

So What Say You?

Problem Solve Behavioral Health Interventions for Patients in Integrated Medical Settings

Case 1: High Cholesterol

Rita is a 33 year old woman whose mother died from heart disease at the age of 55. Rita currently has 2 children and is planning a pregnancy in the near future. On evaluation, blood pressure is 130/80mm Hg and body mass index is 27. Her fasting lipid profile of 300 mg/dL, the high-density lipoprotein (HD) level is 40 mg/dL and the triglyceride level is 200 mg/dL. Fasting blood glucose is 110 mg/dL. Her LDL level is more than double the 100 mg/DL recommend clinical level. The HDL level is low and below the cutpoint of 40 mg/dl. Her family history of heart disease further increases her own risk for coronary heart disease. Since she is planning a pregnancy soon, she was not given statins. Instead she was encouraged to work on a low-fat diet and replace butter with margarine. She was also encouraged to increase her activity level with daily exercise such as walking.

- What are the risk factors you see in Rita's check-up results?
- What would you use to assess her current mental health status?
- What tools would you use to help her compliance with Diet and Exercise as advised by her physician?
- What would you be looking for on Rita's next visit to the clinic?

Case 2: Obesity

Dorothy is a 40-year-old woman who had gained over 50 pounds within the last 10 years. Tired of being overweight and being told she had no willpower, was weak, or that she needed to change her lifestyle – eat less and exercise more, she sought out medical treatment to help her lose weight and thus prevent health risks that could cause serious illness or even death. The physician explained to her that he would not recommend starting weight-loss medications until she followed a diet subsequent to seeing a nutritionist. He said that she should follow-up with his office in 3 months for a re-assessment of her lifestyle changes (e.g., healthy eating, and regular physical activity).

- What are the risk factors you see in Dorothy's check-up results?
- What would you use to assess her current mental health status?
- What tools would you use to help her compliance with Diet and Exercise advised by her physician?
- What would you be looking for on Dorothy's next visit to the clinic?

Case 3: Obesity-Side Effect of Insulin for Diabetes

Roberta, 52-year-old woman with obesity and a 9 year history of type 2 diabetes presents with complaints of fatigue, difficulty losing weight, and no motivation. She denies polyuria (excessive urination), polydipsia (excessive thirst), polyphagia (excessive hunger), blurred vision, or vaginal infections. She notes a marked decrease

in her energy level, particularly in the afternoons. She is tearful and states that she was diagnosed with depression and prescribed an antidepressant that she chose not to take. She states that she has gained an enormous amount of weight since being placed on insulin 6 years ago. Her weight has continued to increase over the past 5 years, and she is presently at the highest weight she has ever been. She states that every time she tries to cut down on her eating she has symptoms of shakiness, diaphoresis (profuse sweating), and increased hunger. She does not follow any specific diet and has been so fearful of hypoglycemia (low blood sugar) that she often eats extra snacks. Her health care practitioners have repeatedly advised weight loss and exercise to improve her health status. She complains that the pain in her knees and ankles makes it difficult to do any exercise. Her blood glucose values on capillary blood glucose testing have been 170–200 mg/dl before breakfast. Before supper and bedtime values range from 150 mg/dl to >300 mg/dl. Her current insulin regimen is 45 U of NPH (Neutral Protamine Hagedorn insulin such as Humulin or Norvolin) plus 10 U of regular insulin before breakfast and 35 U of NPH plus 20 U of regular before supper. This dose was recently increased after her A1c, was found to be 8.9% (normal <6.1 %). Past medical history is remarkable for hypertension, hypertriglyceridemia, and arthritis. Current medications include only insulin, Lisinopril (Prinivil) (for hypertension), and hydrochlorothiazide (Dyazide) (diuretic) with triamterene (diuretic). On physical exam, her height is 5' 1 1/2" and her weight is 265 lb. Her blood pressure is 160/88 mmHg. The remainder of the physical exam was unremarkable.

- What are the risk factors you see in Roberta's check-up results?
- What would you use to assess her current mental health status?
- What tools would you use to help her compliance with Antidepressants, Diet and Exercise advised by her physicians?
- What would you be looking for on Roberta's next visit to the clinic?

Case 4: Type 2 Diabetes

Alfred is a retired 69-year-old man with a 5-year history of type 2 diabetes and he had symptoms indicating hyperglycemia for 2 years before diagnosis. He had fasting blood glucose records indicating values of 118–127 mg/dl, which were described to him as indicative of "borderline diabetes." He also remembered past episodes of nocturia associated with large pasta meals and Italian pastries. At the time of initial diagnosis, he was advised to lose weight ("at least 10 lb."), but no further action was taken. Today his weight is 178 lb.; height: 5'2"; body mass index (BMI): 32.6 kg/m².

Alfred presents with recent weight gain, suboptimal diabetes control, and foot pain. He has been trying to lose weight and increase his exercise for the past 6 months without success. He had been started on glyburide (Diabeta), 2.5 mg every morning, but had stopped taking it because of dizziness, often accompanied by sweating and a feeling of mild agitation, in the late afternoon.

Alfred also takes atorvastatin (Lipitor), 10 mg daily, for hypercholesterolemia (elevated LDL cholesterol, low HDL cholesterol, and elevated triglycerides). He has tolerated this medication and adheres to the daily schedule.

He does not test his blood glucose levels at home and expresses doubt that this procedure would help him improve his diabetes control. "What would knowing the numbers do for me?," he asks. "The doctor already knows the sugars are high."

Alfred states that he has "never been sick a day in my life." He recently sold his business and has become very active in a variety of volunteer organizations. He lives with his wife of 48 years and has two married children. Although both his mother and father had type 2 diabetes, Alfred has limited knowledge regarding diabetes self-care management and states that he does not understand why he has diabetes since he never eats sugar. In the past, his wife has encouraged him to treat his diabetes with herbal remedies and weight-loss supplements, and she frequently scans the Internet for the latest diabetes remedies.

During the past year, Alfred has gained 22 lb. Since retiring, he has been more physically active, playing golf once a week and gardening, but he has been unable to lose more than 2–3 lb. He has never seen a dietitian and has not been instructed in self-monitoring of blood glucose (SMBG).

Alfred's diet history reveals excessive carbohydrate intake in the form of bread and pasta. His normal dinners consist of 2 cups of cooked pasta with homemade sauce and three to four slices of Italian bread. During the day, he often has "a slice or two" of bread with butter or olive oil. He also eats eight to ten pieces of fresh fruit per day at meals and as snacks. He prefers chicken and fish, but it is usually served with a tomato or cream sauce accompanied by pasta. His wife has offered to make him plain grilled meats, but he finds them "tasteless." He drinks 8 oz. of red wine with dinner each evening. He stopped smoking more than 10 years ago, he reports, "when the cost of cigarettes topped a buck-fifty."

Medical Records indicate that his hemoglobin A1c (A1C) has never been <8%. His blood pressure has been measured at 150/70, 148/92, and 166/88 mmHg on separate occasions during the past year at the local senior center screening clinic. Although he was told that his blood pressure was "up a little," he was not aware of the need to keep his blood pressure \leq 130/80 mmHg for both cardiovascular and renal health.

- What are the risk factors you see in Alfred's medical situation?
- What would you use to assess his current mental health status?
- What tools would you use to help his compliance with Medication, Diet and Exercise as advised by his physicians?
- Would you involve Alfred's wife in his care? If so how?
- What would you be looking for on Alfred's next visit to the clinic?

Case 5: Childhood Asthma

Sammy, a 6-year-old Hispanic Male whose family immigrated from Puerto Rico prior to his birth. He presents with a history of asthma since infancy (diagnosed at 13 months after a bout with bronchiolitis) and eczema at 6 months of age. At this visit the mother states that he has frequent colds and wheezing episodes especially at night. He has missed 5 days of school with "asthma attacks." He was treated with prednisone twice last winter for a viral infection and has used more than 6 canisters of albuterol over the past 12 months. He has difficulty keeping up with his friends but does not perceive his asthma as limiting his activity. He says he is always picked last in gym class for sports activities. His mother believes that he is well controlled on his present asthma medications and overall treatment.

He lives with his mother in a basement apartment in an inner city in the Midwest. He has a cat and a bird. His mother admits to smoking outside and never in the car. Mother works at a daycare where Sammy comes after school. His grandparents live about 3 miles away and offer mother respite care on the weekends. They have a cat and dog. Both are smokers. Sammy has had frequent ear infections and had pressure equalizer (PE) tubes placed at 22 months of age. He has four to five documented incidents of viral infections over the last year that required treatment with albuterol for several days. Mother treats his eczema with 0.1% triamcinolone cream with exacerbations and otherwise uses vasoline for his dry skin.

Today he presents to the primary care physician's office in mild to moderate respiratory distress: RR 52 (Respiratory Rate), Pulse 182, T 100.6. Pulse oximetry reading is 86% on room air. Mother states that he arrived at the daycare where she works, pale and out of breath from walking from his nearby school. He is put on nasal cannula oxygen at 2 liters and given 3 back-to-back albuterol treatments with minimal clearance. The physician decides to admit him to the hospital.

Upon arrival at the hospital, he receives an IV and systemic corticosteroids. He is given another albuterol nebulizer treatment and placed on the medical floor. During the admission process, the nurse notes that his mother is unsure if he has ever been given an asthma action plan and says that he does not routinely use an inhaler—he uses only when he wheezes. When the nurse probes further, she hears that this is often at least once a month. His mother is concerned about the cost of the hospitalization because Sammy is uninsured and she is making minimum wage. The nurse assures her that she will get a social worker to talk to her about this.

Sammy is hospitalized for 3 days and receives methylprednisolone systemically and albuterol treatments every 3 to 4 hours. He is started on an inhaled corticosteroid. He does well during the hospitalization and is discharged with an asthma action plan, an inhaled steroid metered-dose inhaler (MDI), and an albuterol MDI for quick relief. He

was told to follow up with his primary care physician in 3 to 5 days or sooner if symptoms worsen. You are with his physician when he arrives for his follow up visit.

- What are the risk factors you see in Sammy's medical situation?
- What would you use to assess his current mental health status?
- What tools would you use to help compliance with Medication utilization as advised by his physician?
- How would you involve Sammy's mother in his care?
- What would you be looking for on Sammy's next visit to the clinic?

Case 6: Hypertension

Bill a 48-year old self-employed plumber who is seen frequently for a persistent cough and upper respiratory tract infections. He has no significant past medical history. He is taking no medications. He has no known allergies. He is a regular smoker and has been since his teens. He drinks a couple of beers a night and "bit more on the weekend." His blood pressure measured today the results: BP148/94 mmHg and his repeat BP 144/92 mmHg. Bill looks like he has hypertension but before putting him on medications, his physician has recommended that he follow a plan of behavioral changes which could reduce the risk of getting Cardiovascular Disease. The changes are to reduce alcohol intake and stop smoking.

- What are the risk factors you see in Bill's medical situation?
- What would you use to assess his current mental health status?
- What tools would you use to help his compliance with reduction of alcohol use and smoking cessation as advised by his physician?
- What would you be looking for on Bill's next visit to the clinic?

Case 7: Cardiovascular Disease

Michael a 40-year-old diabetic was evaluated in the emergency room for chest pain this past week. He has a history of hypertension and a 30 pack-year smoking history. His medications included antihypertensive and cholesterol-lowering agents. He had a prior admission several years ago for a small, uncomplicated, myocardial infarct. He had had angina for many years, averaging one bout of angina a week. His usual angina lasted 10-15 minutes and was relieved by nitroglycerine. A cardiologist attempted angioplasty several years ago. This procedure relieved his symptoms for six months, but eventually exercise-induced angina returned. There were no clinical changes until two weeks prior to his emergency room admission, when he began having daily anginal attacks that lasted 30 minutes or more. In the hour prior to her admission, he had awakened with severe chest pain, nausea, and dyspnea. There had been severe unrelenting pain for 45 minutes, and it had not been relieved by nitroglycerine. Vital signs in the ER were: HR 105, BP 100/50 (his usual BP was about 155/95). He is obese and while in the ER was diaphoretic (sweating profusely) with pale skin and labored respirations. Rales were heard over both lung fields. An EKG and serial cardiac markers were ordered.

- What are the risk factors you see in Michael's medical situation?

- What would you use to assess his current mental health status?
- What tools would you use to help his compliance with smoking cessation and compliance with medication as advised by his physician?
- What would you be looking for on Michael's next visit to the clinic?

Case 8: Coronary Heart Disease

John is a 64-year-old male new to the area. John reports that he has a history of hypertension (20 years) and angina (2 years). He was a heavy smoker, 30 per day for 48 years, but ceased 9 months ago. He has no history of gastrointestinal bleeding and no known allergies. A letter from his previous physician reports that John had a non ST segment elevation myocardial infarction (NSTEMI) 12 months ago for which he underwent a percutaneous transluminal coronary angioplasty and stent to his left coronary artery. John was involved in a cardiac rehabilitation program at the local hospital for six weeks after his discharge. Since then he walks briskly for 40 minutes every day and describes no angina. Current medications: aspirin 100 mg daily, clopidogrel (Iscover, Plavix) 75 mg daily, perindopril (Coversyl) 4 mg daily, simvastatin (Lipex, Simvar, Zocor) 20 mg daily. Further discussion identifies John's lack of understanding of the purpose of his medicines and he admits to not always being compliant.

- What are the risk factors you see in John's medical situation?
- What would you use to assess his current mental health status?
- What tools would you use to help his compliance with smoking cessation and compliance with medication as advised by his physician?
- What would you be looking for on John's next visit to the clinic?

Case 9: Hypothyroidism

Charlie, age 45, has a 20-year history of major depression controlled reasonably well with paroxetine, 40 mg. He presents with escalating anxiety, depression, and irritability. His wife is concerned about his overwhelming thoughts of death, especially because Charlie's father committed suicide 30 years ago under similar circumstances. Charlie has been tremulous for the past month and has not been sleeping well. He feels like he is "in constant motion" and unable to slow down. He screened in the "highly likely" range for bipolar disorder on the Bipolar Spectrum Diagnostic Scale¹⁴ and was started on divalproex ER, 500 mg/d.

His thyroid function tests returned with a suppressed TSH (Thyroid Stimulating Hormone) of 0.03 mIU/L and an elevated FT4 (Free Thyroxine) of 3.26 ng/dL. Divalproex is discontinued and he is started on the beta blocker atenolol, 25 mg/d, to target his anxiety, tachycardia, and akathisia (involuntary movement). TSH receptor antibody testing was positive, which, along with an abnormal radioactive iodine uptake scan, confirmed a diagnosis of Graves' disease (results in Hyperthyroidism). He receives methimazole, 20 mg/d, as a temporizing measure. An endocrinologist

completes a radioactive iodine (I-131) ablation procedure on Charlie, which resolves his mood and anxiety symptoms.

- What are the risk factors you see in Charlie's medical situation?
- What would you use to assess his current mental health status?
- What tools would you use to help compliance with Medication utilization as advised by his physician?
- How would you involve Charlie's wife in his care?
- What would you be looking for on Charlie's next visit to the clinic?

Case 10: Seizure Disorder

Angelica is a 5 year old female who was brought to the clinic because of episodic "blinking out" which began 1 month ago. The patient has episodes in which she abruptly stops all activity for about 10 seconds, followed by a rapid return to full consciousness. The patient's eyes are open during the episodes and she remains motionless with occasional "fumbling" hand movements. After the episode the patient resumes whatever activity she was previously engaged with no awareness that anything has occurred. She has 30 episodes per day with no convulsions. Past medical, physical and developmental histories are unremarkable. There is no history of previous or current medications and no allergies. Family history is pertinent for her father having similar episodes as a child. General physical and neurological examination is normal. Hyperventilation in the office replicates the episodes at home.

- What are the risk factors you see in Angelica's medical situation?
- What would you use to assess her current mental health status?
- What tools would you use to help compliance with Medication utilization as advised by his physician?
- How would you involve Angelica's parents in her care?
- What would you be looking for on Angelica's next visit to the clinic?