Advanced Practice Pharmacist Certificate in Comprehensive Medication Management

Full List of Learning Objectives

**Learning Objectives for Module 1 – Comprehensive Medication Management (CMM) Home Study**

1. Differentiate CMM from MTM and services provided in a traditional outpatient pharmacy.
2. Discuss how CMM aligns with the Joint Commission of Pharmacy Practice’s (JCPP) patient care process.
3. Distinguish the roles of physicians and non-pharmacist clinicians, pharmacists, and patients in CMM.
4. Propose methods of maximizing CMM efficiency and productivity.
5. Defend the alignment between CMM and priorities of potential health system partners and stakeholders.
6. Identify variables that support adoption of CMM as high-value intervention in regards to cost, quality, and/or workforce capacity.
7. Explain the enablers for pharmacists in California and select other states that support the uptake and spread of CMM.
8. Prioritize and stratify patients to target for CMM services to generate maximum value healthcare payers and other stakeholders.
9. Compare methods of funding CMM services ranging from fee for service to value-based payments.
10. Formulate metrics to capture the value of CMM services from the perspective of patients, medical providers, payers, and policy / legislative decision-makers.

**Learning Objectives – Live Program Comprehensive Medication Management (CMM)**

1. Evaluate gaps in medication-related quality and/or safety for a given healthcare organization that can be managed by CMM.
2. Develop a plan for CMM implementation or advancement that aligns with healthcare payers and providers.

**Learning Objectives for Module 2 - Diabetes Home Study**

1. Compare and contrast the pharmacologic treatment recommendations in the ADA and AACE Guidelines.
2. Describe process or strategies to recognize various types of diabetes.
3. Compare the mechanism of action, administration, place in therapy, and ADRs for oral and injectable DM agents.
4. Given a patient case, initiate and optimize evidence-based and cost-effective pharmacologic therapies to achieve A1c and blood glucose goals.
5. Discuss presentations of various comorbid conditions and their management strategies.
6. Identify needs and resources for referring patients to other healthcare members to further manage comorbid conditions.
7. Create an evidence based management plan for a patient to reduce their risk of macro vascular and microvascular complications
8. Describe appropriate patient self-management strategies including nutritional therapy, exercise, and weight loss strategies
9. Review proper management strategies for severe hypoglycemia or hyperglycemia
10. Design evidence-based monitoring and treatment plans including nonpharmacologic and pharmacologic therapies based on patient’s age, race, co-morbid conditions, and concurrent medications.

**Learning Objectives for Module 2 - Lipid Home Study**

1. Describe participants’ characteristics, study designs, study results, and the clinical implications from landmark clinical trials
2. Apply the results of the landmark clinical trials to a given patient case to design the most appropriate treatment plan
3. Calculate the patient’s cardiovascular disease risk and apply results to development of a treatment plan
4. Describe the effects of all lipid-lowering medications on lipids and lipoproteins, doses, adverse effects, drug interactions and monitoring parameters
5. Design evidence-based monitoring and treatment plans including nonpharmacologic and pharmacologic therapies based on patient’s age, race, co-morbid conditions, and concurrent medications.

**Learning Objectives for Module 2 - HTN Home Study**

1. Describe the steps for measuring blood pressure and appropriate equipment use, and record blood pressure properly.
2. Describe participants’ characteristics, study designs, study results, and the clinical implications from landmark clinical trials and apply to a given patient to determine proper blood pressure goal.
3. Compare and contrast antihypertensive agents based on their pharmacologic effects, monitoring parameters, and clinically relevant adverse drug events.
4. Design optimal and evidence based antihypertensive treatment options based on age, comorbid conditions, and blood pressure goals.
5. Differentiate optimal evaluation and management strategies between secondary HTN, and resistant HTN.
6. Design evidence-based monitoring and treatment plans including nonpharmacologic and pharmacologic therapies based on patient’s age, race, co-morbid conditions, and concurrent medications.

**Learning Objectives –Live Program Metabolic Syndrome (Diabetes, HTN, Dyslipidemia)**

1. Evaluate a patient presenting with metabolic syndrome to determine cardiovascular risks and clinical goals based on risk factors, vital signs, laboratory values, and clinical presentation.
2. Given a patient, develop optimal choices of antihypertensive, lipid-lowering, or antihyperglycemic agents based on age, comorbid conditions, and current treatment guidelines
3. Differentiate optimal evaluation and management strategies among diverse and treatment-refractory metabolic syndrome patients.
4. Design evidence-based monitoring and treatment plans including non-pharmacologic and pharmacologic therapies based on a patient’s age, race, comorbid conditions, and concurrent medications.
5. Counsel a patient on appropriate use, drug interactions and expectations of antihypertensive, lipid-lowering, or antihyperglycemic agents.

Learning Objectives for Module 3 - Depression Home Study

1. Detect signs and symptoms of depression through evaluation of a patient’s appearance, behavior, mood, emotional expression, thought process, and content.
2. Employ appropriate descriptors in documenting components of the mental status examination in a patient progress note.
3. Differentiate provider behaviors that may be effective in establishing a therapeutic alliance from behaviors not conducive to establishing a therapeutic alliance.
4. Discuss the epidemiology of major depression and its impact on health outcomes including diabetes and heart disease.
5. Compare the patient health questionnaire (PHQ-9) to other assessment tools for major depression (e.g. Hamilton Depression Rating Scale, and Beck Depression Inventory) with regard to ease of use and diagnostic validity.
6. Formulate questions to illicit suicide risk factors in patients who present with depressive symptoms.
7. Classify depressive symptoms according to those most responsive to pharmacotherapy and those that respond better to nonpharmacological treatments.
8. Given a patient vignette, judge when symptoms warrant referral to a specialist for further evaluation and treatment.
9. Describe the pathophysiology of major depression and explain brain changes and clinical course to a patient and their family members.
10. Compare pharmacologic and psychotherapeutic treatment options for major depression and explain the benefits of treatment to a perspective patient.
11. Explain the significance of neuropsychiatric comorbidities (e.g., PTSD, anxiety, pain, persistent insomnia, and substance use disorders) on the treatment and course of major depression.
12. Appraise the role of complementary therapeutics such as fish oil, SAM-E, and St. John’s Wort in the management of major depression.
13. Explain the role of atypical antipsychotics, lithium, triiodothyronine, electroconvulsive therapy and ketamine in the management of major depression.
14. Distinguish clinically significant differences among SSRIs with regard to dosing, tolerability, and drug interactions.
15. Differentiate trazodone, vilazodone and vortioxetine from each other with regard to receptor pharmacology, dosing, tolerability, and drug interactions.
16. Compare TCAs to SNRIs with regard to safety, dosing, tolerability, monitoring and drug interactions.
17. Determine the place in therapy of bupropion, mirtazapine, and milnacipran in the management of major depression and recommend optimal dosing and monitoring of each.
Learning Objectives Live Program Depression

1. Evaluate a patient presenting with depressive symptoms to determine if an antidepressant trial is optimal or if further evaluation is warranted.
2. Appraise a medication regimen to determine if a patient has received optimal pharmacotherapy for managing depression.
3. Given a patient with newly diagnosed depression and comorbidities, propose a multi-modal treatment plan including pharmacotherapy.
4. Propose an appropriate starting dose, titration and monitoring schedule for a newly diagnosed patient with depression and medical comorbidities.
5. Counsel a patient on appropriate use, drug interactions and expectations of antidepressant medication.

Learning Objectives for Module 4 – Asthma and COPD Home Study

1. Distinguish the core pathophysiologic features between asthma and COPD.
2. Predict a given patient’s likelihood of having asthma vs. COPD vs. asthma-COPD overlap syndrome based on risk factors and history.
3. Evaluate a patient with obstructive airway disease to determine appropriateness of therapy.
4. Select an evidence-based medication therapy regimen for a given patient with obstructive airway disease, accounting for key factors such as ability to use devices and cost considerations.
5. Develop a strategy for avoidance and management of exacerbation triggers.
6. Formulate a medication modification plan that includes monitoring for both changes in clinical status and adverse drug reactions.
7. Evaluate patient use of asthma and COPD-related medications and device.
8. Collect components necessary to develop a personalized action play for asthma or COPD.

Learning Objectives Live Program Asthma and COPD

1. Interpret subjective and objective information from a patient with obstructive airway disease to classify level of disease control.
2. Incorporate asthma and COPD-specific survey tools into patient evaluation.
3. Formulate and implement a patient-specific treatment plan to resolve medication-related barriers to disease control, including self-management interventions.
4. Educate patients on appropriate use of asthma and COPD-related medications and devices.
5. Construct a patient-specific asthma or COPD action plan.

Learning Objectives for Module 5 - Motivational Interviewing – Home Study and Live

1. Explain why motivational interviewing may be a better approach to engage patients
2. Compare the spirit of motivational interviewing and its core communications skills to other types of patient communication
3. Discuss specific ways to incorporate the spirit of motivational interviewing into patient care
4. Predict the possible clinical impact of motivational interviewing and some scenarios where motivational interviewing can be employed
5. Interview a patient using motivational interviewing strategies and techniques
6. Perform individualized medication counseling for a complex patient utilizing the spirit of motivational interviewing