Reducing Geriatric Patient Risk at the Transition of Care from Hospital to Home

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Disclosure

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Learning Objectives

- Design a transitional care workflow in which pharmacists play an integral role using the Centers for Medicare & Medicaid Services Transitional Care Management billing criteria.
- Evaluate medications associated with post-discharge adverse drug events (ADEs).
- Develop strategies to prevent ADEs after discharge.

Which of the following patients is most likely to be readmitted to the hospital?

A. 73-year-old male taking 4 medications and recently started on lisinopril

B. 80-year-old female taking 6 medications and living with her daughter

C. 85-year-old widowed male taking 10 medications with type 2 diabetes mellitus and heart failure with reduced ejection fraction returning home

D. 88-year-old female taking 7 medications recently diagnosed with atrial fibrillation and returning home with home health services

Marcantonio ER. *Am J Med*.1999;107(1):13–17.

Hospital Discharge

- In the US, approximately 35 million patients are discharged from the hospital each year
  - Majority discharging home
- In efforts to reduce hospital readmissions, discharge planning is mandatory for hospital accreditation
  - Medication reconciliation or review is an important element for a successful transition

Healthcare Cost and Utilization Project. Agency for Healthcare Research and Quality. https://hcupnet.ahrq.gov/.
Mueller SK, et al. *Arch Intern Med*.2012;172(14):1057-68.

Transitional Care Management Billing Criteria

- Interactive contact
  - Within 2 business days of discharge
- Non-face-to-face services
  - Review discharge information, follow-up diagnostic tests/treatment, medication reconciliation
- Face-to-face visit
  - Within 14 days of discharge

Centers for Medicare & Medicaid Services. Transitional care management services. 2016. (accessed 2017 Aug 31).

Core Features of Transitions

- Comprehensive assessment of health goals and preferences
- Implementation of an evidence-based plan of transitional care
- Care extending beyond discharge through home and telephone visits
- Mechanisms to gather and share information across sites of care
- Engagement of patients and family caregivers
- Coordination of services during and following hospitalization

Kim CS, Flanders SA. *Ann Intern Med.* 2013; 158(5 Pt 1):ITC3-1. Burke RE, Coleman EA. *JAMA Intern Med.* 2013;173(8):695-8.

Best Practice Transitional Care Models

Best Practice: Transitional Care Models

- The Care Transitions Intervention
- The Transitional Care Model
- Project RED (Re-engineered Discharge)

Coleman EA. *Arch Intern Med.* 2006;166(17):1822-8.
Naylor MD. *J Am Geriatr Soc.* 2004;52:675–84.
Jack BW. *Ann Intern Med.* 2009; 150(3):178-87.

The Care Transitions Intervention

- Patients 65 years and older
- Working telephone
- English speaking
- No plans to enter hospice
- Documented at least 1 of 11 diagnoses
  - Stroke, congestive heart failure, coronary artery disease, cardiac arrhythmias, chronic obstructive pulmonary disease, diabetes mellitus, spinal stenosis, hip fracture, peripheral vascular disease, deep vein thrombosis, and pulmonary embolism

Coleman EA. *Arch Intern Med.* 2006;166(17):1822-8.

The Care Transitions Intervention

Medication Self-Management	Patient-Centered Record	Follow-up	Red Flags
• Patient is knowledgeable about medications and has management system	• Patient understands health record to communicate	• Patient schedules and completes follow-up visits	• Patient is knowledgeable of worsening condition and knows how to respond

Coleman EA. *Arch Intern Med.* 2006;166(17):1822-8.

The Care Transitions Intervention

- Transition coach (advanced practice nurses):
  - Met with patient in the hospital before discharge
  - Introduced patient to health record
  - Arranged a home visit (48-72 hours post-discharge)
    - Medication review and reconciliation
  - Reviewed "red flags" and discussed steps for management
  - 3 follow-up phone calls during the post-hospitalization period

Coleman EA. *Arch Intern Med.* 2006;166(17):1822-8.

The Care Transitions Intervention

- Lower hospital readmission rates in intervention group
  - 30% reduction at 30 days
  - 17% reduction at 180 days
- Lower hospital costs in intervention group
  - 15% net savings in total hospitalization costs
    - $390 per patient

Coleman EA. *Arch Intern Med.* 2006;166(17):1822-8.

The Transitional Care Model

- Patients 65 years and older with heart failure
- Working telephone
- English speaking
- Alert and oriented

Naylor MD. *J Am Geriatr Soc.* 2004;52:675–84.

The Transitional Care Model

Advanced Practice Nurse (APN) Intervention				
Daily visit while patient is hospitalized	Home visit within 24 hours of discharge	Weekly visits during 1st month	Bimonthly visits during 2nd and 3rd month; also as needed	Telephone availability 7 days/week

Naylor MD. *J Am Geriatr Soc.* 2004;52:675–84.

The Transitional Care Model

- Lower incidence of rehospitalization or death at 52 weeks in intervention group (p=0.01)
- The intervention group reported greater quality of life (p<0.05)
- Mean total follow-up cost per patient at 52 weeks
  - $7,636 for the intervention group
  - $12,481 for the control group
  - Total savings of $4,845 per patient

Naylor MD. *J Am Geriatr Soc.* 2004;52:675–84.

Project RED (Re-engineered Discharge)

- Patients 18 years and older
- Working telephone
- English speaking
- Excluded discharges to skilled nursing facility (SNF) or other hospital, or planned hospitalization

Jack BW. *Ann Intern Med.* 2009; 150(3): 178-87.

Project RED: In-hospital Care

- Nurse Discharge Advocate
  - Schedule appointments
  - Discuss tests and/or results
  - Confirm medications
  - Review discharge plan
  - Educate
  - Distribute discharge summary
  - Assess understanding

Jack BW. *Ann Intern Med.* 2009; 150(3): 178-87.

Project RED: After hospital care

- Give patient written discharge plan:
  - Reason for hospitalization
  - Discharge medication list
  - Contact information
  - Information for follow-up visits
  - Appointment calendar
  - Information for tests and/or studies
- Pharmacist post-discharge component:
  - Call the patient to reinforce discharge plan (2-4 days)
  - Review medications
  - Solve problems and communicate with primary care providers

Jack BW. *Ann Intern Med*. 2009; 150(3): 178-87.

Project RED

- The 30-day readmission and emergency department (ED) visit rate decreased by 30% in the intervention group compared with usual care
- The total cost in the intervention group was 33.9% lower for patients than the usual care group
  - Saving an average of $412 per person in the intervention group

Jack BW. *Ann Intern Med*. 2009; 150(3): 178-87.

Which of the following is true regarding transitional care models?

A. Transitional care models have not found improvement in quality of life for patients with discharge follow-up

B. It is best to start the transitional care process once the patient is at home

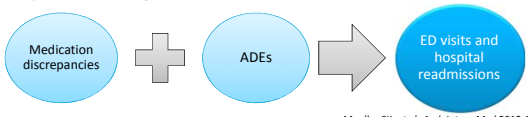
C. A transitional care model can help patients save money

D. The transitional care model should utilize nurses, not pharmacists, to reduce readmissions

Medications and Readmissions

Hospital Discharge: Medication Discrepancies

- Medication discrepancies occur in up to 70% of patients at admission or discharge
  - One-third have the potential to cause harm
- Adverse drug events (ADEs) occur in 12 to 17% of patients after hospital discharge



Mueller SK, et al. *Arch Intern Med.*2012;172(14):1057-68.

Hospital Discharge: Medication Reconciliation

- Systematic review of the medication reconciliation process:
  - 15 studies included involving pharmacists, pharmacy residents and pharmacy technicians
    - 10 studies: Reduced medication discrepancies
    - 2 studies: Reduced potential ADEs
    - Mixed effects on preventable ADEs (1 of 2 studies) and healthcare utilization (2 of 7 studies)
    - 1 study: Reduced ED visits (47%) and drug-related readmissions (80%)
    - 1 study: Reduced 30-day ED visits/readmissions

Mueller SK, et al. *Arch Intern Med.*2012;172(14):1057-68.

Hospital Readmission

- Readmission risk factors:

Present at Initial Admission	Present at Initial Discharge
Age ≥ 80 years	Failure to ambulate
Previous admission within 30 days	≥ 10 discharge medications
≥ 5 comorbid conditions	No patient/family education
History of depression	Discharge to an extended care facility
Pre-illness cognitive/functional impairment	Acute mental status change within 24 hours

Marcantonio ER. *Am J Med.*1999;107(1):13–17.

Preventability and Causes of Readmissions

- Analysis of 1000 readmitted patients found 269 readmissions to be potentially preventable
- Medication-related risk factors:
  - Inadequate monitoring for adverse effects or nonadherence (p<0.001)
  - Patient/caregiver misunderstanding of discharge medications (p<0.001)
  - Inadequate steps to ensure the patient can afford medications (p=0.001)
  - Patient/caregiver unable to manage/monitor medications or drug level (p=0.004)
  - Errors in discharge orders (p=0.006)
  - Drug-drug or drug-disease interaction (p=0.02)

Auerbach AD, et al. *JAMA Intern Med.*2016;176(4):484-93.

Transitional Care Models: Incorporating Pharmacists

- Prospective study with ST-Elevation Myocardial Infarction (STEMI) patients (n=135)
- Pharmacist intervention (n=40):
  - Medication reconciliation
  - Medication education
  - Post-discharge phone calls within 48-72 hours
- All-cause readmission at 30 days decreased from 13% to 5% (p=0.18)
- Medication adherence and literacy scores improved at 30 days post-discharge (p=0.0005)

Budiman T. *Ann Pharmacother.* 2016; 50(2):118-24.

Transitional Care Models: Incorporating Pharmacists

- Prospective, randomized study of internal medicine units (n=278)
- Inclusion:
  - Discharge to home
  - Discharge on > 3 scheduled prescription medications or 1 high-risk medication (anticoagulants, antiplatelets, hypoglycemic agents, immunosuppressants or anti-infectives)
- Pharmacist intervention (n=137):
  - Face-to-face medication reconciliation
  - Pharmacy care plan
  - Discharge counseling
  - Post-discharge phone call at 3, 14, and 30 days

Phatak A. *J Hosp Med*. 2016; 11(1):39-44.

Transitional Care Models: Incorporating Pharmacists

- 380 medication discrepancies in intervention group versus 205 in control group (p<0.0001)
- 55 patients in control group versus 34 patients in intervention group readmitted (p=0.001)
- 18 patients in control group versus 11 patients in intervention group experienced ADEs (p=0.22)

Phatak A. *J Hosp Med*. 2016; 11(1):39-44.

Identification of Adverse Drug Events (ADEs)

Incidence of ADEs

- ADEs cost up to $30.1 billion per year in the U.S.
- At hospital discharge, 30% of patients have at least 1 medication discrepancy
- Approximately 1.5 million *preventable* ADEs occur each year in the U.S.
- 1 in 5 patients experience an adverse event within 3 weeks after discharge
  - 60% medication related

Institute of Medicine. Preventing medication errors: quality chasm series. Washington (DC): National Academies Press; 2007. 480.
National Transitions of Care Coalition. *Improving transitions of care.* September 2010. http://www.ntocc.org/portals/0/pdf/resources/ntoccissuebriefs.pdf.

Identification of ADEs

- Surveillance study of patients 65 years and older with a hospitalization due to an ADE
- 265,802 ED visits with 99,628 hospitalizations (38%)
- 4 most common medications/classes:
  - Warfarin (33%)
  - Insulins (14%)
  - Oral antiplatelets (13%)
  - Oral hypoglycemic agents (11%)

Budnitz DS. *N Engl J Med.* 2011; 365:2002-12.

Identification of ADEs

- Prospective cohort study (n=400)
- Primary outcome: incidence of ADEs after hospital discharge
- 45 (11%) patients experienced an ADE and 16% readmitted
  - Antibiotics (n=14)
  - Corticosteroids (n=7)
  - Cardiovascular (CV) agents (n=7)
  - Analgesics/narcotics (n=5)
  - Anticoagulants (n=4)

Forster AJ. *J Gen Int Med.* 2005; 20:317-23.

Identification of ADEs

- Cohort study of Medicare enrollees for 1 year
- Primary outcome: number of ADEs and preventability
- 1523 ADEs identified
  - Medication classes: CV agents (26%), antibiotics (14.7%), diuretics (13%), analgesics (12%), anticoagulants (8%), hypoglycemic agents (7%), and steroids (5%)
- 421 (28%) classified as preventable
  - Errors in monitoring (61%), errors in prescribing (58%), errors in patient adherence (21%)

Gurwitz JH. *JAMA*. 2003; 289:1107-16.

Medications Likely to Cause ADEs?

- Analgesics/opioids
- Antibiotics
- Anticoagulants
- Antiplatelets
- Cardiovascular agents
- Hypoglycemic agents

Which of the following medications is most likely to cause post-discharge adverse drug events?

A Amiodarone
B Levothyroxine
C Pantoprazole
D Pravastatin

Screening for ADEs Post-Discharge

- Review all medications with the patient
  - Ask about over the counter medications and supplements
- Ensure appropriate medication, dose, frequency, and duration
- Ask the patient about side effects
- Ensure appropriate follow-up monitoring
- Notify the provider of any discrepancies or adverse effects
- Update the medication list

Naranjo CA. *Clin Pharmacol Ther.* 1981; 30:239-45.

Tools to Screen for ADEs

- Medication Appropriateness Index
- Beers criteria for potentially inappropriate medication use in older adults
- STOPP (screening tool of older person's prescriptions)
- Screening medication lists and adjustments made based on renal function

Medication Appropriateness Index

Questions for each individual medication
1. Is there an indication for this medication?
2. Is the medication effective for the condition?
3. Is the dosage correct?
4. Are the directions correct?
5. Are the directions practical?
6. Are there clinically significant drug-drug interactions?
7. Are there clinically significant drug-disease/condition interactions?
8. Is there unnecessary duplication with other medications?
9. Is the duration of therapy acceptable?
10. Is the medication the least expensive alternative compared with others of equal utility?

Hanlon JT. *J Clin Epidemiol.* 1992; 45:1045-51.

2015 Beers Criteria

- Updated version soon to be released (2018)
- Includes the following lists:
  - Potentially inappropriate medication use in older adults
  - Drug-disease or drug-syndrome interactions
  - Use with caution in older adults
  - Non-anti-infective drug-drug interactions
  - Non-anti-infective medications that should be avoided or have their dosage reduced with varying levels of kidney function

American Geriatrics Society. *J Am Geriatr Soc.* 2015; 60:616-31.

Utilizing the 2015 Beers Criteria

- Prospectively look at "flagged medications"
- Assess drug-disease or drug-drug interactions
- Ensure patient is on appropriate renally-adjusted dose
- Recommend switching medications if a patient is on an inappropriate medication

Hanlon JT. J *Am Geriatr Soc.* 2015; 63(12):e8–e18.

ADEs Post-Hospital Discharge: Involvement of Beers Criteria Medications

- Clinical pharmacists reviewed 1000 hospital discharges:
  - Patients age 65 years and older
  - Discharged to the community
  - Discharged for a non-psychiatric condition
- Reviews were to identify drug-related incidences during the 45-day post-hospital discharge period:
  - Hospital discharge summary and ED visits
  - Office notes
  - Telephone encounters and communication between patient and provider

Kanaan AO. *J Am Geriatr Soc.*2013;61(11):1894-99.

ADEs Post-Hospital Discharge: Involvement of Beers Criteria Medications

- 242 ADEs identified and confirmed by physician reviewers
  - 84 ADEs classified as preventable
    - Electrolyte related events, gastrointestinal events, etc
  - 40 ADEs involved 1 or more Beers Criteria medications
    - 36 involved 1 or more potentially inappropriate drugs
    - Most common being nonsteroidal anti-inflammatory drugs (NSAIDs)
- Conclusion: Beers Criteria medications are associated with a small proportion of ADEs and may lead to less severe events

Kanaan AO. *J Am Geriatr Soc.*2013;61(11):1894-99.

STOPP Criteria

- Evaluates medication overuse
- Evidence that the STOPP criteria identifies ADEs associated with acute hospitalization 2.8 times more often than Beers Criteria
- Medications not included in the Beers Criteria
  - Thiazide diuretics in patients with gout
  - Nonsteroidal anti-inflammatory drugs in patients with hypertension
  - Alpha-blockers in males with urinary incontinence

Hamilton H. *Arch Intern Med.* 2011;171(11):1013-1019.
Gallagher P, et al. *Int J Clin Pharmacol Ther.* 2008; 46:72-83. O'Mahony D, et al. *Eur Geriatr Med.* 2010; 1(1):45-51.

ADEs and Utilization of STOPP Criteria

- Prospectively studied 600 admitted patients:
  - Compared the prevalence of ADEs associated with potentially inappropriate medications listed by STOPP criteria and Beers criteria
  - 329 ADEs, 235 classified as avoidable or potentially avoidable
    - 159/235 ADEs involved STOPP criteria medications ($p<0.001$)
    - 67/235 ADEs involved Beers criteria medications
  - ADEs included:
    - Falls with benzodiazepines
    - Symptomatic orthostasis with antihypertensives
    - Falls with opiates

Hamilton H. *Arch Intern Med.* 2011;171(11):1013-1019.

Oral Dosing of Renally Excreted Drugs

Drug	CrCl (mL/min)	Maximum Dose
Apixaban	< 25	Avoid use
Ciprofloxacin	< 30	500 mg every 24 hours
Colchicine	<30	Reduce dose; monitor adverse effects
Duloxetine	< 30	Avoid use
Gabapentin	30-59; 15-29; <15	200-700 mg twice daily; 200-700 mg daily; 100-300 mg daily
Glyburide	< 60	Not recommended
Memantine	< 30	5 mg twice daily; ER 14 mg daily
Nitrofurantoin	< 30	Avoid use
Pregabalin	< 60	Reduce dose
Rivaroxaban	< 30	Avoid use
Spironolactone	< 30	Avoid use

J Am Geriatr Soc. 2015; 60:616-31.

Takeaways From Tools

- The Medication Appropriateness Index is a tool that can be used when reviewing medications after discharge, especially newly started medications
- Beers Criteria and STOPP Criteria have not been shown to reduce hospitalization
  - Useful as tools to help prevent ADEs
- Ensuring appropriate doses based on renal function may decrease electrolyte abnormalities and ADEs

Which of the following patients is taking an inappropriate medication?

A. 79 year old male with HFrEF and CrCl = 42 mL/min taking spironolactone 25 mg tablet daily

B. 88 year old female with diabetes mellitus and arthritis with CrCl = 34 mL/min taking metformin 500 mg tablet twice daily and tramadol 50 mg tablet every 6 hours as needed for pain

C. 75 year old male with atrial fibrillation and CrCl = 28 mL/min taking apixaban 5 mg tablet twice daily

D. 82 year old female with neuropathic pain and CrCl = 25 mL/min taking gabapentin 300 mg capsule three times daily

Patient Case Scenario

- 76-year-old male was admitted due to a heart failure exacerbation. He was discharged home on Saturday with a discharge medication list and the inpatient team arranged for him to have home health services post-discharge.
- The patient lives alone and has a daughter who lives ~3 hours away who provides him transportation to appointments.
- You are a pharmacist in his Primary Care Clinic involved in transitions of care. You call the patient to review his medications.

Patient Case Continued

- You note the following discrepancies during your phone call:
  - The patient has both citalopram and escitalopram at home
    - Discharge medication list has escitalopram listed
  - The patient has been taking dofetilide since discharge
    - Discharge medication list included dofetilide; however, the discharge summary states to stop dofetilide due to prolonged QTc interval of 537 ms
  - The patient does not have torsemide at home
    - Torsemide was on the discharge medication list
  - When asked if the patient is taking any other medications that were not reviewed, he mentions taking ibuprofen 600 mg three times daily for knee pain

Which of the following actions of the pharmacist will most likely help prevent a readmission for this patient?

A. Advise the patient to not take any medications until the home health nurse is able to sort through them

B. Call the patient's daughter to let her know what her father should be taking

C. Resolve the medication discrepancies by telling the patient what he should be taking and schedule a follow-up phone call in 3 days

D. Educate the patient that ibuprofen is not recommended due to his heart failure and he should discuss this at his appointment

Key Takeaways

- Key Takeaway #1
  - A successful transitional care model begins when the patient is in the hospital.
- Key Takeaway #2
  - Assessing medication appropriateness, including dose, duration, frequency, and side effects is an important component in preventing readmissions.
- Key Takeaway #3
  - Utilizing tools such as the Beers Criteria and STOPP Criteria will help identify potentially inappropriate medications post-discharge.

SAFELY HOME: Developing a Best Practice Model In Transitions from Skilled Nursing Facility to Home

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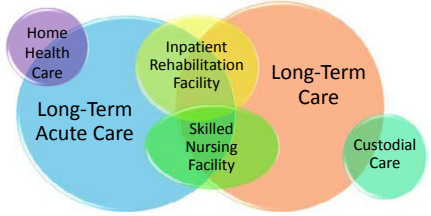
Skilled Nursing Facility (SNF) Environment

- Definitions
- Barriers to effective care transitions
- Opportunities to improve care transitions
- Components of successful care transitions
- Pharmacist roles

Definitions

- Post-acute care vs. Long-term care vs. Long-term acute care
- Skilled Nursing Facility vs. Rehabilitation Facility
- Focus on Skilled Nursing Facility



Custodial Care

- Custodial care includes
  - Help with bathing or dressing
  - Not covered by Medicare
- Wide array of locations
  - Home Care
  - Assisted Living
  - Nursing Homes

Centers for Medicare and Medicaid Services. Your Medicare Coverage: Nursing Home Care. https://www.medicare.gov/coverage/nursing-home-care.html. 2017 Oct 18.

Post-Acute Care/Long-Term Acute Care

- Following a change in health status that demands increased intervention with patient at a stabilized baseline
- Medical evaluation identifies intervention to regain function
  - Physical Therapy
  - Occupational Therapy
  - Psychological Therapy
  - Speech Therapy
  - Many More…

Inpatient Rehabilitation Facility (IRF)

- Admission appropriate for patients with complex nursing, medical management, and rehabilitative needs
- Must require
  - Multiple therapy disciplines
  - Intensive rehabilitation therapy program
    3 hr/day x 5 days/week or 15 hr within a 7-consecutive day period
  - Active participation in & benefit significantly from
  - Rehab physician supervision
  - Intensive & coordinated interprofessional team approach

Centers for Medicare and Medicaid Services. July 2012. Inpatient rehabilitation therapy services: Complying with Documentation Requirements. https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/Inpatient_Rehab_Fact_Sheet_ICN905643.pdf. 2017 Oct 18.

Skilled Nursing Facilities (SNF)

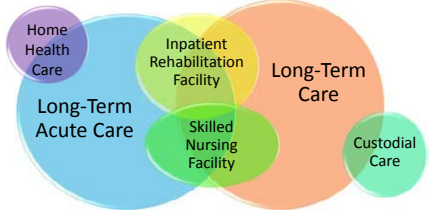
Day Requirements

- Hospitalized x 3 consecutive days
- SNF admission within 30 days of hospital discharge
- Recertify need at day 5 & 14 after admission, and every 30 days
- SNF stay = 100 days or less
- Medicare must approve length of stay

Skill Requirements

- Related to hospital-treated conditions
- Require daily skilled nursing or rehab services
- Can only be provided inpatient
- Specify need for daily skilled care
- Medicare review & approval for continued skilled care

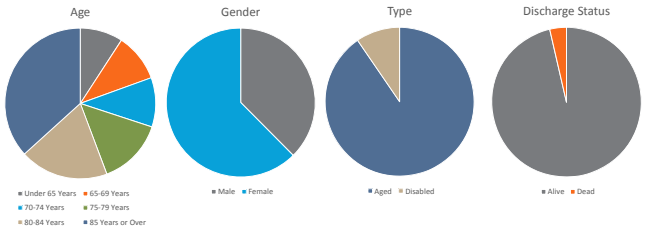
Centers for Medicare and Medicaid Services. Your Medicare Coverage: Skilled Nursing Facility (SNF) Care. https://www.medicare.gov/coverage/skilled-nursing-facility-care.html. 2017 Oct 18.



Which of the following patients would be the optimal candidate for a skilled nursing facility referral after a hospital stay?

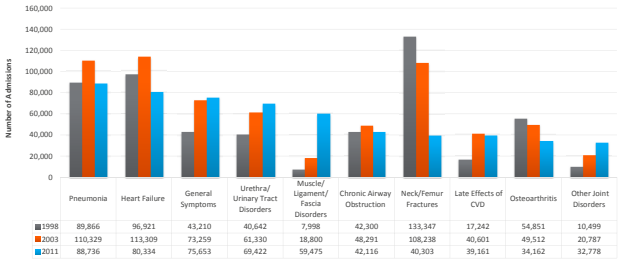
Choice	Age	Pertinent PMH & Diagnosis	Hospital LOS	Prior Residence
A	75 year old female	Parkinson's Disease. Post fall and pneumonia	5 days	Independent senior apartment
B	62 year old male	Hypertension & Diabetes. Post stroke with moderate left arm weakness, 30% recovered	4 days	Single-family home with wife
C	82 year old male	Alzheimer's disease. Acute mental status change with urinary tract infection	2 days	Nursing facility with memory unit
D	65 year old female	Obese with osteoarthritis, total knee arthroscopy with hardware infection requiring IV antibiotics	3 days	24-hour caregiver in private home

Demographics of SNF Admissions, 2011



Centers for Medicare and Medicaid Services. Covered admissions, covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare beneficiaries, by demographic characteristics, type of entitlement, and discharge status: calendar year 2011. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Medicare-and-Medicaid-Statistical-Supplement-Items/2012SNF.html. 2017 Oct 18.

Number and Distribution of Covered Admissions for Medicare Beneficiaries Admitted to Skilled Nursing Facilities (SNF): Leading Principal Diagnosis



	Pneumonia	Heart Failure	General Symptoms	Urethra/ Urinary Tract Disorders	Muscle/ Ligament/ Fascia Disorders	Chronic Airway Obstruction	Neck/Femur Fractures	Late Effects of CVD	Osteoarthritis	Other Joint Disorders
1998	89,866	96,921	43,210	40,642	7,998	42,300	133,347	17,242	54,851	10,499
2003	110,329	113,309	73,259	61,330	18,800	48,291	108,238	40,601	49,512	20,787
2011	88,736	80,334	75,653	69,422	59,475	42,116	40,303	39,161	34,162	32,778

Centers for Medicare and Medicaid Services. Number and distribution of covered admissions for Medicare beneficiaries admitted to skilled nursing facilities, by the leading principal diagnoses: calendar years 1998, 2003, 2011. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Medicare-and-Medicaid-Statistical-Supplement-Items/2012SNF.html. 2017 Oct 18.

Where do they go from SNF?

- Home
- Long Term Care
- Assisted Living Facility
- 19-23% are readmitted to the hospital within 30 days of discharge

Mor V, et al. *Health Aff* 2010;29:57-64.

Improving Transitions by Identifying Barriers

- 2008 National Transitions of Care Coalition (NTOCC)
  - Identified:
    - Gaps in care
    - Costs of fragmented care
    - Potential areas for improvement
- 2016 Consensus Best Practice Recommendations for Transitioning Patients' Healthcare from Skilled Nursing Facilities to the Community
  - Society of General Internal Medicine (SGIM)
  - Society for Post-Acute and Long-Term Care Medicine (AMDA)
  - American Geriatrics Society (AGS)

National Transitions of Care Coalition (NTOCC)

- Implementation and evaluation outline
- Multiple resources developed
  - Education & Awareness
  - Tools & Resources
  - Policy & Advocacy
  - Performance & Metrics
  - Health Information & Technology

National Transitions of Care Coalition. Improving transitions of care: the vision of the national transitions of care coalition. May 2008. http://www.ntocc.org/Portals/0/PDF/Resources/PolicyPaper.pdf. 2017 Oct 18.

7 Steps to Improve Transitional Care Management (TCM)

- Improve communication
- Implement electronic medical records
- Expand role of the pharmacist
- Establish points of accountability
- Increase use of case management
- Implement payment systems
- Develop performance measures

National Transitions of Care Coalition. Improving transitions of care: the vision of the national transitions of care coalition. May 2008. http://www.ntocc.org/Portals/0/PDF/Resources/PolicyPaper.pdf. 2017 Oct 18.

2016 SGIM-AMDA-AGS

Transition Issue	Best Practice Recommendations	
	SNF	Primary Care Provider (PCP)
#1: PCP does not realize that patient is admitted to SNF.	Identify the correct community PCP and include identity in SNF chart.	Confirm and update PCP information and fields in charts.
#2: Patient does not follow up or delays follow-up with PCP after SNF discharge.	Schedule a follow-up appointment with PCP within 7 days post-discharge from SNF.	Expedite scheduling of patients being discharged from SNF.
#3: Information on care received at SNF and necessary follow-up is not received by PCP and outpatient team.	Transmit discharge instructions to the PCP office at time of patient discharge and a formal discharge summary within 72 hr of discharge. Oral report is given by SNF nurse and/or physician.	Read, follow up, and include information from the SNF physician in the outpatient record. Prepare outpatient staff for receipt of oral report from SNF staff.
#4: Upon return home, patient has questions, faces inaccurate medication reconciliation, or does not receive vital services.	Ensure patient receives a phone call 48 hr following SNF discharge.	

Lindquist LA, et al. *J Gen Intern Med* 2017:32;199-203.

2016 SGIM-AMDA-AGS

Transition Issue	Best Practice Recommendations	
	SNF	Primary Care Provider (PCP)
#1: PCP does not realize that patient is admitted to SNF.	Identify the correct community PCP and include identity in SNF chart.	Confirm and update PCP information and fields in charts.

Lindquist LA, et al. *J Gen Intern Med* 2017:32;199-203.

2016 SGIM-AMDA-AGS

Transition Issue	Best Practice Recommendations	
	SNF	Primary Care Provider (PCP)
#2: Patient does not follow up or delays follow-up with PCP after SNF discharge.	Schedule a follow-up appointment with PCP within 7 days post-discharge from SNF.	Expedite scheduling of patients being discharged from SNF.

Lindquist LA, et al. *J Gen Intern Med* 2017:32;199-203.

2016 SGIM-AMDA-AGS

Transition Issue	Best Practice Recommendations	
	SNF	Primary Care Provider (PCP)
#3: Information on care received at SNF and necessary follow-up is not received by PCP and outpatient team.	Transmit discharge instructions to the PCP office at time of patient discharge and a formal discharge summary within 72 hr of discharge. Oral report is given by SNF nurse and/or physician.	Read, follow up, and include information from the SNF physician in the outpatient record. Prepare outpatient staff for receipt of oral report from SNF staff.

Lindquist LA, et al. *J Gen Intern Med* 2017:32;199-203.

2016 SGIM-AMDA-AGS

Transition Issue	Best Practice Recommendations SNF Primary Care Provider (PCP)
#4: Upon return home, patient has questions, faces inaccurate medication reconciliation, or does not receive vital services.	Ensure patient receives a phone call 48 hr following SNF discharge.

Lindquist LA, et al. *J Gen Intern Med* 2017:32;199-203.

Which of the following scenarios has been identified as a foundational potential barrier to effective transitions from SNF to home?

A. Patient identified with new diagnosis during SNF stay
B. Patient receiving new medications during SNF stay
C. Patient's PCP not identified during SNF stay
D. Patient's family lacks engagement in care during SNF stay

Successful Transition Approaches

- Interprofessional Team
  - SNF Team
  - Home Health Team
  - Primary Care Team
  - Patient & Family

Practical Evidence

- Systematic Review of SNF to Home Transitional Care
- 6 studies identified
  - —Randomized | non randomized | historical control
  - —Targeted older adults discharged from SNF to home
  - —Described influence of intervention on one of the following:
    - Mortality, hospital readmission, preparedness for discharge, functional status
  - —Pre-discharge, post-discharge, or bridging interventions
- Described resources needed to implement interventions

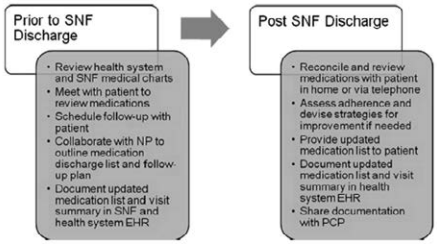
Toles M, et al. *Geriatric Nursing* 2016:37;296-301.

Practical Evidence

Intervention Characteristics	• Pre-discharge: Discharge planning, patient education, appointments, usual care, medication reconciliation • Bridging: Pt centered discharge instruction, transition coaching • Post-discharge: Follow-up calls, home visits, medication reconciliation, timely PCP communication, patient hotline
Resources needed for Implementation	• Staff trained to use new procedures & tools • Added staff: RN, NP, RPh, Social worker, Geriatrician • Location of service: SNF, health care mgmt call center, affiliated clinic • New tools developed • Patient/caregivers included as targets of intervention
Outcomes	• 30- or 60-day readmission: reduced in 2 studies; no change in 4 studies • Unable to determine if adequately powered • Reduced time to any death: 1 study • Reduced ED use: 1 study • Improved patient satisfaction: 2 studies

Toles M, et al. *Geriatric Nursing* 2016:37;296-301.

Practical Evidence



Used with permission from Reidt SL, et al. *J Am Geriatr Soc.* 2016;64:1895-99.

Practical Evidence

	Intervention	Comparison	Analysis
Number of Patients	87	198	
30-Day Hospitalization Rate	9.2%	19.6%	P=0.02 OR 0.47 (95% CI = 0.21-1.08)
30-Day Emergency Department Rate	12.6%	24.9%	P=0.03 OR 0.46 (95% CI = 0.22-0.97)
Average MRP interventions	2.1 (35% Safety)	--	
Post-SNF Average Medication Related Problem Interventions	1.8 (46% Adherence)	--	

Reidt SL, et al. *J Am Geriatr Soc* 2016;64:1895-1899.

How to Measure TCM Success - NTOCC

- Structure
  - Accountable providers throughout
  - Plan of care tool
  - Health Information Technology (HIT) incorporated
- Process
  - Care team process
  - Transfer of information between providers/care settings
  - Pt/Family education/engagement
- Outcomes
  - Satisfaction: patient, providers
  - Health care utilization & costs

National Transitions of Care Coalition. Transitions of Care Measures. May 2008. http://www.ntocc.org/portals/0/PDF/Resources/PolicyPaper.pdf. 2017 Oct 18.

Opportunities in SNF Transitions

- Readmission reduction
- Medication safety
- Payment for service

Factors Associated with Readmission

- Following discharge to SNF
- Within 30 days:
  - Older (mean age 81 years)
  - White
  - Urban
  - Higher previous admissions
- INVERSE: Longer index hospital LOS
- Within 7 days:
  - <6 chronic illnesses
  - Prior hospitalization within 1 year
  - Rural zip code
  - Myocardial infarction & pneumonia
  - Private insurance payer
- Within 8-30 days:
  - Higher comorbidities
  - UTI, femur fracture, & trauma
  - Larger teaching hospitals
  - Medicare as payer

Horney C, et al. *J Am Geriatr Soc* 2017:65:1199-205.

Medication Safety Outcomes in SNF TCM

- Medication discrepancies
- Potential medication-related problems
- Hospitalizations
- Emergency department utilization

Sinvani LD, et al. *J Am Med Dir Assoc.* 2013;668-72.
Delante T, et al. *Pharmacotherapy.* 2008;28:444-52.
Reidt SL, et al. *J Am Geriatr Soc.* 2016;64:1895-9.
Park HA, et al. *J Am Geriatr Soc.* 2013;61:137-42.

NH High-Risk Medications

Patient Factors
- >75 years
  - Increased adverse anticoagulant events
- >85 years
  - Increased adverse fracture events
  - Associated with anticonvulsant, antidepressant, thiazide use
- >5 medications

Medication Classes
- Psychotropic drugs
- Cardiovascular drugs
- Opioid analgesics
- Anticoagulants
- Antibiotics
- Antidiabetics

Al-Jumaili AA, et al. *J Am Med Dir Assoc.* 2017;18:470-88.

Which of the following patient scenarios has the **highest** risk of ADRs in the skilled nursing setting?

A. 65 year old on warfarin taking 9 other medications
B. 85 year old on hydrochlorothiazide taking 5 other medications
C. 74 year old on lamotrigine taking 11 other medications
D. 79 year old on metformin taking 3 other medications

Who are the Payers?

- TCM Current Procedural Terminology (CPT) code in office
  99495 (mod complex, 14-days) 99496 (highly complex, 7-days)
- Incident-to CPT code in office
  99211 (Physician based) G0463 (Hospital based)
- Medication Therapy Management (MTM) service in community pharmacy
  99605 (new) 99606 (established) 99607 (added 15min)
- Other stakeholders
  – 30-day post SNF all-cause penalty for hospital readmissions
  – October 1, 2018

American College of Clinical Pharmacy. Payment Methods in Outpatient Team-Based Clinical Pharmacy Practice, Part 1. April 2015. www.accp.com/paib1. 2017 Oct 18.
Centers for Medicare and Medicaid Services. Overview of the Skilled Nursing Facility Value-Based Purchasing Program. https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/SE1621.pdf. 2017 Oct 18.

Role of the Pharmacist

- Skilled Nursing Facility
- Community
- Ambulatory Care
- Other?

The Medicare SNF 30-day all-cause readmission measure will be used to rank facilities based on the readmission rate from what patient encounters?

A. Discharge from hospital
B. Discharge from SNF
C. Last physician visit in hospital
D. Last physician visit in SNF

The University of Kansas Health System

- Historically separate hospital and clinic-based entities
- Systematic TOC approach
  - Throughout hospital
  - Admission to home
- Consolidation to one system
- Identified Preferred Provider Networks
  - Skilled Nursing Facilities
  - Home Health Agencies
- Transitions of care gap from SNF to home

SNF to Home Initiative

- Identify target pilot population
- Evaluate and improve current practice
  - Structure: Optimize current systems and checklists
  - Process: intentional hand-offs
  - Outcomes: patient-centered & system-based
- Replicate

Key Takeaways

- Key Takeaway #1
  - Recognize the opportunities to improve transitions of care in your health system
- Key Takeaway #2
  - Systematically approach improvement with a focus on process, structure, and outcome evaluation
- Key Takeaway #3
  - The pharmacist is a key contributor to safe care transitions

Questions?

References

- Al-Jumaili AA, Doucette WR. Comprehensive literature review of factors influencing medication safety in nursing homes: Using a systems model. *J Am Med Dir Assoc* 2017;18:470-88.
- American College of Clinical Pharmacy. Payment Methods in Outpatient Team-Based Clinical Pharmacy Practice, Part 1. April 2015. www.accp.com/paib1. 2017 Oct 18.
- Centers for Medicare and Medicaid Services. Inpatient rehabilitation therapy Services: Complying with Documentation Requirements. https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/Inpatient_Rehab_Fact_Sheet_ICN905643.pdf. 2017 Oct 18.
- Centers for Medicare and Medicaid Services. Overview of the Skilled Nursing Facility Value-Based Purchasing Program. https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/SE1621.pdf. 2017 Oct 18.
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- Centers for Medicare and Medicaid Services. Number and distribution of covered admissions for Medicare beneficiaries admitted to skilled nursing facilities, by the leading principal diagnoses: calendar years 1998, 2003, 2011. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Medicare-and-Medicaid-Statistical-Supplement-Items/2012SNF.html. 2017 Oct 18.

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- Delante T, Chester EA, Stubbings TW, et al. Clinical Outcomes of a Home-Based Medication Reconciliation Program After Discharge from a Skilled Nursing Facility. *Pharmacotherapy* 2008;28(4):444–52).
- Horney C, Capp R, Boxer R, et al. Factors associated with early readmission among patents discharged to post-acute care facilities. *J Am Geriatr Soc* 2017:65:1199-205.
- Lindquist LA, Miller RK, Saltsman WS, et al. SGIM-AMDA-AGS consensus best practice recommendations for transition patient's healthcare from skilled nursing facilities to the community. *J Gen Intern Med* 2016:32;199-203.
- Mor V, Intrator O, Feng Z, et al. The revolving door of rehospitalization from skilled nursing facilities. *Health Aff* 2010;29:57-64.
- National Transitions of Care Coalition. Improving transitions of care: the vision of the national transitions of care coalition. May 2008. http://www.ntocc.org/portals/0/PDF/Resources/PolicyPaper.pdf. 2017 Oct 18.
- National Transitions of Care Coalition. Transitions of Care Measures. May 2008. http://www.ntocc.org/Portals/0/PDF/Resources/TransitionsOfCare_Measures.pdf. 2017 Oct 18.
- Park HK, Branck LG, Bulat T, et al. Influence of a Transitional Care Clinic on Subsequent 30-Day Hospitalizations and Emergency Department Visits in Individuals Discharged from a Skilled Nursing Facility. *J Am Geriatr Soc* 2013;61:137–42.
- Reidt SL, Holtan HS, Larson TA, et al. Interprofessional collaboration to improve discharge from skilled nursing facility to home: preliminary data on postdischarge hospitalizations and emergency department visits. *J Am Geriatr Soc* 2016;64:1895-9.
- Sinvani LD, Beizer J, Akerman M, et al. Medication Reconciliation in Continuum of Care Transitions: A Moving Target. *J Am Med Dir Assoc* 2013:14;668-72.
- Toles M, Colon-Emeric C, Asafu-Adjei J, et al. Transitional care of older adults in skilled nursing facilitates: a systematic review. *Geriatric Nursing* 2016:37;296-301.

Recommended Resources and References

1. National Transitions of Care Coalition. Improving transitions of care: the vision of the national transitions of care coalition (May 2008). http://www.ntocc.org/portals/0/PDF/Resources/PolicyPaper.pdf (accessed 2017 Aug 16).
2. American College of Clinical Pharmacy. Payment methods in outpatient team-based clinical pharmacy practice, part 1 (April 2015). www.accp.com/paib1 (accessed 2017 Aug 22).
3. Lindquist LA, Miller RK, Saltsman WS et al. SGIM-AMDA-AGS consensus best practice recommendations for transitioning patient's healthcare from skilled nursing facilities to the community. *J Gen Intern Med.* 2016:32;199-203.
4. Centers for Medicare & Medicaid Services. Transitional care management services (2016). https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/Transitional-Care-Management-Services-Fact-Sheet-ICN908628.pdf (accessed 2017 Aug 30).

2017 ASHP Midyear Intensive Studies for Recertification

Please note: Continuing Pharmacy Education Credit can be claimed by following general Midyear CE processing instructions outlined in your onsite program book and online.

The information below is intended for pharmacists seeking recertification credit, in one of these areas:

- **Ambulatory Care Pharmacy, BCACP**
- **Critical Care Pharmacy, BCCCP**
- **Geriatric Pharmacy, BCGP**
- **Oncology Pharmacy, BCOP**
- **Pediatric Pharmacy, BCPPS**
- **Pharmacotherapy, BCPS**

Several ASHP Midyear Clinical Meeting sessions were developed as a part of ASHP's professional development program for recertification of board certified pharmacists. These activities are approved by the Board of Pharmacy Specialties (BPS). For pharmacists who maintain more than one certification, some of these sessions provide credit for more than one specialty. A range of 4 to 6 hours of credit may be earned, depending on the specialty.

How does this work?

1. You must purchase the desired recertification package (BCACP, BCCCP, BCGP, BCOP, BCPPS, BCPS) by **December 7th at 12PM ET.** This is in addition to Midyear registration.

2. Attend the sessions at the ASHP Midyear Clinical Meeting in Orlando.

3. **Missed an Intensive Study at Midyear?** The recertification package, including recorded sessions, will be available online for all of the sessions in your selected specialty.

4. The assessments will be available online February 7, 2018- August 8, 2018. You will receive an email with instructions on how to access your recorded sessions and recertification assessment. To earn recertification credit, complete and **pass the recertification assessment(s)** for the desired specialty/session(s).

5. **Dual or triple certified?** Passing a recertification assessment for a session with multiple certifications will provide you hours for each of your specialties. For example, by passing the assessment for the "Medication Safety Fatigue" activity, you earn hours toward BCACP, BCCCP, BCGP, BCPPS, and BCPS. Sessions with multiple certifications are outlined in the Intensive Study table. You may purchase more than one specialty package.

Note: If you are currently enrolled in the 3-year recertification plan or the RRRP, the Intensive Study Package of your selected specialty is already included in your subscription.

Have you already purchased your recertification package?

In order to claim recertification credit, you must have purchased the recertification exam in addition to your Midyear registration.

You have the following options to purchase the package onsite:

Prior to 11:59 pm ET November 30th
Purchase online:
- Log in to **http://store.ashp.org**
- Click on **My Account**
- Under My Meetings, find **52nd ASHP Midyear Clinical Meeting** and Click on **View Registration**
- Click **Edit** next to Select Events
- Click **Add** next to desired Recertification Package and click **Next**
- Update badge info if applicable, and click **Next**
- Click **Pay Now for This Registrant**
- Fill in any payment info and click **Complete Registration**

December 1st through December 7th, before 12 pm ET
- Go to the **Customer Relations Desk.**

Or
- Purchase online at **http://elearning.ashp.org/buyintensives**

ASHP Midyear Intensive Studies for Recertification
Ambulatory Care Pharmacy (BCACP) Package, 6 hours

Medication Safety Fatigue? Pragmatic Actions for the Clinical Practitioner
ACPE Activity #0204-9999-17-322-L05-P, 1.50 Contact Hours, Application-based
Sunday, December 3, 2017, 2:00 PM - 3:30 PM, OCCC, W209A, Level 2
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP), Board Certified Critical Care Pharmacist (BCCCP), Board Certified Geriatric Pharmacist (BCGP), Board Certified Pediatric Pharmacy Specialist (BCPPS), and Board Certified Pharmacotherapy Specialist (BCPS), recertification credit.*
Medical Cannabis: Current Considerations and Implications for Pharmacists
ACPE Activity #0204-9999-17-220-L01-P, 1.00 Contact Hours, Application-based
Monday, December 4, 2017, 4:15 PM - 5:15 PM, OCCC, W311B, Level 3
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP) recertification credit.*
Chronic Obstructive Pulmonary Disease: New Approaches to an Old Problem
ACPE Activity #0204-9999-17-234-L01-P, 2.00 Contact Hours, Application-based
Tuesday, December 5, 2017, 8:00 AM - 10:00 AM, OCCC, Valencia W415D, Level 4
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP) and Board Certified Pharmacotherapy Specialist (BCPS) recertification credit.*
Nonmedical Use of Prescription Opioids by Adolescents and Young Adults: Strategies for Pharmacists
ACPE Activity #0204-9999-17-252-L01-P, 1.50 Contact Hours, Application-based
Tuesday, December 5, 2017, 2:00 PM - 3:30 PM, OCCC, W209A, Level 2
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP) and Board Certified Pediatric Pharmacy Specialist (BCPPS) recertification credit.*

ASHP Midyear Intensive Studies for Recertification
Critical Care Pharmacy (BCCCP) Package, 4 hours

Medication Safety Fatigue? Pragmatic Actions for the Clinical Practitioner
ACPE Activity #0204-9999-17-322-L05-P, 1.50 Contact Hours, Application-based
Sunday, December 3, 2017, 2:00 PM - 3:30 PM, OCCC, W209A, Level 2
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP), Board Certified Critical Care Pharmacist (BCCCP), Board Certified Geriatric Pharmacist (BCGP), Board Certified Pediatric Pharmacy Specialist (BCPPS), and Board Certified Pharmacotherapy Specialist (BCPS), recertification credit.*
Update on Anticoagulation Reversal
ACPE Activity #0204-0000-17-214-L01-P, 1.50 Contact Hours, Application-based
Monday, December 4, 2017, 2:00 PM - 3:30 PM, OCCC, Valencia W415D, Level 4
This activity is approved for Board Certified Critical Care Pharmacist (BCCCP) and Board Certified Pharmacotherapy Specialist (BCPS) recertification credit.
Overcoming Patient Safety Challenges Associated with Drug Shortages
ACPE Activity #0204-0000-17-245-L05-P, 1.00 Contact Hours, Application-based
Tuesday, December 5, 2017, 10:00 AM - 11:00 AM, OCCC, Valencia W415D, Level 4
This activity is approved for Board Certified Critical Care Pharmacist (BCCCP) and Board Certified Pharmacotherapy Specialist (BCPS) recertification credit.

ASHP Midyear Intensive Studies for Recertification
Geriatric Pharmacy (CGP) Package, 5 hours

Medication Safety Fatigue? Pragmatic Actions for the Clinical Practitioner
ACPE Activity #0204-9999-17-322-L05-P, 1.50 Contact Hours, Application-based
Sunday, December 3, 2017, 2:00 PM - 3:30 PM, OCCC, W209A, Level 2
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP), Board Certified Critical Care Pharmacist (BCCCP), Board Certified Geriatric Pharmacist (BCGP), Board Certified Pediatric Pharmacy Specialist (BCPPS), and Board Certified Pharmacotherapy Specialist (BCPS), recertification credit.*
The Hidden Opioid Abuse Problem: Is it Geriatric Opioid Abuse or Is Grandma Really a Junkie?
ACPE Activity #0204-0000-17-236-L01-P, 2.00 Contact Hours, Application-based
Tuesday, December 5, 2017, 8:00 AM – 10:00 AM, OCCC, W209A, Level 2
This activity is approved for Board Certified Geriatric Pharmacist (BCGP) recertification credit.
Reducing Geriatric Patient Risk at the Transition of Care from Hospital to Home
ACPE Activity #0204-0000-17-254-L04-P, 1.50 Contact Hours, Application-based
Tuesday, December 5, 2017, 2:00 PM - 3:30 PM, OCCC, W414B, Level 4
This activity is approved for Board Certified Geriatric Pharmacist (BCGP) recertification credit.

**Developed in partnership between ASHP and the American Pharmacists Association (APhA).*

ASHP/ACCP BCOP Clinical Sessions
Oncology Pharmacy (BCOP) Package, 4 hours

BCOP Clinical Sessions: An Oncology Pharmacist's Guide to Bayesian Statistics
ACPE Activity #0217-9999-17-161-L04-P, 2.00 Contact Hours, Application-based
Tuesday, December 5, 2017, 8:00 AM - 10:00 AM, OCCC, W312A, Level 3
This activity is approved for Board Certified Oncology Pharmacist (BCOP) recertification credit.**
BCOP Clinical Sessions: New Oncology Drugs and Updates on the Management of Nausea and Vomiting
ACPE Activity #0217-9999-17-162-L01-P, 2.00 Contact Hours, Application-based
Tuesday, December 5, 2017, 2:00 PM - 4:00 PM, OCCC, W312A, Level 3
This activity is approved for Board Certified Oncology Pharmacist (BCOP) recertification credit.**

**Developed in partnership between ASHP and the American Pharmacists Association (APhA).*
***Developed in partnership between ASHP and American College of Clinical Pharmacy.*

ASHP Midyear Intensive Studies for Recertification
Pediatric Pharmacy (BCPPS) Package, 4 hours

Medication Safety Fatigue? Pragmatic Actions for the Clinical Practitioner
ACPE Activity #0204-9999-17-322-L05-P, 1.50 Contact Hours, Application-based
Sunday, December 3, 2017, 2:00 PM - 3:30 PM, OCCC, W209A, Level 2
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP), Board Certified Critical Care Pharmacist (BCCCP), Board Certified Geriatric Pharmacist (BCGP), Board Certified Pediatric Pharmacy Specialist (BCPPS), and Board Certified Pharmacotherapy Specialist (BCPS), recertification credit.*
Nonmedical Use of Prescription Opioids by Adolescents and Young Adults: Strategies for Pharmacists
ACPE Activity #0204-9999-17-252-L01-P, 1.50 Contact Hours, Application-based
Tuesday, December 5, 2017, 2:00 PM - 3:30 PM, OCCC, W209A, Level 2
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP) and Board Certified Pediatric Pharmacy Specialist (BCPPS) recertification credit.*
Big Challenges for Small Patients: Update on the Management of Methicillin-resistant Staphylococcus Aureus (MRSA) in Pediatrics
ACPE Activity #0204-0000-17-263-L01-P, 1.00 Contact Hours, Application-based
Tuesday, December 5, 2017, 4:00 PM - 5:00 PM, OCCC, W209A, Level 2
This activity is approved for Board Certified Pediatric Pharmacist (BCPPS) recertification credit.

ASHP Midyear Intensive Studies for Recertification
Pharmacotherapy (BCPS) Package, 6 hours

Medication Safety Fatigue? Pragmatic Actions for the Clinical Practitioner
ACPE Activity #0204-9999-17-322-L05-P, 1.50 Contact Hours, Application-based
Sunday, December 3, 2017, 2:00 PM - 3:30 PM, OCCC, W209A, Level 2
This activity is approved for Board Certified Ambulatory Care Pharmacist (BCACP), Board Certified Critical Care Pharmacist (BCCCP), Board Certified Geriatric Pharmacist (BCGP), Board Certified Pediatric Pharmacy Specialist (BCPPS), and Board Certified Pharmacotherapy Specialist (BCPS), recertification credit.*
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This activity is approved for Board Certified Critical Care Pharmacist (BCCCP) and Board Certified Pharmacotherapy Specialist (BCPS) recertification credit.

**Developed in partnership between ASHP and the American Pharmacists Association (APhA).*

About Us

ASHP seeks to support and advance the practice of board certified pharmacists. Our review and recertification products are application based and designed for the high-level practitioner who is looking for a practical approach to preparation and recertification that will be immediately applicable to their practice**.** These are so much more than just another therapeutics lecture.

Learn more about the “ASHP Difference” and how we offer a more practical approach to certification review and recertification. **http://www.ashpcertifications.org**