HIGHMARK WHOLECARE

Diabetes Provider Toolkit

INSIDE THIS TOOLKIT

Clincial Practice Guidelines for Diabetes

These guidelines are reviewed and updated annually.

Quality Measures

Clinical Practice Guidelines

Standards of Medical Care in Diabetes

The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had each of the following:

- Hemoglobin A1c (HbA1c) testing
- HbA1c poor control (>9.0%)
- BP control (<140/90 mm Hg)
- Eye exam (retinal) performed
- Medical Attention for Nephropathy

Statin Therapy for Patients with Diabetes

The percentage of members 40–75 years of age with diabetes who do not have clinical atherosclerotic cardiovascular disease (ASCVD) who met the following criteria:

1. **Received Statin Therapy** Members who were dispensed at least one statin medication of any intensity during the year.
2. **Statin Adherence 80%** Members who remained on a statin medication of any intensity for at least 80% of the

Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications

The percentage of members 18–64 years of age with schizophrenia, schizoaffective disorder or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.

A diabetes screening test is defined as a glucose test or an A1c test. Members with a diagnosis of diabetes are excluded from this measure.

Diabetes Monitoring for People With Diabetes and Schizophrenia

The percentage of members 18–64 years of age with schizophrenia or schizoaffective disorder and diabetes who had both an LDL-C test and an HbA1c test during the year.

Screening and Assessment Tools

Diabetes Distress Scales (English and Spanish) Print Version

Diabetes Distress Survey- Print and electronic versions

Diabetes Risk Test

Provider Educational Resources

Screening for Depression and Diabetes Distress in Adults with Type 2 Diabetes

The Use of Language in Diabetes Care and Education

Speaking the Language of Diabetes

Heart Disease and Diabetes- What is the link?

Member Educational Resources

Ten Tips for Coping with Diabetes Distress

Behavioral Health Treatment Planning Considerations

Diabetes Care for Clients in Behavioral Health Treatment

Diabetes Care for Clients in Behavioral Health Treatment

Cognitive Behavioral Therapy and Diabetes

Behavioral and Psychosocial Interventions in Diabetes

Substance Use Disorders and Diabetes

Drug and Alcohol Use with Diabetes

Eating Disorders and Diabetes

American Diabetes Association and Types of Eating Disorders

Diabulimia

Borderline Personality Disorder and Diabetes

Borderline Personality Disorder and Diabetes

Bipolar Disorder and Diabetes

Diabetes Complicates Bipolar Disorder

Common Definitions Associated with the Diagnosis of Diabetes

Diabetes Mellitus (DM)

Hyperglycemia (high blood sugar) as a result of abnormal carbohydrate metabolism.

Type 1 Diabetes (T1D)

Autoimmune disease characterized by insulin deficiency resulting from pancreatic-beta cell dysfunction. Most often diagnosed in childhood or adolescence, however not exclusive. Symptoms are typically of rapid onset (days to weeks), including frequent urination, increased thirst, extreme hunger, unexpected weight loss, and/or extreme fatigue and irritability.

Type 2 Diabetes (T2D)

Characterized by insulin resistance and hyperglycemia. Often associated with obesity because of resistance to insulin-mediated glucose uptake. Progression to Type 2 Diabetes typically occurs over the course of several years. Type 2 diabetes diagnosis is often identified by lab tests to check A1C or fasting blood glucose.

Antipsychotic medications metabolic risk:

Greater risk: clozapine, olanzapine

Lower risk: aripiprazole, brexpiprazole, cariprazine, lurasidone, ziprasidone.

Pre-diabetes

When blood sugar is higher than normal but below diabetes diagnosis range. Risk factors for developing type 2 diabetes include:

- Being overweight or obese
- Sedentary lifestyle
- Family history of diabetes
- History of gestational diabetes
- Age being 65 years or older

Complications of Diabetes

Diabetic Ketoacidosis (DKA)

Serious acute complication of diabetes. Severe hyperglycemia with the presence of ketones in the urine or blood. Requires hospitalization for treatment.

Neuropathy

A group of neurologic complications with diverse clinical manifestations. Leads to damage of nerves and sensory loss.

- **Diabetic peripheral neuropathy:** pain and/or burning sensation, often in feet and lower legs
- **Autonomic neuropathy:** includes erectile dysfunction, gastroparesis, hypoglycemia unawareness

Assessment of large and small fibers and sensation should be conducted.

Diabetic Retinopathy

Vascular complication resulting in impaired vision. Prevalence is strongly related to duration of diabetes diagnosis and level of glycemic control. Because progression can be rapid, it is important to screen people with diabetes for the development of retinal disease.

Screening or monitoring for diabetic retinopathy includes dilation of the retinas by an optometrist or ophthalmologist.

Chronic Kidney Disease (CKD)

A microvascular complication of diabetes characterized by kidney damage or decreased kidney function for at least 3 months. Kidney damage may be made on the presence of protein in the urine (albuminuria). Kidney function is decreased glomerular filtration rate (GFR).

Screening or monitoring for chronic kidney involves urinalysis. CKD increases cardiovascular risk, taking ACE/ARB medication therapy helps protect kidney damage.

An undesired complication of diabetes is damage to the kidneys. To ensure that the kidneys are still performing well and being protected from damage as a result of diabetes it is important to have routine screening or monitoring testing on a yearly basis.

Hyperglycemia

High blood glucose. Symptoms can include any of those symptoms associated with type I diabetes as well as fruity smelling breath, nausea, vomiting, abdominal pain, rapid heartbeat, and difficulty breathing. Confusion, lethargy and coma may also occur.

Hyperglycemia

Blood sugar has fallen low enough that action is required to bring back into target range. Typically <70 mg/dL

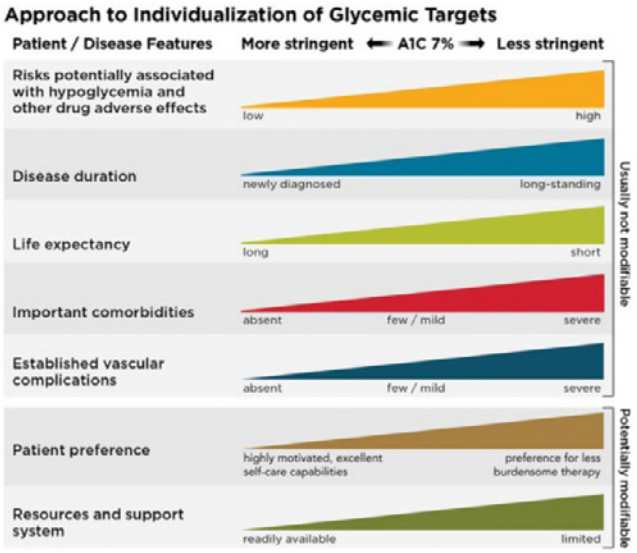
Some symptoms of hypoglycemia can include: Feeling shaky, being nervous or anxious, sweating, chills, clamminess, mood swings, irritability, confusion, fast heartbeat, feeling lightheaded or dizzy.

Common Definitions Associated with Diabetes Care

Hemoglobin A1C (HbA1C or A1C)

Measurement of what percentage of the hemoglobin — a protein in red blood cells that carries oxygen — is coated with sugar (glycated). A1C test results are reported as a percentage. The higher the A1C level, the poorer the blood sugar control and the higher the risk of diabetes complications.

A1C ≥6.5% can be used to diagnose diabetes



Hemoglobin A1C Testing (HbA1C or A1C)

The A1C test is a blood test to assess glycemic control. The A1C result reflects the average blood sugar level for the past two to three months. The A1C test should be performed routinely for all people with diabetes as part of initial assessment and continuing care. The frequency of testing varies; at minimum A1C should be tested at least twice a year for those meeting treatment goals. For those whose therapy has changed or not meeting treatment goals, testing should be completed every 3 months. Testing does not require fasting.

	A1C
Normal	≤5.6%
Prediabetes/At Risk	5.7 – 6.4%
Diabetes	≥6.5%

A normal A1C level is below 5.7 percent for someone who doesn't have diabetes.

If the A1C level is between 5.7 and 6.4 percent, this is prediabetes (also called impaired fasting glucose), which means having a high risk of developing diabetes in the future.

An A1C level of 6.5 percent or higher on two separate occasions shows diabetes. An A1C level above 8 percent means that the diabetes is not well-controlled and there is a higher risk of developing complications of diabetes.

For most adults who have diabetes, an A1C level of 7 percent or less is a common treatment target. Lower or higher targets may be appropriate for some individuals.

Glycemic Targets

Recommendations for non-pregnant adult with diabetes. Targets should be individualized to the patients' management plan

A1c	<7.0%
Preprandial plasma glucose	80-130 mg/dL
Peak postprandial plasma glucose	<180 mg/dL

Continual Glucose Monitoring (CGM)

A monitor that continually tracks blood glucose using a sensor inserted under the skin and a glucometer to read blood sugar. Devices typically provide additional glucose information like is blood sugar is trending up or down. Devices may be part of an insulin pump or a separate monitor.

Medications Therapy for the Treatment of Diabetes

Metformin/Biguanide

A class of medications that lower blood sugar by reducing the production of glucose that occurs after digestion. Approved for the treatment of type 2 diabetes.

Preferred Agents on the Statewide Preferred Drug List (PDL)

Metformin IR
Metformin ER
Combination therapy with glipizide OR glyburide

Incretin Enhancers/Mimetics

A group of medications that act like incretin hormones. Approved for the treatment of type 2 diabetes.

INCRETIN ENHANCERS

DPP-4 Inhibitors (dipeptidyl pepeidase-4): oral medications to improve glucose levels by reducing fasting and postprandial blood glucose levels. Often weight neutral and do not cause hypoglycemia.

INCRETIN MEMETICS

GLP-1 Agonists (glucagon-like peptide): injectable medications that improve glucose by stimulating insulin secretion and may lead to weight loss. Although they are injectable, they are not insulin and may be taken once a day or once a week depending on the medication prescribed.

Preferred Agents on the Statewide Preferred Drug List (PDL)

Janumet (DPP-4 Inhibitor)
Janumet XR (DPP-4 Inhibitor)
Januvia (DPP-4 Inhibitor)
Jantadueto (DPP-4 Inhibitor)

Tradjenta (DPP-4 Inhibitor)
Bydureon Pen (GLP-1 Agonist)
Byetta (GLP-1 Agonist)
Trulicity (GLP-1 Agonist)
Victoza (GLP-1 Agonist)

Insulin

Injected under the skin to replace insulin with insulin deficiency. All people with Type 1 diabetes require insulin. People with Type 2 diabetes may require insulin depending on individual needs. Injections come in vial and syringe preparations or "pen" uses. Insulin pumps are an option for delivery.

Insulin comes in multiple preparations and dosing patterns. Insulin comes with a higher risk of hypoglycemia. Dosing, frequency and timing vary widely and there is not a "one size fits all" arrangement. Insulin preparations are categorized into types:

- Rapid-Acting Insulin Analogs: rapid onset with shorter duration of action. Injected
- 15-20 minutes before a meal. Often called "bolus" insulin.
- Basal Insulin Analogs: slower onset and longer duration of action. Often called "background" insulin.
- Pre-Mixed: Fixed ratio of rapid-acting and basal insulin.
- U-500 Regular Insulin: used for treatment in people with sever insulin-resistance. Higher concentration of insulin.
- NPH Insulin: provides 24-hour insulin coverages, injected twice a day.

Preferred Agents on the Statewide Preferred Drug List (PDL)

Rapid-Acting/Bolus Insulin
Apidra
NovoLog
Insulin aspart
Insulin lispro

Basal Insulin/Long-Acting
Lantus
Levemir

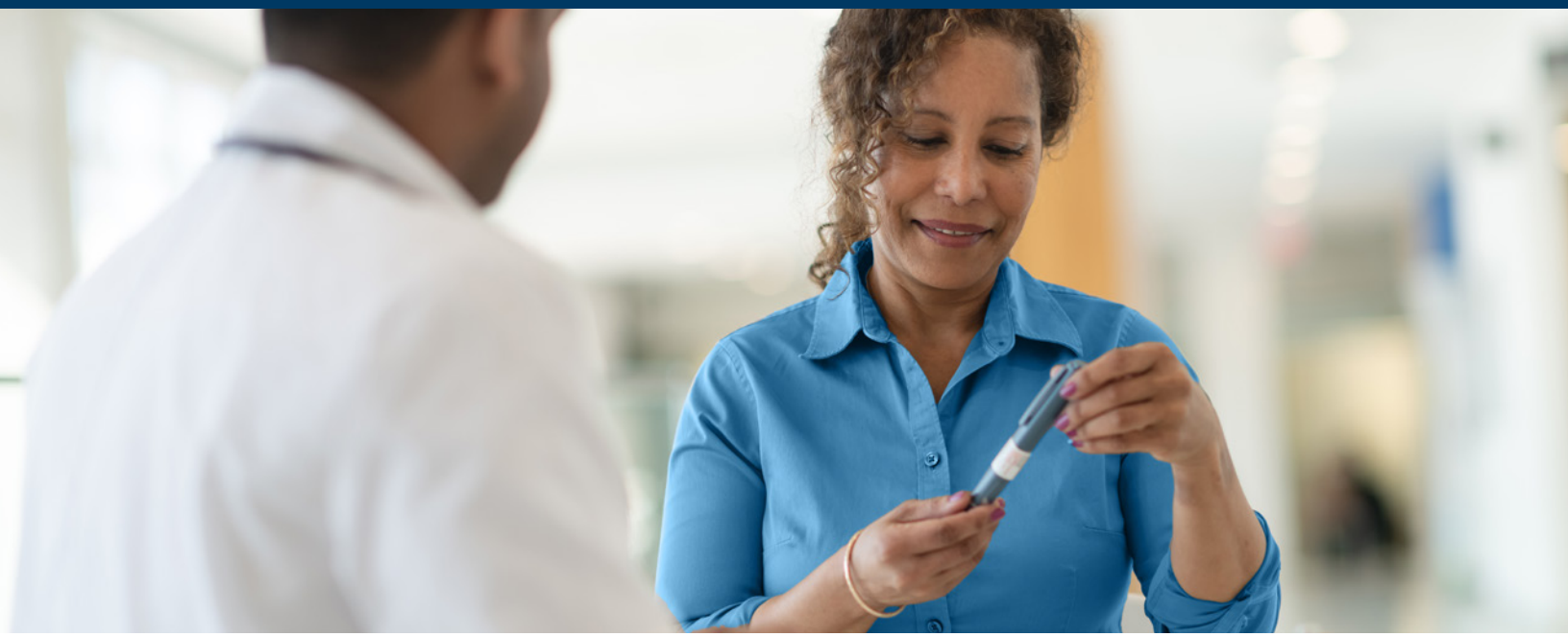
Pre-Mixed Insulin
Humalog Mix 50-50
Humalog Mix 75-25
Humulin 70-30
Novolog Mix 70-30

U-500 Concentration
Humulin R U-500

SGLT-2 Inhibitors (Sodium-glucose cotransporter-2)

Class of medication that prevents the reabsorption of glucose back into the blood, resulting is glucose excreted in the urine. Effective to lower A1C, aid in weight loss and is considered low risk for causing hypoglycemia. Approved for the treatment of type 2 diabetes.

Preferred Agents on the Statewide Preferred Drug List (PDL)
Farxiga
Invokamet
Invokana
Jardiance
Synjardy



Sulfonylureas

Oral medication that stimulates the pancreas to secrete insulin. Class of medications may cause hypoglycemia. Approved for the treatment of type 2 diabetes.

Preferred Agents on the Statewide Preferred Drug List (PDL)

Glimepiride
Glipizide
Glipizide ER/XL
Glyburide

TZDs (Thiazolidinediones)

Oral medication that improves insulin sensitivity to lower blood glucose. Approved for the treatment of type 2 diabetes.

Preferred Agents on the Statewide Preferred Drug List (PDL)

Piogltitazone

Glucometer Kits

Provide readings by detecting the level of glucosein a person's blood make decisions in line with theirtreatment plan. Consists of glucometer, lancet andlancing device.

Preferred Agents on the Statewide Preferred Drug List (PDL)

Ascensia Glucomters

Contous
Contour Link
Contour Next
Contour Next EZ
Contous Next One

Ascenia Test Strips

Contour
Contour Next

Lifescan Glucometers

OneTouch Ultra 2
OneTouch UltraMini
OneTouch Verio
OneTouch Verio Flex

This does not include GCMs (continuous glucose monitoring) systems.