamSTEPPS®. Agency for Healthcare Research and Quality.

Top 10 Particularly Dangerous Drug Interactions in Long-Term Care. The Society for Post-Acute and Long-Term Care Medicine.

Health Communication Skills and Interprofessional Care Resources

CULTURE AND HEALTH COMMUNICATION SKILLS


Centers for Disease Control and Prevention. Health Literacy: Older Adults.


Gerontologic Society of America. Communicating with Older Adults Publication Series Video

Publication: Communicating with Older Adults
International Council on Active Aging. ICAA’s Guidelines for effective communication with older adults.


National Institute on Aging. Tips with improving communication with older adults.

Stanford Geriatric Education Center. Center on Ethnogeriatrics, the study of health care for elders from diverse populations.


**INTERPROFESSIONAL CARE**

Interprofessional Education Collaborative.


**CURRICULUM/PRECEPTING RESOURCES**

American Geriatrics Society Resources, Publications and Tools

ASCP Practice Resource Center


CDC Tools for Cross-Cultural Communication and Language Access

Stanford School of Medicine Ethnogeriatrics

Geriatric Emergency Department Guidelines

AHRQ Health Literacy Universal Precautions Toolkit

Interprofessional Collaborator Assessment Rubric (ICAR)

Interprofessional education collaborative (IPEC) Core competencies for interprofessional Collaborative Practice: 2016 Update


MedEdPortal: Repository of Evidence-Based Teaching Activities for Health Profession Trainees Covering a Wide Range of Direct Patient Care Skills and Professional Competencies in Geriatrics and Other Specialty Areas


Partnership for Health In Aging Multidisciplinary Competencies in the Care of Older Adults at The Completion of the Entry-Level Health Professional Degree

Think Cultural Health: Resources for cross-cultural communication in the healthcare setting

Try This: Series Assessment Tools for Best Practices to care for older adults
RESIDENCY RESOURCES

ASHP Residency Information.

Educational Outcomes, Goals, and Objectives for Postgraduate Year Two (PGY2) Pharmacy Residencies in Geriatrics.

ASCP Geriatric Residencies.

ASCP Tips and Tricks for Residency/Fellowship Interviews. https://www.ascp.com/page/careerdevelopment

GERIATRIC APPE/ELECTIVE RESOURCES


OUTREACH RESOURCES


MTM RESOURCES


ASCP Medication Therapy Management Services (Member Log on Required): American Society for Consultant Pharmacists.

CAREER RESOURCES

American Society of Consultant Pharmacists (ASCP). Resources.


Professional Development/Geriatric Certification Resources

American Society of Health-Systems Pharmacists. Traineeships.

ASHP Clinical Leadership Development. Traineeships.


Certifications for Pharmacists. Available here

Deprescribing/ Online Deprescribing Networks/Tools

ABIM Foundation. Choosing Wisely.


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Deprescribing.Org


Lown Institute


Medstopper: Canada

Primary Health: Tasmania. Deprescribing Resources.


University of Maryland Optimizing medication management during the COVID-19 Pandemic: Implementation Guide for Post-Acute and Long-Term Care Complete guide available here

PHARMACOGENOMICS

Clinical Pharmacogenetics Implementation Consortium

PharmGKB
## Appendix A: Crosswalk with ACPE  Section I: Education Outcomes

The Accreditation Council for Pharmacy Education is responsible for the accreditation of professional-level pharmacy degree programs, as well as continuing-education programs for pharmacists. The ACPE outcomes are the foundation of the curriculum of each school of pharmacy.

<table>
<thead>
<tr>
<th>ACPE Outcome</th>
<th>ASCP’s Geriatric Pharmacy Curriculum Guide</th>
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</thead>
</table>
| **1.1. Foundational Knowledge**            | I.B.2. Describe the biology of aging and discuss common theories of aging.  
I.B.3. Discuss the physiologic changes of aging and how they impact the pharmacokinetic, pharmacodynamic and therapeutic use of medications.  
II.D.2. Evaluate the appropriateness of standards of practice or treatment guidelines for an older adult patient.  
II.D.4. Apply principles of pharmacokinetic and pharmacodynamic changes associated with aging to the design of the pharmacotherapy regimen.  
III.A.1. Identify reputable sources of information for the care of an older adult patient.  
III.A.4. Evaluate and apply evidence from primary literature as it pertains to the care of older adult patients.  
III.A.5. Evaluate the relevancy of clinical practice guidelines, standards of care and quality measures related to geriatric care. |
| The graduate must be able to develop, integrate, and apply knowledge from the foundational sciences (i.e., biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action, solve therapeutic problems, and advance population health and patient-centered care. |
| **2.1. Patient-centered care**             | I.D.1. Communicate drug and adherence information to older patients, their care partners and the interprofessional team.  
I.D.3. Demonstrate proficiency to interview and counsel older adults with varying degrees of health literacy, cognitive function, and communication abilities.  
I.F.3. Conduct a comprehensive medication review to minimize the impact of drug-related falls.  
II.B.1. Recognize the atypical clinical presentation and progression of common diseases found in older adults.  
II.B.2. Identify symptoms of drug-induced diseases and geriatric syndromes.  
II.C.1. Identify basic cognitive, functional, physical and safety assessments for common diseases in the older adult population.  
II.C.2. Demonstrate the ability to conduct basic cognitive, functional, physical and safety assessments for common diseases in the older adult population.  
II.C.4. Apply knowledge of geriatric syndromes and medication-related problems when interpreting assessment results.  
II.C.5. Obtain and interpret a comprehensive medication history in relation to an older adult’s current health status.  
II.C.6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug events, underuse, and potentially inappropriate prescribing).  
II.C.7. Appropriately recommend laboratory monitoring and interpret laboratory results for an older adult patient. |
| The graduate must be able to provide patient-centered care as the medication expert (collect and interpret evidence, prioritize, formulate assessments and recommendations, implement, monitor and adjust plans, and document activities). |
| II.C.10. Develop a problem list and prioritize care based upon severity of illness, patient preference, quality of life, and time to benefit. |
| II.C.12. Identify when appropriate to recommend deprescribing in an older adult. |
| II.D.1. Define therapeutic goals incorporating patient-specific principles (e.g., age, functionality, patient preference, pharmacogenomics, cultural). |
| II.D.3. Determine therapeutic options and the risk/benefit to the patient (e.g., no treatment, non-pharmacologic interventions, non-prescription medications, complementary and alternative medicine, and prescription medications). |
| II.D.4. Apply principles of pharmacokinetic and pharmacodynamic changes associated with aging to the design of the pharmacotherapy regimen. |
| II.D.6. Resolve and/or prevent medication-related problems in a given older adult patient. |
| II.E.1. Develop and implement an older adult patient-specific monitoring plan. |
| II.E.2. Revise therapeutic plans based upon changes in patient status. |
| II.G.1. Document rationale, actions, and outcomes from medication therapies for the healthcare team. |
| II.G.2. Write an action plan for use by the patient/care partner. |
| III.A.4. Evaluate and apply evidence from primary literature as it pertains to the care of older adult patients. |

### 2.2. Medication use systems management

The graduate must be able to manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems.

| I.E.1. Define the continuum of care available to older adults such as community resources, home care, formal and informal care partnerships, assisted living facilities, nursing facilities, sub-acute care facilities, hospice care, and hospitals. |
| I.E.3. Facilitate medication reconciliation to improve transitions across the continuum of care and reduce readmissions. |
| I.G.4. Acknowledge different systems for documentation and tracking of intervention data which can generate evidence of care. |
| III.A.2. Evaluate medication utilization at the system level to ensure safe and effective drug therapy. |
| III.A.3. Utilize a documentation system to evaluate outcomes of pharmacist intervention. |

### 2.3. Health and wellness

The graduate must be able to design prevention, intervention, and educational strategies for individuals and communities to manage chronic disease and improve health and wellness.

| I.B.4. Educate an individual on factors to consider when evaluating an intervention to slow the aging process. |
| I.C.1. Describe the interrelationship between social determinants of health and aging (e.g., family, cultural, community, housing, access to care, policy issues). |
| I.C.3. Identify and manage the social issues of medication use for an individual patient’s therapy. |
| I.C.4. Describe the interrelationship between an older adult and their formal and informal care partners. |
| I.C.5. Recognize available resources and develop strategies to support older adults and care partners. |
| I.C.9. Define elder abuse/neglect (e.g., physical, psychological, and financial). |
| I.C.10. Recognize and report the signs of elder abuse/neglect. |
| I.C.12. Consider financial/reimbursement issues (e.g., formularies, insurance coverage) when making therapeutic recommendations. |
| I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult. |
| I.C.14. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals. |
| I.C.16. Discuss the concept of ageism and how it may impact the treatment of patients |
| I.D.2. Recognize the prevalence of limited health literacy in the older adult population. |
| I.E.2. Participate in interprofessional decision making regarding appropriate levels of care for individual patients. |
| I.F.1. Describe and advocate for health care initiatives related to wellness and health promotion (e.g., nutrition, physical activity, medication adherence, immunizations, and health screenings). |
| I.F.2. Counsel an older adult on the utility of health screenings and preventive measures. |
| I.F.3. Conduct a comprehensive medication review to minimize the impact of drug-related falls. |
| II.C.3. Assess social and cultural determinants of health outcomes. |
| III.B.3. Respect the roles and responsibilities of the pharmacist and other healthcare professionals within the interprofessional team. |

**2.4. Population-based care**
The graduate must be able to describe how population-based care influences patient-centered care and influences the development of practice guidelines and evidence-based best practices.

| I.A.1. Define the demographic, economic and medical characteristics of older adults (e.g., gender, ethnicity, geographic, socioeconomic, multi-morbidity, disability, and medication use patterns). |
| I.A.2. Recognize the heterogeneity of the older adult population |
| I.B.1. Recognize the spectrum of aging from healthy aging to frailty. |
| I.C.7. Promote patient-centered decision making and care. |
| I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult. |
| I.D.2. Recognize the prevalence of limited health literacy in the older adult population. |
| I.E.4. Discuss the philosophy and practice of hospice/palliative care. |
| I.E.5. Incorporate life expectancy and end-of-life issues in the decision-making of appropriate use of medications. |
| II.A. Describe incidence and prevalence of diseases in the older adult population  
III.A.5. Evaluate the relevancy of clinical practice guidelines, standards of care and quality measures related to geriatric care.  
III.D.1. Develop, implement and assess formulary management/protocols as they pertain to the care of the older adult patient. |
|---|
| **3.1. Problem Solving**  
The graduate must be able to identify problems; explore and prioritize potential strategies; and design, implement, and evaluate a viable solution.  
I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population.  
I.D.2. Recognize the prevalence of limited health literacy in the older adult population.  
I.D.4. Recognize barriers to effective communication (e.g., cognitive, sensory, cultural, and language).  
II.C.6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug events, underuse, and potentially inappropriate prescribing).  
II.C.8. Identify and recognize potential functional barriers to the older adult patient (e.g., transportation, housing, economics, and social support structure).  
II.C.9. Identify potential environmental causes of decline in activities of daily living (ADL), instrumental activities of daily living (IADL), and cognitive function.  
II.C.12. Identify when appropriate to recommend deprescribing in an older adult.  
II.D.7. Optimize a medication regimen to minimize polypharmacy, prescribing cascades, and anticholinergic burden.  
II.E.1. Develop and implement an older adult patient-specific monitoring plan  
II.E.2. Revise therapeutic plans based upon changes in patient status. |
| **3.2. Educator**  
The graduate must be able to educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.  
I.B.4. Educate an individual on factors to consider when evaluating an intervention to slow the aging process.  
I.D.1. Communicate drug and adherence information to older patients, their care partners and the interprofessional team.  
I.D.3. Demonstrate proficiency to interview and counsel older adults with varying degrees of health literacy, cognitive function, and communication abilities.  
I.D.4. Recognize barriers to effective communication (e.g., cognitive, sensory, cultural, and language).  
I.F.1. Describe and advocate for health care initiatives related to wellness and health promotion (e.g., nutrition, physical activity, medication adherence, immunizations, and health screenings).  
I.F.2. Counsel an older adult on the utility of health screenings and preventive measures.  
II.F.1. Utilize educational material appropriate to the specific patient/care partner. |
I.C.8. Describe advanced directives, living wills and the role of a power of attorney. 
I.C.10. Recognize and report the signs of elder abuse/neglect. 
I.C.11. Describe the options for coverage and benefits older adults may utilize (e.g., Medicare, Medicaid and supplemental coverage). 
I.C.12. Consider financial/reimbursement issues (e.g., formularies, insurance coverage) when making therapeutic recommendations. 
II.C.11. Identify patients who need referrals to other health and non-health professionals. 
II.C.12. Identify when appropriate to recommend deprescribing in an older adult. 
II.F.4. Assist the patient/care partner in identifying, procuring, and utilizing adherence strategies and devices. 
III.C.4. Promote advocacy for geriatric patient care and the pharmacy profession. |
| --- | --- |
| The graduate must be able to represent the patients’ best interest. | I.C.7. Promote patient-centered decision making and care. 
I.C.8. Describe advanced directives, living wills and the role of a power of attorney. 
I.C.10. Recognize and report the signs of elder abuse/neglect. 
I.C.11. Describe the options for coverage and benefits older adults may utilize (e.g., Medicare, Medicaid and supplemental coverage). 
I.C.12. Consider financial/reimbursement issues (e.g., formularies, insurance coverage) when making therapeutic recommendations. 
II.C.11. Identify patients who need referrals to other health and non-health professionals. 
II.C.12. Identify when appropriate to recommend deprescribing in an older adult. 
II.F.4. Assist the patient/care partner in identifying, procuring, and utilizing adherence strategies and devices. 
III.C.4. Promote advocacy for geriatric patient care and the pharmacy profession. |
I.D.1. Communicate drug and adherence information to older patients, their care partners and the interprofessional team. 
I.E.2. Participate in interprofessional decision making regarding appropriate levels of care for individual patients. 
II.C.11. Identify patients who need referrals to other health and non-health professionals. 
II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles. 
III.B.2. Recognize emerging opportunities for geriatric practice. 
III.B.3. Respect the roles and responsibilities of the pharmacist and other healthcare professionals within the interprofessional team. 
III.C.5. Demonstrate decision making skills when implementing care for older adults to improve outcomes and quality measures. |
| The graduate must be able to actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs. | I.C.7. Promote patient-centered decision making and care. 
I.D.1. Communicate drug and adherence information to older patients, their care partners and the interprofessional team. 
I.E.2. Participate in interprofessional decision making regarding appropriate levels of care for individual patients. 
II.C.11. Identify patients who need referrals to other health and non-health professionals. 
II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles. 
III.B.2. Recognize emerging opportunities for geriatric practice. 
III.B.3. Respect the roles and responsibilities of the pharmacist and other healthcare professionals within the interprofessional team. 
III.C.5. Demonstrate decision making skills when implementing care for older adults to improve outcomes and quality measures. |
| 3.5. Cultural sensitivity | I.A.1. Define the demographic, economic and medical characteristics of older adults (e.g., gender, ethnicity, geographic, socioeconomic, multi-morbidity, disability, and medication use patterns). 
I.C.1. Describe the interrelationship between social determinants of health and aging (e.g., family, cultural, community, housing, access to care, policy issues). 
I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult. |
| The graduate must be able to recognize social determinants of health to diminish disparities and inequities in access to quality care. | I.A.1. Define the demographic, economic and medical characteristics of older adults (e.g., gender, ethnicity, geographic, socioeconomic, multi-morbidity, disability, and medication use patterns). 
I.C.1. Describe the interrelationship between social determinants of health and aging (e.g., family, cultural, community, housing, access to care, policy issues). 
I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult. |
<table>
<thead>
<tr>
<th>3.6. Communication</th>
<th>The graduate must be able to effectively communicate verbally and nonverbally when interacting with an individual, groups, and organization.</th>
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<tbody>
<tr>
<td>I.D.1. Communicate drug and adherence information to older patients, their care partners and the interprofessional team.</td>
<td>I.D.1. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals.</td>
</tr>
<tr>
<td>I.D.3. Demonstrate proficiency to interview and counsel older adults with varying degrees of health literacy, cognitive function, and communication abilities.</td>
<td>I.C.14. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals.</td>
</tr>
<tr>
<td>I.F.2. Ensure understanding of medication use and its role in the overall treatment plan.</td>
<td>I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population.</td>
</tr>
<tr>
<td>I.F.3. Conduct a medication review to minimize the impact of drug-related falls.</td>
<td>I.C.16. Discuss the concept of ageism and how it may impact the treatment of patients.</td>
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<tr>
<td>II.C.2. Demonstrate the ability to conduct basic cognitive, functional, physical and safety assessments for common diseases in the older adult population.</td>
<td>I.D.2. Recognize the prevalence of limited health literacy in the older adult population.</td>
</tr>
<tr>
<td>II.C.3. Assess social and cultural determinants of health outcomes.</td>
<td>I.D.3. Demonstrate proficiency to interview and counsel older adults with varying degrees of health literacy, cognitive function, and communication abilities.</td>
</tr>
<tr>
<td>II.F.2. Ensure understanding of medication use and its role in the overall treatment plan.</td>
<td>I.D.4. Recognize barriers to effective communication (e.g., cognitive, sensory, cultural, and language).</td>
</tr>
<tr>
<td>II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles.</td>
<td>II.C.5. Obtain and interpret a comprehensive medication history in relation to an older adult’s current health status.</td>
</tr>
<tr>
<td>II.G.1. Document rationale, actions, and outcomes from medication therapies for the healthcare team.</td>
<td>II.F.2. Ensure understanding of medication use and its role in the overall treatment plan.</td>
</tr>
<tr>
<td>II.G.3. Perform and document comprehensive medication reconciliation across the continuum of care.</td>
<td>II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles.</td>
</tr>
<tr>
<td>II.G.4. Acknowledge different systems for documentation and tracking of intervention data which can generate evidence of care.</td>
<td>II.G.1. Document rationale, actions, and outcomes from medication therapies for the healthcare team.</td>
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</table>

4.1. Self-awareness
The graduate must be able to examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and

<table>
<thead>
<tr>
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<th>The graduate must be able to examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and</th>
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<tbody>
<tr>
<td>I.C.14. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals.</td>
<td>I.C.14. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals.</td>
</tr>
<tr>
<td>I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population.</td>
<td>I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population.</td>
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emotions that could enhance or limit personal and professional growth.

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<tr>
<th>4.2. Leadership</th>
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<tr>
<td>The graduate must be able to demonstrate responsibility for creating and achieving shared goals, regardless of position.</td>
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<tr>
<th>4.3. Innovation and Entrepreneurship</th>
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<tr>
<td>The graduate must be able to engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.</td>
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<tr>
<th>4.4. Professionalism</th>
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<tr>
<td>The graduate must be able to exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.</td>
</tr>
</tbody>
</table>

| I.D.4. Recognize barriers to effective communication (e.g., cognitive, sensory, cultural, and language). |
| III.C.3. Develop strategies for keeping up-to-date on regulatory changes and their impact on geriatric care |

| I.E.2. Participate in interprofessional decision making regarding appropriate levels of care for individual patients. |
| III.B.3. Respect the roles and responsibilities of the pharmacist and other healthcare professionals within the interprofessional team. |
| III.C.5. Demonstrate decision making skills when implementing care for older adults to improve outcomes and quality measures. |

| III.B.1. Identify existing and emerging models of practice in geriatric care. |
| III.B.2. Recognize emerging opportunities for geriatric practice. |
| III.C.1. Identify agencies and organizations integral in the development and enforcement of geriatric public policy. |
| III.C.4. Promote advocacy for geriatric patient care and the pharmacy profession. |
| III.D.2. Demonstrate knowledge of sources and processes of compensation for geriatric pharmacy services. |

| I.C.6. Recognize ethical dilemmas through a systematic decision-making process based on clearly articulated ethical theories and principles (e.g., self-determination, autonomy, justice in the distribution of resources). |
| I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult. |
| I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population. |
| III.B.4. Discuss board certifications available for pharmacists providing geriatric care (e.g., BCGP, CDE, other advanced training). |
| III.C.2. Identify and adhere to site-specific regulations for geriatric care. |

Appendix B: Crosswalk with Core Competencies for Interprofessional Collaborative Practice.

In 2009, six national associations of schools of health professions formed a collaborative to promote and encourage constituent efforts that would advance substantive interprofessional learning experiences. The goal was, and remains, to help prepare future health professionals for enhanced team-based care of patients and improved population health outcomes. The collaborative, representing dentistry, nursing, medicine, osteopathic medicine, pharmacy, and public health, convened an expert panel of representatives from each of the six IPEC sponsor professions to create core competencies for interprofessional collaborative practice, to guide curriculum development across health professions schools. The competencies and implementation recommendations subsequently published in the 2011 Core Competencies for Interprofessional Collaborative Practice have been broadly disseminated.

In 2016 the IPEC Board aims to: reaffirm the original competencies, ground the competency model firmly under the singular domain of Interprofessional Collaboration, and broaden the competencies to better integrate population health approaches across the health and partner professions so as to enhance collaboration for improving both individual care and population health outcomes.

<table>
<thead>
<tr>
<th>Core Competencies for Interprofessional Collaborative Practice: 2016 Update</th>
<th>ASCP’s Geriatric Pharmacy Curriculum Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Values/Ethics for Interprofessional Practice</strong></td>
<td></td>
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<tr>
<td>Work with individuals of other professions to maintain a climate of mutual respect and shared values.</td>
<td>I.C.7. Promote person-centered decision making and care.</td>
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<tr>
<td></td>
<td>I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult population.</td>
</tr>
<tr>
<td></td>
<td>I.C.14. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals.</td>
</tr>
<tr>
<td></td>
<td>I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population</td>
</tr>
<tr>
<td><strong>Roles/Responsibilities</strong></td>
<td></td>
</tr>
<tr>
<td>Use the knowledge of one’s own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations.</td>
<td>I.E.2. Participate in interprofessional decision making regarding appropriate levels of care for individual patients.</td>
</tr>
<tr>
<td></td>
<td>II.C.11. Identify patients who need referrals to other health and non-health professionals.</td>
</tr>
</tbody>
</table>

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| II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles. |
| III.B.3. Respect the roles and responsibilities of the pharmacist and other healthcare professionals within the interprofessional team. |

### Interprofessional Communication

Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease.

- I.C.4. Describe the interrelationship between an older adult and their formal and informal caregivers.
- I.C.5. Recognize available resources and develop strategies to support older adults and caregivers.
- I.D.1. Communicate drug and adherence information to older patients, their caregivers and the interprofessional team.
- II.G.1. Document rationale, actions, and outcomes from medication therapies for the healthcare team.

### Teams and Teamwork

Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.

- III.B.3. Respect the roles and responsibilities of the pharmacist and other healthcare professionals within the interprofessional team.

https://nebula.wsimg.com/2f68a39520b03336b41038c370497473?AccessKeyId=DC06780E69ED19E2B3A5&disposition=0&alloworigin=1
Appendix C: Crosswalk with the Curricular Framework: Core Competencies in Multicultural Geriatric Care (2004)

The Curricular Framework: Core Competencies in Multicultural Geriatric Care was created with recommendations from the University of California Academic Geriatric Resource Program and the Ethnogeriatrics Committee of the American Geriatrics Society. The objective was to develop cultural competencies for geriatric faculty for all healthcare disciplines. The competencies focus on preparing healthcare professionals to work effectively in cross-cultural situations.

<table>
<thead>
<tr>
<th>Core Competencies in Multicultural Geriatric Care</th>
<th>ASCP’s Geriatric Pharmacy Curriculum Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudes</strong>&lt;br&gt;Assess awareness of personal beliefs before interacting with others.</td>
<td>I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult population.&lt;br&gt;I.C.14. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals.&lt;br&gt;I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population.</td>
</tr>
<tr>
<td><strong>Knowledge</strong>&lt;br&gt;Use data to influence attitudes and improve healthcare outcomes.</td>
<td>I.A.1. Define the demographic, economic and medical characteristics of older adults (e.g., gender, ethnicity, geographic, socioeconomic, multi-morbidity, disability, and medication use patterns).&lt;br&gt;I.C.16. Discuss the concept of ageism and how it may impact the treatment of patients.&lt;br&gt;I.D.4. Recognize barriers to effective communication (e.g., cognitive, sensory, cultural, and language).&lt;br&gt;II.C.8. Identify and recognize potential functional barriers to the older adult patient (e.g., transportation, housing, economics, and social support structure).&lt;br&gt;II.D.1. Define therapeutic goals incorporating patient-specific principles (e.g., age, functionality, patient preference, pharmacogenomics, cultural).</td>
</tr>
<tr>
<td><strong>Skills</strong>&lt;br&gt;Demonstrate competency in understanding cultural needs by applying attitudes and knowledge when working with patients.</td>
<td>II.C.3. Assess social and cultural determinants of health outcomes.</td>
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</table>

Appendix D: Crosswalk with Partnership with Health in Aging Multidisciplinary Competencies in the Care of Older Adults at the Completion of the Entry-level Health Professional Degree (2010)

The Partnership for Health in Aging, originally convened by the American Geriatrics Society, is a coalition of more than 30 health professions organizations involved in the care of older adults. As one of its first actions, the Partnership for Health in Aging developed a statement of educational core competencies unique to the care of older adults that are relevant to all health professions. The competencies are applicable to all health professions at the completion of the entry-level degree program.

### Partnership with Health in Aging Multidisciplinary Competencies in the Care of Older Adults at the Completion of the Entry-level Health Professional Degree

<table>
<thead>
<tr>
<th>Domain #1: Health Promotion &amp; Safety</th>
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<tbody>
<tr>
<td>1. Advocate to older adults and their caregivers interventions and behaviors that promote physical and mental health, nutrition, function, safety, social interactions, independence, and quality of life.</td>
</tr>
<tr>
<td>I.F.1. Describe and advocate health care initiatives related to wellness and health promotion (e.g., nutrition, physical activity, medication adherence, immunizations, and health screenings).</td>
</tr>
<tr>
<td>I.F.2. Counsel an older adult on the utility of health screenings and preventive measures.</td>
</tr>
<tr>
<td>II.C.11. Identify patients who need referrals to other health and non-health professionals or services.</td>
</tr>
<tr>
<td>2. Identify and inform older adults and their caregivers about evidence-based approaches to screening, immunizations, health promotion, and disease prevention.</td>
</tr>
<tr>
<td>I.F.1. Describe and advocate health care initiatives related to wellness and health promotion (e.g., nutrition, physical activity, medication adherence, immunizations, and health screenings).</td>
</tr>
<tr>
<td>I.F.2. Counsel an older adult on the utility of health screenings and preventive measures.</td>
</tr>
<tr>
<td>3. Assess specific risks and barriers to older adult safety, including falls, elder mistreatment, and other risks in community, home, and care environments.</td>
</tr>
<tr>
<td>I.C.2. Recognize signs of substance and medication misuse/abuse in older adults.</td>
</tr>
<tr>
<td>I.C.9. Define elder abuse/neglect (e.g., physical, psychological, and financial).</td>
</tr>
<tr>
<td>I.C.10. Recognize and report the signs of elder abuse/neglect.</td>
</tr>
<tr>
<td>I.F.3. Conduct a comprehensive medication review to minimize the impact of drug-related falls.</td>
</tr>
<tr>
<td>II.C.1. Identify basic cognitive, functional physical and safety assessments for common diseases in the older adult population.</td>
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<tr>
<td>II.C.2. Demonstrate the ability to conduct basic cognitive, functional, physical and safety assessments for common diseases in the older adult population.</td>
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<td>II.C.3. Assess social and cultural determinants of health outcomes.</td>
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<tr>
<td>II.C.4. Apply knowledge of geriatric syndromes and medication-related problems when interpreting assessment results.</td>
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<tr>
<td>II.C.8. Identify and recognize potential functional barriers to the older adult patient (e.g., transportation, housing, economics, and social support structure).</td>
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<tr>
<td>II.C.9. Identify potential environmental causes of decline in activities of daily living (ADL), instrumental activities of daily living (IADL), and cognitive function.</td>
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| II.C.6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug event, underuse, potentially inappropriate prescribing) |
| II.D.4. Apply principles of pharmacokinetic and pharmacodynamic changes associated with aging to the design of the pharmacotherapy regimen. |
| II.D.5. Design and recommend age/person specific regimen including medication, dose, dosage form, dosing interval, and route of administration. |
| II.D.6. Resolve and/or prevent medication-related problems in a given older adult patient. |

4. Recognize the principles and practices of safe, appropriate, and effective medication use in older adults.

| I.A.2. Recognize the heterogeneity of the older adult population |
| I.B.4. Educate an individual on factors to consider when evaluating an intervention to slow the aging process |
| II.C.6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug event, underuse, potentially inappropriate prescribing) |

| II.C.1. Identify basic cognitive, functional, physical and safety assessments for common diseases in the older adult population. |
| II.C.2. Demonstrate the ability to conduct basic cognitive, functional, physical and safety assessments for common diseases in the geriatric population. |
| II.C.3. Assess social and cultural determinants of health outcomes. |
| II.C.6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug event, underuse, potentially inappropriate prescribing) |

5. Apply knowledge of the indications and contraindications for, risks of, and alternatives to the use of physical and pharmacological restraints with older adults.

| I.C.7. Promote person-centered decision making and care |
| II.C.6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug event, underuse, potentially inappropriate prescribing) |

| II.D.6. Resolve and/or prevent medication-related problems in a given older adult patient. |

**Domain #2: Evaluation and Assessment**

| I.B.2. Describe the biology of aging and discuss common theories of aging. |

| Domain #2: Evaluation and Assessment |
| 1. Define the purpose and components of an interdisciplinary, comprehensive geriatric assessment and the roles individual disciplines play in conducting and interpreting a comprehensive geriatric assessment |
| II.C.1. Identify basic cognitive, functional, physical and safety assessments for common diseases in the older adult population. |
| II.C.2. Demonstrate the ability to conduct basic cognitive, functional, physical and safety assessments for common diseases in the geriatric population. |
| II.C.3. Assess social and cultural determinants of health outcomes. |
| II.C.6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug event, underuse, potentially inappropriate prescribing) |

2. Apply knowledge of the biological, physical, cognitive, psychological, and...
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<tr>
<th><strong>Domain #1: Knowledge of Geriatric Pharmacology and Therapeutics</strong></th>
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<tbody>
<tr>
<td><strong>I.B.3. Discuss the physiologic changes of aging and how they impact the pharmacokinetic, pharmacodynamic and therapeutic use of medications.</strong></td>
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<tr>
<td><strong>I.C.1. Describe the interrelationship between social issues and aging (e.g., family, cultural, community, housing, access to care, policy issues).</strong></td>
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<td><strong>II.C.9. Identify potential environmental causes of decline in activities of daily living (ADL), instrumental activities of daily living (IADL), and cognitive function.</strong></td>
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<tr>
<td><strong>3. Choose, administer, and interpret a validated and reliable tool/instrument appropriate for use with a given older adult to assess: a) cognition, b) mood, c) physical function, d) nutrition, and e) pain.</strong></td>
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<tr>
<td><strong>II.C.1. Identify basic cognitive, functional physical and safety assessments for common diseases in the older adult population.</strong></td>
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<tr>
<td><strong>II.C.2. Demonstrate the ability to conduct basic cognitive, functional, physical and safety assessments for common diseases in the older adult population.</strong></td>
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<td><strong>4. Demonstrate knowledge of the signs and symptoms of delirium and whom to notify if an older adult exhibits these signs and symptoms.</strong></td>
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<td><strong>II.B.2. Identify symptoms of drug-induced disease and geriatric syndromes</strong></td>
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<td><strong>II.C.1. Identify basic cognitive, functional physical and safety assessments for common diseases in the older adult population.</strong></td>
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<td><strong>II.C.6. Assess a medication regimen for medication-related problems (e.g., polypharmacy, non-adherence, drug interactions, adverse drug event, underuse, potentially inappropriate prescribing)</strong></td>
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<td><strong>II.C.11. Identify patients who need referrals to other health and non-health professionals or services.</strong></td>
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<td><strong>II.D.6. Resolve and/or prevent medication-related problems in a given older adult patient.</strong></td>
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<tr>
<td><strong>5. Develop verbal and nonverbal communication strategies to overcome potential sensory, language, and cognitive limitations in older adults.</strong></td>
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<td><strong>I.D.2. Recognize the prevalence of limited health literacy in the older adult population.</strong></td>
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<tr>
<td><strong>I.D.3 Demonstrate proficiency to interview and counsel older adults with varying degrees of health literacy, cognitive function, and communication abilities.</strong></td>
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**Domain #3: Care Planning and Coordination Across the Care Spectrum (Including End-of-Life Care)**

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<tr>
<th><strong>Domain #3: Care Planning and Coordination Across the Care Spectrum (Including End-of-Life Care)</strong></th>
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<tbody>
<tr>
<td><strong>1. Develop treatment plans based on best evidence and on person-centered and directed care goals.</strong></td>
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<td><strong>I.C.7. Promote patient-centered decision making and care.</strong></td>
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<td><strong>II.D.2. Evaluate the appropriateness of standards of practice or treatment guidelines for an older adult patient.</strong></td>
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<td><strong>III.A.4. Evaluate and apply evidence from primary literature as it pertains to the care of older adults.</strong></td>
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<tr>
<td><strong>III.A.5. Evaluate the relevancy of clinical practice guidelines, standards of care and quality measures related to geriatric care.</strong></td>
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2. Evaluate clinical situations where standard treatment recommendations, based on best evidence, should be modified with regard to older adults’ preferences and treatment/care goals, life expectancy, co-morbid conditions, and/or functional status.

I.C.7. Promote patient-centered decision making and care.
I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult population
I.D.1. Communicate drug and adherence information to older patients, their caregivers and the interprofessional team.
I.E.5. Incorporate life expectancy and end-of-life issues in the decision-making of appropriate use of medications.
II.C.10. Develop a problem list and prioritize care based upon severity of illness, patient preference, quality of life, and time to benefit.
III.A.5. Evaluate the relevancy of clinical practice guidelines, standards of care and quality measures related to geriatric care.

3. Develop advanced care plans based on older adults’ preferences and treatment/care goals, and their physical, psychological, social, and spiritual needs.

I.C.7. Promote patient-centered decision making and care.
II.D.1. Define therapeutic goals incorporating person-specific principles (e.g., age, functionality, patient preference, pharmacogenomics, cultural).

4. Recognize the need for continuity of treatment and communication across the spectrum of services and during transitions between care settings, utilizing information technology where appropriate and available.

I.E.1. Define the continuum of care available to older adults such as community resources, home care, formal and informal care giverships, assisted living facilities, nursing facilities, sub-acute care facilities, hospice care, and hospitals.
I.E.2. Participate in interprofessional decision making regarding appropriate levels of care for individual patients.
I.E.3. Facilitate medication reconciliation to improve transitions across the continuum of care.

**Domain #4: Interdisciplinary and Team Care**

1. Distinguish among, refer to, and/or consult with any of the multiple healthcare professionals who work with older adults, to achieve positive outcomes.

II.C.11. Identify patients who need referrals to other health and non-health professionals or services.
II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles.
III.B.3. Understand the roles and responsibilities of the pharmacist and other healthcare professionals within the interprofessional team.

2. Communicate and collaborate with older adults, their caregivers, healthcare professionals, and direct-care workers to incorporate discipline-specific information into overall team care planning and implementation.

I.C.4. Describe the interrelationship between an older adult and their formal and informal care partners.
I.C.14. Recognize differences in healthcare beliefs which may exist between patients and healthcare professionals
I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population.
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<td><strong>Domain #5: Caregiver Support</strong></td>
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<td>1. Assess caregiver knowledge and expectations of the impact of advanced age and disease on health needs, risks, and the unique manifestations and treatment of health conditions.</td>
<td>II.B.1. Recognize the atypical clinical presentation and progression of common diseases found in older adults. II.F.2. Ensure understanding of medication use and its role in the overall treatment plan.</td>
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<tr>
<td>2. Assist caregivers to identify, access, and utilize specialized products, professional services, and support groups that can assist with care-giving responsibilities and reduce caregiver burden.</td>
<td>I.C.4. Describe the interrelationship between an older adult and their formal and informal care partners. II.F.4. Assist the patient/caregiver in identifying, procuring, and utilizing adherence strategies and devices.</td>
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<td>3. Know how to access and explain the availability and effectiveness of resources for older adults and caregivers that help them meet personal goals, maximize function, maintain independence, and live in their preferred and/or least restrictive environment.</td>
<td>II.F.1. Utilize educational material appropriate to the specific patient/caregiver. II.F.2. Ensure understanding of medication use and its role in the overall treatment plan. II.F.3. Educate patient/caregiver regarding potential problems with patient care management and administration of medications.</td>
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<tr>
<td>4. Evaluate the continued 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.</td>
<td>II.E.2. Revise therapeutic plans based upon changes in patient status.</td>
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<td><strong>Domain #6: Healthcare Systems and Benefits</strong></td>
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<tr>
<td>1. Serve as an advocate for older adults and caregivers within various healthcare systems and settings.</td>
<td>III.C.4. Promote advocacy for geriatric patient care and the pharmacy profession.</td>
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<tr>
<td>2. Know how to access, and share with older adults and their caregivers, information about the healthcare benefits of programs such as Medicare, Medicaid, Veterans’ services, Social Security, and other public programs.</td>
<td>I.C.11. Describe the options for coverage and benefits older adults may utilize (e.g., Medicare, Medicaid and supplemental coverage). I.C.12. Consider financial/reimbursement issues (e.g., formularies, insurance coverage) when making therapeutic recommendations.</td>
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<tr>
<td>3. Provide information to older adults and their caregivers about the continuum of long-term care services and supports – such as community resources, home care, assisted living facilities, hospitals, nursing facilities, sub-acute care facilities, and hospice care.</td>
<td>I.E.1. Define the continuum of care available to older adults such as community resources, home care, formal and informal care giverships, assisted living facilities, nursing facilities, sub-acute care facilities, hospice care, and hospitals. III.A.1. Identify reputable sources of information for the care of an older adult patient.</td>
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Appendix E: Crosswalk with Pharmacists’ Patient Care Process


The following was created by The Joint Commission of Pharmacy Practitioners (JCPP). The pharmacists’ patient care process (PPCP) “encompasses a contemporary and comprehensive approach to patient-centered care that is delivered in collaboration with other members of the health care team.” The JCPP developed the process after examining the literature pertaining to pharmaceutical care and medication therapy management.

ASCP Geriatric Curriculum Guide Competencies Mapped to the PPCP:

<table>
<thead>
<tr>
<th>PPCP</th>
<th>ASCP Geriatric Curriculum Guide Competencies</th>
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| Patient-Centered Care | I.C.7. Promote person-centered decision making and care.  
I.C.13. Value and appreciate ethnic, racial and cultural differences in the older adult.  
II.D.1. Define therapeutic goals incorporating patient-specific principles (e.g., age, functionality, patient preference, pharmacogenomics, cultural).  
II.D.3. Determine therapeutic options and the risk/benefit to the patient (e.g., no treatment, non-pharmacologic interventions, non-prescription medications, complementary and alternative medicine, and prescription medications). |
| Collect | I.C.3. Identify and manage the social issues of medication use for an older adult’s therapy.  
I.D.2. Recognize the prevalence of limited health literacy in the older adult population.  
I.D.3. Demonstrate proficiency to interview and counsel older adults with varying degrees of health literacy, cognitive function, and communication abilities.  
I.F.3. Conduct a medication review to minimize the impact of drug-related falls.  
II.B.1. Recognize the atypical clinical presentation and progression of common diseases found in older adults.  
II.B.2. Identify symptoms of drug-induced diseases and geriatric syndromes.  
II.C.2. Demonstrate the ability to conduct basic cognitive, functional, physical and safety assessments for common disease in the older adult population.  
II.C.5. Obtain and interpret a comprehensive medication history in relation to an older adult’s current health status. |
| --- | --- |
I.C.10. Recognize and report the signs of elder abuse/neglect.  
I.C.12. Consider financial/reimbursement issues (e.g., formularies, insurance coverage) when making therapeutic recommendations.  
I.C.15. Demonstrate the ability to assess personal misconceptions, generalities and stereotypes which may impact the care of an ethnically, racially and culturally diverse patient population.  
I.F.3. Conduct a medication review to minimize the impact of drug-related falls.  
I.E.5. Incorporate life expectancy and end-of-life issues in the decision-making of appropriate use of medications.  
II.B.1. Recognize the atypical clinical presentation and progression of common diseases found in older adults.  
II.B.2. Identify symptoms of drug-induced diseases and geriatric syndromes.  
II.C.3. Assess social and cultural determinants of health outcomes.  
II.C.4. Apply knowledge of geriatric syndromes and medication-related problems when interpreting assessment results.  
II.C.5. Obtain and interpret a comprehensive medication history in relation to an older adult’s current health status.  
II.C.6. Assess a medication regimen for medication-related problems. (e.g., polypharmacy, non-adherence, drug interactions, adverse drug event, underuse, potentially inappropriate prescribing).  
II.C.7. Appropriately recommend laboratory monitoring and interpret laboratory results for an older adult patient.  
II.C.9. Identify potential environmental causes of decline in ADL (activities of daily living), IADL (independent activities of daily living) and cognitive function. |
II.C.10. Develop a problem list and prioritize care based upon severity of illness, patient preference, quality of life, and time to benefit.
II.C.11. Identify patients who need referrals to other health and non-health professionals or services.
II.C.12. Identify when appropriate to recommend deprescribing in an older adult patient.
II.D.1. Define therapeutic goals incorporating patient-specific principles (e.g., age, functionality, patient preference, pharmacogenomics, cultural).
II.D.3. Determine therapeutic options and the risk/benefit to the patient (e.g., no treatment, non-pharmacologic interventions, non-prescription medications, complementary and alternative medicine, and prescription medications).
III.A.1. Identify reputable sources of information for the care of an older adult patient.
III.A.2. Evaluate medication utilization at the system level to ensure safe and effective drug therapy.
III.A.4. Evaluate and apply evidence from primary literature as it pertains to the care of older adult patients.
III.A.5. Evaluate the relevancy of clinical practice guidelines, standards of care and quality measures related to geriatric care.
III.D.1. Develop, implement and assess formulary management/protocols as they pertain to the care of the older adult patient.
III.D.2. Demonstrate knowledge of sources and processes of compensation for geriatric pharmacy services.

| Plan | I.C.12. Consider financial/reimbursement issues (e.g, formularies, insurance coverage) when making therapeutic recommendations.
I.E.5. Incorporate life expectancy and end-of-life issues in the decision-making of appropriate use of medications.
II.C.7. Appropriately recommend and interpret laboratory results for an older adult patient.
II.D.1. Define therapeutic goals incorporating patient-specific principles (e.g., age, functionality, patient preference, pharmacogenomics, cultural).
II.D.4. Apply principles of pharmacokinetic and pharmacodynamic changes associated with aging to the design of the pharmacotherapy regimen.
II.D.5. Design and recommend age/person specific regimen including medication, dose, dosage form, dosing interval, and route of administration.
II.D.6. Resolve and/or prevent medication-related problems in a given older adult patient.
II.D.7. Optimize a medication regimen to minimize polypharmacy, prescribing cascades, and anticholinergic burden.
II.E.1. Develop and implement an older adult person-specific monitoring plan. |
| Implement | I.C.3. Identify and manage the social issues of medication use for an older adult’s therapy.  
I.C.10. Recognize and report the signs of elder abuse/neglect.  
I.D.3. Demonstrate proficiency to interview and counsel older adults with varying degrees of health literacy, cognitive function, and communication abilities.  
I.F.2. Counsel an older adult patient on the utility of health screenings and preventive measures.  
I.F.3. Conduct a comprehensive medication review to minimize the impact of drug-related falls.  
II.C.2. Demonstrate the ability to conduct basic cognitive, functional, physical and safety assessments for common disease in the older adult population.  
II.D.6. Resolve and/or prevent medication-related problems in a given older adult patient.  
II.E.1. Develop and implement an older adult person-specific monitoring plan.  
II.F.1. Utilize educational material appropriate to the specific patient/caregiver.  
II.F.2. Ensure understanding of medication use and its role in the overall treatment plan.  
II.F.3. Educate patient/caregiver regarding potential problems with patient care management and administration of medications.  
II.F.4. Assist the patient/caregiver in identifying, procuring, and utilizing adherence strategies and devices.  
II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles.  
II.G.2. Write an action plan for use by the patient/caregiver.  
III.C.4. Promote advocacy for geriatric patient care and the pharmacy profession.  
III.C.5. Demonstrate decision making skills when implementing care for older adults to improve outcomes and quality measures.  
III.D.1. Develop, implement and assess formulary management/protocols as they pertain to the care of the older adult patient. |
| Follow-up: Monitor and Evaluate | I.D.5. Discuss the physiologic changes of aging and how they impact the pharmacokinetic, pharmacodynamics and therapeutic use of medications.  
II.C.7. Appropriately recommend and interpret laboratory results for an older adult patient.  
II.E.1. Develop and implement an older adult person-specific monitoring plan.  
II.E.2. Revise therapeutic plans based upon changes in patient status. |
| Collaborate, Communicate and Document | I.D.1. Communicate drug and adherence information to older patients, their caregivers and the interprofessional team.  
I.D.4. Recognize barriers to effective communication (e.g., cognitive, sensory, cultural, and language). |
II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles.

II.G.1. Document rationale, actions, and outcomes from medication therapies for the healthcare team.

II.G.2. Write an action plan for use by the patient/caregiver.


II.G.4. Acknowledge different systems for documentation and tracking of intervention data which can generate evidence of care.

II.F.5. Educate interprofessional team members regarding geriatric-specific pharmacotherapy principles.

II.G.1. Document rationale, actions, and outcomes from medication therapies for the healthcare team.

II.G.2. Write an action plan for use by the patient/caregiver.


II.G.4. Acknowledge different systems for documentation and tracking of intervention data which can generate evidence of care.

III.A.3. Utilize a documentation system to evaluate outcomes of pharmacist intervention.

III.B.1. Identify existing and emerging models of practice in geriatric care.

III.B.2. Recognize emerging opportunities for geriatric practice.

III.B.3. Respect the roles and responsibilities of the pharmacist and other healthcare professionals within the interprofessional team.

III.B.4. Discuss board certifications available for pharmacists providing geriatric care (e.g., BCGP, CDE, other advanced training).

III.C.1. Identify agencies and organizations integral in the development and enforcement of geriatric public policy.

III.C.2. Identify and adhere to site-specific regulations for geriatric care.

III.C.3. Develop strategies for keeping up-to-date on regulatory changes and their impact on geriatric care.

Citation: Joint Commission of Pharmacy Practitioners. Pharmacists’ Patient Care Process. May 29, 2014. Available at: https://jcpp.net/wp-content/uploads/2016/03/PatientCareProcess-with-supporting-organizations.pdf.