

- a. Describe your assigned client's situation. Why are they presenting to the clinic? What medications are they currently taking?**

The client coming in today is Ms. Konane Pelekia, she is a 65-year-old female with a prior medical history of hypertension and stage c diastolic heart failure. She came to the clinic for routine lab work and yearly physical but was diagnosed with type 2 diabetes during this visit. Her recent labs show that her A1c is currently 8.1%, a fasting blood glucose of 155, and a point of care blood glucose of 205. Other labs completed were BNP 110, ejection fraction of 55% and all other labs were normal (potassium, kidney levels, and cholesterol). Her current medications are furosemide 20mg, lisinopril 10mg, metoprolol 50mg, and aspirin 81mg.

- b. Assess the applicable clinical practice guideline (CPG) for your assigned client linked on the same page in the lesson where the client case is located. What treatment is recommended by the CPG for your client's situation?**

Clinical practice guidelines (CPG) give a step-by-step approach that includes steps for patients with comorbid conditions. These conditions range from heart failure, cardiovascular disease, chronic kidney disease, and obesity. They start with lifestyle modification and then they have different algorithms for different scenarios that incorporate the different complications and lifestyles.

According to the CPG, Ms. Pelekia should be started on an SGLT-2 medication such as Canagliflozin (Invokana). She has a history of heart failure and hypertension along with her new diagnosis of diabetes. In the CPG article, they state that "SGLT2 has clearly been shown to significantly and robustly reduce the risk of hospitalization for HF or coronary vascular (CV) death in persons with type 2 diabetes with or without atherosclerotic cardiovascular disease risk (ASCVD) and improve HF-related symptoms" (Samson et al, 2023).

- c. Discuss your personal professional assessment of the client's situation provided in the scenario. What pharmacological treatment is necessary and why?**

Assessing Ms. Pelekia's situation, the choice of an SGLT-2 is the best option for her. Given that she already is in stage C heart failure with hypertension and good cholesterol, it is the best choice for her with her other comorbidities. The medications in this drug class are Canagliflozin (Invokana), Dapagliflozin (Farxiga), and Empagliflozin (Jardiance). Discussing the side effects and education of these medications will help decide which one is best for Ms. Pelekia, along with the cost. One of these medications should be started along with education on diet and lifestyle changes to best help Ms. Pelekia reach her goals and manage her diabetes. Not only will the SGLT-2 medication help manage her diabetes but will also help her HF as a dual treatment.

- d. Reflect on additional questions you have about your assigned client that may influence treatment. What else do you need to know? What follow-up assessments, labs, or conversations are required to ensure optimal health outcomes?**