Participants tasks:

Prior to attending / viewing the webinar titled *Creating and Implementing Care Plans: Part I*, read the following patient case and complete the following tasks:

1. Set goals of therapy for each of the patient’s medical conditions (diabetes, dyslipidemia, hypertension, erectile dysfunction), making some assumptions that you talked to the patient to get his opinion on the goals.

2. Using the drug therapy problems that were identified at the last webinar (which are stated at the end of this document) select the interventions that you think would be most reasonable for this patient. If any of these interventions need to be approved by a physician, state exactly how you would make the recommendations to the physician (in writing or verbally).

Patient Case

SB is a 70-year-old Caucasian man who presented to your community pharmacy for a medication assessment (SMAP). You just interviewed him to collect a medication history. This is a real patient case from the Medication Assessment Centre, but the initials have been changed.

Current Medications

Amlodipine 10mg once daily for hypertension
Atenolol 50mg once daily for hypertension
Hydralazine 50mg BID for hypertension
Valsartan 320mg once daily for hypertension
Ezetimibe 10mg once daily for dyslipidemia
Atorvastatin 10mg once daily for dyslipidemia
Canagliflozin 300mg once daily for type II diabetes
Glyburide 5mg BID for type II diabetes
Metformin 1000mg BID for type II diabetes
Insulin glargine 27 units at HS for type II diabetes
Insulin lispro PRN (dose varies) before meals “uses only when sugars are high”
ASA 81mg BID for cardiovascular protection
Vitamin C 1000mg BID for general health
Vitamin D 1000 IU once daily for general health
Multivitamin once daily for general health

He has no known drug allergies and he reports that his medication adherence is excellent.
Pertinent information from the interview:

**DIABETES:** He has had diabetes for a couple decades and current medications have been pretty stable. Canagliflozin was most recently added about one year ago (which is not covered and he pays $120/month for it). He does not check his home sugars very often, but did so for 2 weeks prior to your appointment and his pre-meal/fasting sugars have ranged from 4.7 – 8.2 mmol/L. When you checked the e-Health viewer you found that his most recent A1c value was 8.1% (which is similar to the previous 3 readings in the last year). He reports symptomatic hypoglycemia in the middle of the night about 2-3 timers per month (wakes up sweaty and shaky, sugars are 2.5 – 3.0mmol/l, has some juice and feels better). No diabetes complications.

**DYSLIPIDEMIA:** He has never had a heart attack or a stroke, but has had dyslipidemia for a couple decades. He thinks his cholesterol medications have been the same for the last 10 years. He reports no muscle pain/weakness or any other side effects. Annual lipids values have been consistent for last 4 years: LDL 1.1mmol/L, HDL 1.0mmol/L, TG 1.3mmol/L, TC 3.0mmol/L.

**HYPERTENSION:** He reports that he has had hypertension for a couple decades and has been on the same medications for several years. The only other blood pressure medication that he has ever tried is an ACE-inhibitor, which caused a bad cough and was switched to valsartan over 5 years ago. The most recent addition was hydralazine about 3 years ago. He reports no side effects and has no complaints. He checks his BP at home about twice per week and the average over the last 2 weeks is 138/77mmHg. You checked it yourself and it was 135/80mmHg in the pharmacy.

While performing your review of systems at the end of the interview you found that SB has not been able to achieve an erection for about 3 years. His family doctor assessed the problem a few years back and told him that it was probably due to his longstanding diabetes. The doctor prescribed both Viagra 50mg and 100mg with little response, but SB has not tried it in the last 2 years.

**Family History**
Father—died in car accident at age 51
Mother—died of lung cancer at age 77

**Social History**
Retired teacher, married, with several adult children
Non-smoker, Drinks alcohol sporadically and in moderation; drinks ~2 cups of coffee per day
He has Rx insurance through the Sask Senior’s Plan and teacher retirement plan
Height 5’10”; weight 100kg

**Other relevant laboratory tests accessed from e-Health viewer:** (normal values in brackets)

- Na\(^+\) 140 (135-146)
- K\(^+\) 4.0 (3.5-5.1)
- Urea 6.0 (3.7-7.0)
- Serum creatinine 78μmol/L (45-110)
- Est. CrCl 70ml/min
- Fasting glucose 8.7 (3.6-6.0)
- TSH 1.10 (0.5-9.0)
- WBC 6.45 (4.00-11.00)
- RBC 3.99
Drug therapy problems:

1. SB is taking ezetimibe, which is not indicated
2. SB is taking Vitamin C, which has no clear indication
3. SB is experiencing erectile dysfunction that is not being treated and which may be worsened by his antihypertensives
4. SB is not on best drugs for his hypertension
5. SB is not on best drugs for his diabetes
6. SB is taking an excessive dose of ASA