

DM - Diabetes Mellitus

DM-AP ANATOMY AND PHYSIOLOGY

OUTCOME: The patient/family will understand anatomy and physiology as it relates to diabetes.

STANDARDS:

1. Explain the anatomy and physiology of diabetes.
2. Discuss the changes to anatomy and physiology as a result of diabetes. Explain that beta cell damage has occurred prior to the clinical diagnosis of Type 2 diabetes resulting in insulin deficiency.
3. Discuss the impact of these changes on the patient's health or well-being.

DM-C COMPLICATIONS

OUTCOME: The patient/family will understand the importance of controlling blood sugar, blood pressure, and lipids to reduce the risk of complications from diabetes.

STANDARDS:

1. Discuss common complications of long term hyperglycemia and /or hypertension and /or dyslipidemia, for example:
 - a. Retinopathy (**refer to ODM**)
 - b. Sensormotor and autonomic neuropathy
 - c. Nephropathy (**refer to CKD**)
 - d. Cardiovascular (**refer to CAD**)
 - e. Peripheral vascular disease (**refer to PVD**)
 - f. Cerebrovascular disease (**refer to CVA**)
 - g. Acute infections
 - h. Periodontal
2. Describe the signs/symptoms Diabetic Ketoacidosis or Diabetic Hyperosmolar, Hypoglycemic State (HHN).
3. Describe the signs/symptoms that the patient may experience when blood sugar is low (hypoglycemia), e.g., shakiness, dizziness, headache, hunger or nausea, blurred vision, sweating, lack of concentration, heart palpitations, irritability, unconsciousness.
4. Emphasize that optimum blood sugar, blood pressure, and lipids can reduce the risk of complications from diabetes.

5. Explain that routine laboratory testing and examinations are essential to identify the risk of complications and early treatment.

DM-CM CASE MANAGEMENT

OUTCOME: The patient/family/caregiver will understand the importance of integrated case management in diabetes.

STANDARDS:

1. Discuss roles and responsibilities of each member of the care team including the patient, family/caregiver, and providers in the case management plan.
2. Explain the coordination and integration of resources and services in developing and implementing the case management plan.
3. Explain the need to obtain the appropriate releases of information necessary to support integrated case management and to maintain patient privacy and confidentiality. **Refer to AF-CON.**

DM-CUL CULTURAL/SPIRITUAL ASPECTS OF HEALTH

OUTCOME: The patient/family will understand the impact and influences that cultural and spiritual traditions, practices, and beliefs have on health and wellness.

STANDARDS:

1. Discuss the potential role of cultural/spiritual traditions, practices and beliefs in achieving and maintaining health and wellness. Refer to clergy services, traditional healers, or other culturally appropriate resources.
2. Explain that traditional medicines/treatments should be reviewed with the healthcare provider to determine if there are positive or detrimental interactions with prescribed treatment. Explain that the medical treatment plan must be followed as prescribed to be effective.

DM-DP DISEASE PROCESS

OUTCOME: The patient/family will understand the disease process of diabetes.

STANDARDS:

1. Briefly describe the pathophysiology of Type 1 and/or Type 2 diabetes, including the concept of insulin resistance, as appropriate.
2. Describe risk factors for developing diabetes, e.g., family history, age, ethnicity, sedentary lifestyle, overweight.
3. Describe the signs/symptoms that the patient may experience when blood sugar is high (hyperglycemia), e.g., increased thirst, increased urination, increased hunger, unintentional weight loss, lethargy, headache, blurry vision, impaired concentration, impaired wound healing and immune response.

4. Emphasize that there is no cure for diabetes, but it can be managed with positive lifestyle changes (healthy eating, regular physical activity, no tobacco use) and routine medical care.

DM-EQ EQUIPMENT

OUTCOME: The patient/family will understand the equipment that may be used in the self-management of diabetes.

STANDARDS:

1. Discuss the specific components of this patient's self-blood glucose monitoring and/or self-blood pressure monitoring. Discuss the specific components of an insulin pump, as appropriate.
2. Discuss the following as appropriate regarding the prescribed equipment:
 - a. Indication for the equipment
 - b. Benefits of using the equipment
 - c. Types and features of the equipment
 - d. Proper function of the equipment
 - e. Signs of equipment malfunction and proper action in case of malfunction
 - f. The importance of not tampering with any medical device
3. Demonstrate the safe and proper use, care and cleaning of the equipment, and proper disposal of medical supplies, as appropriate. Participate in a return demonstration as appropriate.
4. For inpatients, explain that the various alarms are to alert the medical personnel of the patient's status and/or the function of the equipment.

DM-EX EXERCISE

OUTCOME: The patient/family will understand the role of physical activity and will make a plan to increase regular activity by an agreed-upon amount if indicated.

STANDARDS:

1. Discuss medical clearance issues for physical activity.
2. Discuss the benefits of any exercise, such as improvement in well being, stress reduction, sleep, bowel regulation, and self image.
3. Discuss obstacles to a personal exercise plan and solutions to those obstacles. Assist the patient in developing a personal exercise plan.
4. Discuss the appropriate frequency, intensity, time, and type of activity. Set realistic goals.
5. Explain the ways to stay safe during physical activity:

- a. Balance physical activity with meals and medications.
- b. Check blood sugars before and after physical activity.
- c. Start physical activity slowly, warming-up and cooling down.
- d. Wear appropriate clothing, shoes, and socks that fit well.
- e. Carry diabetes identification and notify someone where the patient will be exercising.
- f. Avoid extreme weather.
- g. Drink plenty of water before, during, and after activity.
- h. Carry food or drink if at risk for hypoglycemia.
- i. Stop physical activity and seek immediate medical care with pain and pressure in chest or arm, shortness of breath, nausea or vomiting, irregular heart beat, feeling very tired, feeling lightheaded or faint.

DM-FTC FOOT CARE AND EXAMINATIONS

OUTCOME: The patient/family will understand the risks of skin breakdown, ulcers, and lower extremity amputation associated with diabetes.

STANDARDS:

1. Identify risks that can result in amputation. Stress that wounds do not heal properly if blood glucose is elevated.
2. Discuss the current recommendations for periodic foot screening and comprehensive foot exam by a trained healthcare provider. Encourage the patient to remove shoes at each clinic visit.
3. Demonstrate the proper technique for a daily home foot check by patient or support person.
4. Discuss the relationship between peripheral vascular disease, neuropathy, and high blood glucose. Explain that the progression to amputation is typical without early and appropriate intervention. **Refer to PVD.**
5. Emphasize the importance of appropriate footwear.
 - a. Desirable characteristics for shoes:
 - i. Closed shoes
 - ii. Solid soles
 - iii. Properly fitted and supportive
 - b. Undesirable characteristics of shoes
 - i. Shoes that don't fit well
 - ii. Open toed, open heeled shoes
 - iii. Flip flops, flexible shoes, or thin soled shoes

- iv. High heels
 - v. Pointed toes
 - c. Emphasize that going barefoot is not recommended.
 - d. Refer to podiatrist for professional evaluation and fitting as appropriate.
6. Explain that toe nails and/or ingrown toe nails must be trimmed and treated by trained medical professionals to decrease the risk for serious infection that could lead to amputation.

DM-FU FOLLOW-UP

OUTCOME: The patient/family will understand the importance of follow-up in the management of diabetes and the prevention of complications.

STANDARDS:

1. Emphasize the importance of early intervention to prevent complications.
2. Explain that regular medical appointments are necessary to monitor and to adjust treatment plans to attain blood glucose, blood pressure, and lipid control.
3. Explain that the home glucose monitors and home blood pressure monitoring logs are tools for evaluating the treatment plan and should be brought to every appointment.
4. Explain that diabetes management involves many healthcare providers. Emphasize the importance of keeping appointments with all healthcare providers, e.g., dental, eye care, foot care, laboratory, dietitian, behavioral health.
5. Discuss the procedure for making appointments.

DM-HM HOME MANAGEMENT

OUTCOME: The patient/family will understand the home management and self-care activities necessary to control blood glucose and will make a plan to integrate these activities into daily life.

STANDARDS:

1. Discuss the specific components of this patient's home management plan (e.g., nutrition, exercise, home monitoring, taking medications). Discuss the role of support systems/family in the plan.
2. Explain that home monitoring is an important tool to assist the patient in the self-management of diabetes. Discuss maintaining monitoring logs and sharing with provider at every appointment.
3. Demonstrate and receive return demonstration of home monitoring and/or insulin administration as appropriate.

4. Emphasize the importance of good personal and oral hygiene. **Refer to HPDP-HY.**

DM-KID KIDNEY DISEASE

OUTCOME: The patient/family will understand the risks of kidney damage associated with diabetes.

STANDARDS:

1. Emphasize that high blood glucose results in damage to the kidneys. This may result in renal failure requiring long-term dialysis or kidney transplant. Once kidney damage occurs it cannot be reversed.
2. Emphasize the need for regular urine analysis and blood chemistry screening.
3. Emphasize that high blood pressure worsens diabetic kidney disease. Reinforce the importance of regular blood pressure screening and taking antihypertensive medications as prescribed. **Refer to HTN.**
4. Discuss the need for nutrition intervention. Refer to Registered Dietitian.

DM-L LITERATURE

OUTCOME: The patient/family will receive literature about diabetes.

STANDARDS:

1. Provide the patient/family with literature on diabetes.
2. Discuss the content of the literature.

DM-LA LIFESTYLE ADAPTATIONS

OUTCOME: The patient/family/caregiver will understand the lifestyle adaptations for diabetes.

STANDARDS:

1. Explain that lifestyle adaptations are the key components to preventing or delaying the progression of diabetes.
2. Emphasize that nutrition and physical activity aid in weight loss and are critical components in addressing insulin resistance.
3. Explain that use of tobacco products can exacerbate the disease process and lead to complications.

DM-M MEDICATIONS

OUTCOME: The patient/family will understand the purpose, proper use, and expected outcomes of prescribed drug therapy.

STANDARDS:

1. Describe the name, strength, purpose, dosing directions, and storage of the medication.
2. Discuss the risks, benefits, and common or important side effects of the medication and follow up as appropriate.
3. Discuss any significant drug/drug, drug/food, and alcohol interactions, as appropriate.
4. Discuss the importance of full participation with the medication plan and that this is the patient's responsibility. Discuss any barriers to full participation.
5. Discuss the importance of keeping a list of all current prescriptions and over-the-counter medicines, vitamins, herbs, traditional remedies, and supplements. Encourage the patient to bring this list and pill bottles to appointments for medication reconciliation.

DM-MNT MEDICAL NUTRITION THERAPY

OUTCOME: The patient and family will understand the specific nutritional intervention(s) needed for treatment or management of this condition, illness, or injury.

STANDARDS:

1. Explain that Medical Nutrition Therapy (MNT) is a systematic nutrition care process provided by a Registered Dietitian (RD) that consists of the following:
 - a. Assessment of the nutrition related condition.
 - b. Identification of the patient's nutritional problem.
 - c. Identification of a specific nutrition intervention therapy plan.
 - d. Evaluation of the patient's nutritional care outcomes.
 - e. Reassessment as needed.
2. Review the basic nutrition recommendations for the treatment plan.
3. Discuss the benefits of nutrition and exercise to health and well-being.
4. Assist the patient/family in developing an appropriate nutrition care plan.
5. Refer to other providers or community resources as needed.

DM-N NUTRITION

OUTCOME: The patient/family will understand the importance of nutritional management in the control of blood glucose and develop a plan to meet nutritional goals.

STANDARDS:

1. Emphasize that nutritional management includes meal planning, careful shopping, appropriate food preparation, and eating.

2. Describe healthy food preparation methods. Emphasize the importance of appropriate serving sizes and reading food labels.
3. Identify techniques or strategies for eating out, social events, traditional eating practices, and family support in managing blood sugar.
4. Explain that emotional eating from boredom, anger, frustration, loneliness, and depression can interfere with blood sugar control, as appropriate. Alternative choices should be recommended.
5. Discuss managing food intake with medication on sick days and with an exercise regime to prevent hypoglycemia.
6. Refer to registered dietitian for MNT or other local resources as appropriate.

DM-P PREVENTION

OUTCOME: The patient/family will understand major risk factors for development of Type 2 diabetes and will develop a plan for risk reduction.

STANDARDS:

1. Discuss current recommendations/importance of screening. Elevated glucose level and/or acanthosis nigricans may indicate insulin resistance.
2. Emphasize that to maintain health and prevent diabetes, extra commitment is necessary for people with a family and/or gestational history of Type 2 diabetes.
3. Discuss the role of sedentary lifestyle and obesity in the development of Type 2 diabetes. Explain that following a healthy eating plan and maintaining adequate activity levels will reduce the risk of getting Type 2 diabetes.
4. Explain that gestational diabetes increases the risk of Type 2 diabetes. **Refer to GDM.** Breast fed babies are less likely to develop diabetes.
5. Explain that patients are at high risk for infectious diseases. Review the current recommendations for immunizations and refer for immunization as appropriate. **Refer to IM.**

DM-PD PERIODONTAL DISEASE

OUTCOME: The patient/family will understand the risk of uncontrolled diabetes as it relates to dental health.

STANDARDS:

1. Explain that gum disease can contribute to poor glycemic control and cardiovascular disease.
2. Explain that the mouth (gums) contain highly vascular surface tissues that are easily damaged by poor glycemic control.
3. Explain that damage to gum tissues can result in loss of teeth and bone mass.

4. Discuss the current recommendation for annual dental examination and make appropriate referral. Explain how to access dental services.
5. **Refer to PD.**

DM-PM PAIN MANAGEMENT

OUTCOME: The patient/family will understand that pain relief may be available.

STANDARDS:

1. Explain the pain scale and how it is used to assess the degree of pain individuals are experiencing. Discuss its use in developing a plan to manage pain.
2. Discuss the pain management options which are available and help the patient develop a plan to monitor and manage pain.
3. Explain that lower extremity pain may be a sign of complications associated with neuropathy. Discuss with the medical provider.
4. Explain that some over-the-counter medications for pain can increase the risk for complications. Discuss with the medical provider.
5. Explain that any chest pain must be evaluated immediately by the medical provider to rule out the possibility of myocardial infarction.
6. **Refer to PM or CPM.**

DM-S SAFETY

OUTCOME: The patient/family will understand the safety issues related to diabetes.

STANDARDS:

1. Explain the ways to stay safe during physical activity. **Refer to DM-EX.**
2. Discuss proper foot care. **Refer to DM-FTC.**
3. Discuss the signs and symptoms of hypoglycemia and hyperglycemia. Explain how to prevent and/or treat.
4. Explain that many people have Type 2 diabetes for as much as 5–7 years before diagnosis, and that end-organ damage is occurring during that time.

DM-SCR SCREENING

OUTCOME: The patient/family will understand the proposed screening including indications.

STANDARDS:

1. Discuss the indication, risks, and benefits for the proposed screening (e.g., guaiac, blood pressure, hearing, vision, development, mental health).
2. Explain the process and what to expect after the screening.

3. Emphasize the importance of follow-up care.
4. Explain the recommended frequency of various screenings.

DM-SM STRESS MANAGEMENT

OUTCOME: The patient will understand the role of stress management in diabetes.

STANDARDS:

1. Explain that uncontrolled stress can:
 - a. Contribute to insulin resistance and lead to increased morbidity and mortality
 - b. interfere with the treatment of diabetes
2. Explain that effective stress management may reduce the adverse consequences of diabetes, as well as help improve the health and well-being of the patient.
3. Discuss that stress may exacerbate adverse health behaviors such as increased tobacco, alcohol or other substance use as well as overeating, all which can increase the risk of morbidity and mortality from diabetes.
4. Discuss various stress management strategies which may help maintain a healthy lifestyle. Examples may include:
 - a. Becoming aware of your own reactions to stress
 - b. Recognizing and accepting your limits
 - c. Talking with people you trust about your worries or problems
 - d. Setting realistic goals
 - e. Getting enough sleep
 - f. Maintaining a reasonable diet
 - g. Exercising regularly
 - h. Taking vacations
 - i. Practicing meditation, self-hypnosis, and positive imagery
 - j. Practicing physical relaxation methods such as deep breathing or progressive muscular relaxation
 - k. Participating in spiritual or cultural activities
5. Discuss referrals as appropriate.

DM-TE TESTS

OUTCOME: The patient/family will understand the test(s) to be performed, the potential risks, expected benefits, and the risks of non-testing.

STANDARDS:

1. Explain test(s) that have been ordered (explain as appropriate):
 - a. method of testing
 - b. necessity, benefits, and risks of test(s) to be performed
 - c. any potential risk of refusal of recommended test(s)
 - d. any advance preparation and instructions required for the test(s)
 - e. how the results will be used for future medical decision-making
 - f. how to obtain the results of the test
2. Explain test results:
 - a. meaning of the test results
 - b. follow-up tests may be ordered based on the results
 - c. how results will impact or effect the treatment plan
 - d. recommendations based on the test results

DM-TX TREATMENT

OUTCOME: The patient/family will understand the treatment plan for diabetes.

STANDARDS:

1. Explain the treatment plan. Emphasize the importance of active participation by the patient/family in the development of and participation with treatment plan.
2. Discuss therapies that may be utilized.
3. Explain that various treatments have their own inherent risks, side effects, and expected benefits. Explain the risk/benefit of treatment and non-treatment.
4. Discuss the importance of maintaining a positive mental attitude.

DM-WC WOUND CARE

OUTCOME: The patient/family will understand proper wound care and infection control measures.

STANDARDS:

1. Explain the reasons to care appropriately for the wound, e.g., decreased infection rate, improved healing.
2. Explain the correct procedure for caring for this patient's wound. As appropriate the patient/family will demonstrate the necessary wound care techniques.
3. Detail the supplies necessary for care of this wound (if any) and how/where they might be obtained. Emphasize the proper methods for disposal of used supplies.

4. Explain signs or symptoms that should prompt immediate follow-up: increasing redness, purulent discharge, fever, increased swelling/pain, etc.
5. Discuss any special recommendations or instructions particular to the patient's wound.