

# Diabetes Care Coordination



*A Team-Based Guide*



2012

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2013



**California Medical Association Foundation**

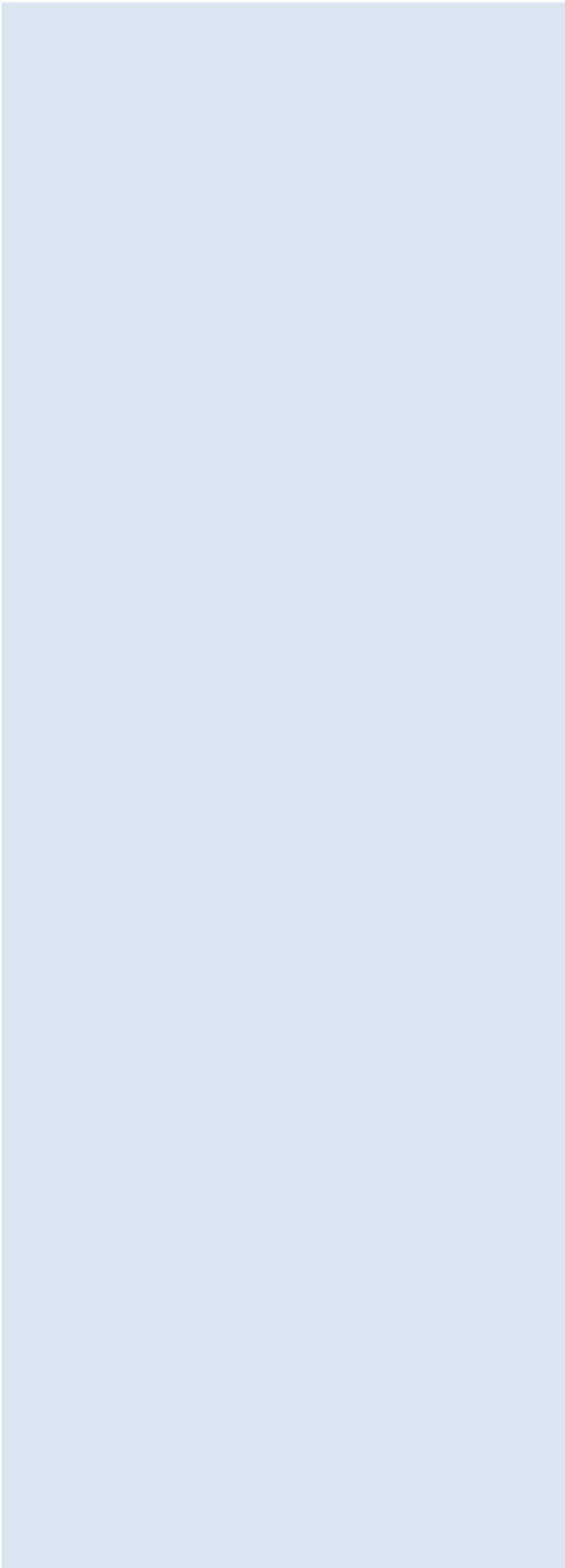
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# Preface

Dear Colleagues,

In the current practice environment, the average face time between physician and patient is limited to approximately fifteen minutes. With that time constraint, critical communication opportunity becomes increasingly limited. At the same time, the issues that need to be addressed have become more complex and require expanded contact time to cover. To overcome, or at least reduce, this challenge, the use of an office based health care team can help assure that the patient receives all the information and education needed for his or her care. In solo or small group practices, the use of the medical assistant is key to optimizing the value a patient receives during their physician visit.

In fact, the outcome of many randomized studies of the Chronic Care Model and the Patient Centered Medical Home Model suggests that incorporating the “team” is a best practice to help address the many needs of patients with diabetes. According to the National Diabetes Education Program, “Team care can minimize patients’ health risks by assessment, intervention, and surveillance to identify problems early and initiate prompt treatment. Increased use of effective treatments to improve both glycemic control and cardiovascular risk profiles can prevent or delay progression to renal failure, blindness, nerve damage, lower-extremity amputation, and cardiovascular disease. When patients participate in treatment decisions, set personally selected behavioral goals, receive adequate education, and actively manage their disease, improved diabetes control is achieved. This in turn leads to improved patient satisfaction with care, better quality of life, improved health outcomes, and ultimately, lower health care costs”.

*Diabetes Care Coordination: A Team-Based Guide* supports medical offices in developing a prepared, proactive care team that transforms patient care and self-management support. The guide specifically focuses on the integration of the medical assistant and other medical office staff as key members of the diabetes care team. Medical assistants are an often underutilized asset in the practice or clinic, who, with proper training, can facilitate planned, coordinated care that aims to improve patient health and maximize a physician’s time with their patient.

Our hope is that this guide supports the journey to develop a stronger diabetes care team within your own practice or clinic.

Sincerely,

David R. Holley, MD  
Chair, Board of Directors, CMA Foundation



# About the Guide

***Diabetes Care Coordination: A Team-Based Guide*** was developed with the goal of integrating medical assistants and medical office staff as key diabetes care team members and transforming the care provided to patients with type 2 diabetes. Considering that the average length of a primary care visit is 15 minutes, each and every one of those precious minutes needs to be maximized to its fullest. By encouraging all staff working in a practice or clinic to fully utilize their skills and potential, including medical assistants, we can expect (1) patients to have a more positive experience during their care and (2) physicians and clinicians to feel less burdened by time-consuming care coordination activities. Studies have also shown that by working in a team-based approach, clinics and practices can expect to see costs decrease and revenue increase. <sup>1</sup>

The team involves multidisciplinary health care staff, which includes not only professional staff but also the patient, medical assistant and other office staff, to provide continuous, supportive, and holistic care for people with diabetes throughout the course of their disease.

Properly implemented, diabetes team care is cost-effective and a preferred method of care delivery, particularly when services include health promotion and disease prevention in addition to intensive clinical management.

Utilization of the medical assistant on this team is critical for solo/small group practices, as the most common non-physician staff are medical assistants<sup>2</sup>. By using this guide, all physicians, including those in solo and small group practices, have a tool to increase the effectiveness of their practices diabetes care

## **Key Content**

The guide includes:

- ❖ Summary of type 2 diabetes
- ❖ Key tips for developing and sustaining the care team
- ❖ Team Care Checklists for before, during and after the patient visit
- ❖ A variety of practice and patient tools that can easily be incorporated into your workflow

## **Intended User**

The intended users of the guide are medical assistants and/or other office staff. This Guide provides education and training for medical assistants and other office staff in the basics of diabetes team care including planning the visit, during the visit and following the visit.

This guide is designed to inform and educate multidisciplinary medical staff including (1) physicians or primary care clinicians, (2) nurses, clinic/office managers, (3) medical assistants and/or other office staff. The physician and/or nurses, clinic/office managers are critical to ensure the practice's key decision-makers are committed to the implementation of multidisciplinary diabetes care team and the necessary resources and infrastructure to enable the team to function. The practice cannot make improvements if the team leader is not committed to the improvements.

Health plan, medical group, and/or IPA quality improvement leaders may also find this guide beneficial in educational activities that aim to develop or reinforce care team approaches.



## Corporate Sponsors:

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### Disclaimer

The strategies and activities described are not intended to be prescriptive or exhaustive, but rather focus on key knowledge and skills that are important if medical assistants and other medical office staff are to achieve competency as diabetes care team members. Any application of the recommendations included in this guide should be made in consideration of the needs, conditions and circumstances of each individual patient and practice.

This guide highlights promising strategies and practices at the time of publication, with the recognition that these strategies and practices may change as more knowledge is gained.

Unless otherwise stated, all materials in this guide may be reproduced with credit to the "CMA Foundation *Diabetes Care Coordination: A Team-Based Guide*, 2013."

*We would like to acknowledge Judith Schaefer with the MacColl Institute for Healthcare Innovation (et al.) for sharing their excellent toolkit with us - "Partnering in Self-Management Support: A Toolkit for Clinicians, 2009." Aspects of this toolkit were modified for inclusion.*

<sup>1</sup> Margolius D, Bodenheimer T. *Transforming Primary Care: from past practice to the practice of the future.* Health Aff. 2010; 29(5): 779-84.)

<sup>2</sup> Tache S, Chapman S. *Medical Assistants in California.* 2004. Center for the Health Professions, University of California San Francisco.



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- ❖ Additional Resources





# 1

## About Diabetes

### Learning Objectives:

- ❖ Comprehend the urgency to address the epidemic of type 2 diabetes.
- ❖ Understand and identify risk factors associated with type 2 diabetes.
- ❖ Identify health complications of uncontrolled type 2 diabetes.

# Overview

Diabetes is a chronic disease that affects 25.8 million adults in the US. More than 79 million more adults are estimated to have prediabetes.<sup>1</sup>

In California there was an estimated 3.9 million Californians with diabetes in 2010, meaning that 1 out of 7 adult Californians (13.8 percent) has diabetes. Of these, 2.4 million (8.6 percent) were aware that they have diabetes and about 1.5 million (5.2 percent) adults were not aware they have diabetes. Diabetes numbers are rapidly growing. From 2001 to 2010, the prevalence of diagnosed diabetes rose from 6.5 to 8.6 percent of California adults. California had the greatest number of annual new cases (approximately 208,000) among all the states and territories in the U.S.

Diabetes costs the US over \$176 billion annually, this includes direct medical costs for hospital and emergency care, office visits and medications, indirect medical costs, which includes absenteeism, reduced productivity, unemployment caused by diabetes-related disability and lost productivity due to early mortality.<sup>4</sup>

Diabetes is widely recognized as one of the leading causes of death and disability in the United States. Diabetes is a major cause of heart disease and stroke and the leading cause of kidney failure, non-traumatic lower-limb amputations, and new cases of blindness among adults. In 2006, it was the seventh leading cause of death. However, diabetes is likely to be underreported as the underlying cause of death on death certificates (most people with diabetes die from the complications of diabetes). In 2004, among people ages 65 years or older, heart disease was noted on 68 percent of diabetes-related death certificates; stroke was noted on 16 percent of diabetes-related death certificates for the same age group.

What happens: Diabetes is a complex group of diseases with a variety of causes. People with diabetes have high blood glucose, also called high blood sugar or hyperglycemia. Diabetes is a disorder of metabolism—the way the body uses digested food for energy. The digestive tract breaks down carbohydrates—sugars and starches found in many foods—into glucose, a form of sugar that enters the bloodstream. With the help of the hormone insulin, cells throughout the body absorb glucose and use it for energy. Diabetes develops when the body doesn't make enough insulin or is not able to use insulin effectively, or both.<sup>2</sup>

There are several forms of diabetes. The main types are type 1, type 2 and gestational diabetes. Type 1 diabetes is an autoimmune disease where the pancreas doesn't produce insulin, which is needed to move glucose from the blood as energy to the cells. People with type 1 diabetes must take insulin daily to live. The exact cause of type 1 is unknown. Symptoms of type 1 diabetes usually develop over a short period, although beta cell destruction can begin years earlier. Symptoms may include increased thirst and urination, constant hunger, weight loss, blurred vision, and extreme fatigue. If not diagnosed and treated with insulin, a person with type 1 diabetes can lapse into a life-threatening diabetic coma, also known as diabetic ketoacidosis.<sup>2</sup>

Type 2 diabetes occurs when the body does not make enough insulin or cannot use the insulin it makes effectively. Type 2 diabetes can be managed by nutrition, physical activity and lifestyle change or with oral medications and supplemental insulin.

The symptoms of type 2 diabetes develop gradually. Their onset is not as sudden as in type 1 diabetes. Symptoms may include fatigue, frequent urination, increased thirst and hunger, weight loss, blurred vision, and slow healing of wounds or sores. Some have no sign of symptoms.

Type 2 diabetes may remain undetected for many years and often presents itself with a complication of having diabetes – most often found during a medical emergency – that could have been prevented if diabetes had been detected earlier.<sup>4</sup>

What is the prevalence of diabetes by type?

- Type 1 (previously called insulin-dependent or juvenile-onset) diabetes accounts for approximately 5 percent of all diagnosed cases of diabetes in adults.
- Type 2 (previously called non-insulin-dependent or adult-onset) diabetes accounts for 90 to 95 percent of all diagnosed cases of diabetes in adults. Type 2 diabetes is increasingly being diagnosed in children and adolescents.

Gestational diabetes occurs in 2 to 10 percent of pregnancies. Some women develop gestational diabetes late in pregnancy. Although this form of diabetes usually disappears after the birth of the baby, women who have had gestational diabetes have a 40 to 60 percent chance of developing type 2 diabetes within 5 to 10 years. Maintaining a reasonable body weight and being physically active may help prevent development of type 2 diabetes.

About 3 to 8 percent of pregnant women in the United States develop gestational diabetes. As with type 2 diabetes, gestational diabetes occurs more often in some ethnic groups and among women with a family history of diabetes. Gestational diabetes is caused by the hormones of pregnancy or a shortage of insulin. Women with gestational diabetes may not experience any symptoms. <http://diabetes.niddk.nih.gov/dm/pubs/overview/index.aspx>

## Pre-diabetes

Pre-diabetes is a condition that raises the risk of developing type 2 diabetes, heart disease, and stroke. People with pre-diabetes have blood glucose levels that are higher than normal but not high enough for a diagnosis of diabetes.<sup>5</sup> For information on diagnosis of pre-diabetes refer to section below; Screening and Diagnosing Type 2 Diabetes.

Pre-diabetes has become more common in the United States. The U.S. Department of Health and Human Services estimates that at least 79 million U.S. adults ages 20 or older had pre-diabetes between 2005 - 2008. Those with pre-diabetes are likely to develop type 2 diabetes within 10 years, unless they take steps to prevent or delay diabetes.<sup>6</sup>

In 2007 - 2008, about 11.1 million (41 percent) adults in California had pre-diabetes, suggesting that future rates of diabetes will continue to rise in the absence of intervention. In 2008, about 18,000 (2.3 per 1,000) children between ages 5-19 in California had diagnosed diabetes, with 15,000 being type 1 diabetes and 3,000 being type 2 diabetes. More recent small studies suggest a consistent rise in type 2 diabetes among children and youth, with almost half of the diabetes cases in youth being type 2.<sup>7</sup>

The urgency to address type 2 diabetes and pre-diabetes stems from the rapidly increasing number of Americans diagnosed with diabetes each year. Diabetes is a growing, serious, common, and costly disease that affects 1 of 10 Americans, or 8.3 percent of the U.S. population.

The good news is that people with pre-diabetes can prevent or delay diabetes. Studies have clearly shown that losing 5 to 10 percent of body weight through increased physical activity can lower the risk of developing type 2 diabetes. A major study of more than 3,000 people with infrared glucose testing (IGT) found that healthy eating and physical activity resulting in a 5 to 7 percent weight loss—about 10 to 14 pounds in a person who weighs 200 pounds — lowered the incidence of type 2 diabetes by nearly 60 percent. Study participants lost weight by cutting fat and calories in their diet and increasing physical activity — most chose walking — by at least 30 minutes a day, 5 days a week.<sup>14</sup> In 2009, the Diabetes Prevention Program Outcomes Study concluded that prevention or delay of diabetes with lifestyle intervention or metformin can persist for at least 10 years.<sup>15</sup> Interventions to prevent or delay type 2 diabetes in people with pre-diabetes are feasible and could be cost-effective.

## Type 2 Diabetes

This Guide focuses on Type 2 diabetes. Diabetes is a chronic medical condition marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both.<sup>8</sup> In adults, type 2 diabetes accounts for about 90% to 95% of all diagnosed cases of diabetes. It usually begins as insulin resistance, a disorder in which the cells do not use insulin properly. As the need for insulin rises, the pancreas's ability to produce it gradually decreases.

What happens: Normally, in the body most of the food we eat is broken down into glucose in the blood. Glucose is a main source of fuel for the body. Glucose passes into the bloodstream, where cells use it for energy. Insulin, a hormone produced naturally in the body by the pancreas, must be present to open up the cell receptors for glucose to enter. When insulin is not available or resistant, blood glucose rises in the body. When high blood glucose is constantly present the risk for complications of diabetes increases. In order to reduce risk for diabetes complications blood glucose must be controlled.

### Complications of Diabetes

Hyperglycemia or high blood glucose is a common factor in all types of diabetes. Hyperglycemia is responsible for the onset and progression of complications. If hyperglycemia is not controlled it can cause a fatal heart attack, heart disease, stroke, blindness, kidney failure and amputation.

#### Quick Tip

##### What is diabetes?

Diabetes is a chronic medical condition marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. This is a metabolic disorder complicating the way the body uses food for energy.

Know the Facts about Uncontrolled Diabetes<sup>8</sup> (American Association of Diabetes Educators; Fundamentals of Diabetes Care Program)

- Causes 2-4 times more heart attacks
- Causes 2-6 times more strokes
- Is the leading cause of blindness
- Is the leading cause of kidney failure
- Is responsible for 60% of the non-traumatic amputations in the U.S.
- Shortens the lifespan by 10 - 15 yrs.

## **Smoking and Diabetes: A Dangerous Combination**

We all know that smoking is not good for our health. But smoking is really dangerous when you have diabetes. Smoking exacerbates the harmful effects of diabetes by increasing insulin resistance. This can in turn worsen diabetes control. Smoking can also increase diabetes-related complications like vascular disease, neuropathy, nephropathy, retinopathy, and periodontal disease. If you have patients with diabetes or any other chronic disease, encourage them to quit. Smoking needs to be treated just like any chronic disease with diagnoses, treatment and follow-up. Research shows us that 70% of smoker's want to quit and are happy to have their health care provider advise them to try. But provide them with a referral to the resources like the California Smokers' Helpline (1-800-NOBUTTS). This can double their chances that they can quit successfully.

## **Who Develops Type 2 Diabetes?**

There is not a clear understanding as to why some individuals develop Type 2 Diabetes and others do not. However, there are many factors that increase the risk of Type 2 Diabetes. Type 2 diabetes is associated with older age, obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity and race/ethnicity. African Americans, Hispanic/Latino Americans, American Indians and some Asian Americans and Native Hawaiians and other Pacific Islanders are at particularly high risk for developing Type 2 Diabetes and its complications. Type 2 Diabetes is more common in older people, especially in people who are overweight. Type 2 diabetes in children and adolescents is becoming more common especially among American Indians, African Americans, Hispanic/Latino Americans, and Asians/Pacific Islanders.<sup>9</sup>

## **How is diabetes managed?**

Healthy eating, physical activity, and blood glucose testing are the basic management tools for type 2 diabetes. In addition, many people with type 2 diabetes require one or more diabetes medicines—pills, insulin, and other injectable medicine—to control their blood glucose levels.

Adults with diabetes are at high risk for cardiovascular disease (CVD). In fact, at least 65 percent of those with diabetes die from heart disease or stroke. Managing diabetes is more than keeping blood glucose levels under control—it is also important to manage blood pressure and cholesterol levels through healthy eating, physical activity, and the use of medications, if needed. By doing so, those with diabetes can lower their risk. Aspirin therapy, if recommended by a person's health care team, and smoking cessation can also help lower risk.

Diabetes self-management education or training is a key step in improving health outcomes and quality of life. It focuses on self-care behaviors, such as healthy eating, being active, and monitoring blood sugar. It is a collaborative process in which diabetes educators help people with or at risk for diabetes gain the knowledge and problem-solving and coping skills needed to successfully self-manage the disease and its related conditions.

People with diabetes should see a health care provider who will help them learn to manage their diabetes and who will monitor their diabetes control. Most people with diabetes get care from primary care physicians—internists, family practice doctors, or pediatricians. Often, having a team of providers can improve diabetes care.

A team can include

- a primary care provider such as an internist, a family practice doctor, or a pediatrician
- an endocrinologist—a specialist in diabetes care
- a dietitian, a nurse, and other health care providers who are certified diabetes educators—experts in providing information about managing diabetes
- a podiatrist—for foot care
- an ophthalmologist or an optometrist—for eye care
- all primary care staff can be a part of the diabetes team

The team can also include other health care providers, such as cardiologists and other specialists. The team for a pregnant woman with type 1, type 2, or gestational diabetes should include an obstetrician who specializes in caring for women with diabetes. The team can also include a pediatrician or a neonatologist with experience taking care of babies born to women with diabetes. <http://diabetes.niddk.nih.gov/dm/pubs/overview/index.aspx>

### **How are diabetes and prediabetes diagnosed?**

Blood tests are used to diagnosis diabetes and prediabetes because early in the disease type 2 diabetes may have no symptoms. All diabetes blood tests involve drawing blood at a health care provider's office or commercial facility and sending the sample to a lab for analysis. Lab analysis of blood is needed to ensure test results are accurate. Glucose measuring devices used in a health care provider's office, such as finger—stick devices, are not accurate enough for diagnosis but may be used as a quick indicator of high blood glucose.

Testing enables health care providers to find and treat diabetes before complications occur and to find and treat pre-diabetes, which can delay or prevent type 2 diabetes from developing. Any one of the following tests can be used for diagnosis:\*

- an **A1C** test, also called the hemoglobin A1c, HbA1c, or glycol-hemoglobin test
- a **fasting plasma glucose (FPG)** test
- an **oral glucose tolerance test (OGTT)**

*\*Not all tests are recommended for diagnosing all types of diabetes.*

If the 2-hour blood glucose level is between 140 and 199 mg/dL, the person has a type of pre-diabetes called impaired glucose tolerance (IGT). If confirmed by a second test, a 2-hour glucose level of 200 mg/dL or above means a person has diabetes.

Another blood test, the random plasma glucose (RPG) test, is sometimes used to diagnose diabetes during a regular health checkup. If the RPG measures 200 micrograms per deciliter or above, and the individual also shows symptoms of diabetes, then a health care provider may diagnose diabetes.

### **A1C Test**

The A1C test is used to detect type 2 diabetes and pre-diabetes but is not recommended for diagnosis of type 1 diabetes or gestational diabetes. The A1C test is a blood test that reflects the average of a person's blood glucose levels over the past 3 months and does not show daily fluctuations. The A1C test is more convenient for patients than the traditional glucose tests because it does not require fasting and can be performed at any time of the day.

The A1C test result is reported as a percentage. The higher the percentage, the higher a person's blood glucose levels have been. A normal A1C level is below 5.7 percent.



An A1C of 5.7 to 6.4 percent indicates pre-diabetes. People diagnosed with pre-diabetes may be retested in 1 year. People with an A1C below 5.7 percent may still be at risk for diabetes, depending on the presence of other characteristics that put them at risk, also known as risk factors. People with an A1C above 6.0 percent should be considered at very high risk of developing diabetes. A level of 6.5 percent or above means a person has diabetes.

### **Laboratory analysis**

When the A1C test is used for diagnosis, the blood sample must be sent to a laboratory using a method that is certified by the NGSP to ensure the results are standardized. Blood samples analyzed in a health care provider's office, known as point-of-care tests, are not standardized for diagnosing diabetes.

### **Abnormal results**

The A1C test can be unreliable for diagnosing or monitoring diabetes in people with certain conditions known to interfere with the results. Interference should be suspected when A1C results seem very different from the results of a blood glucose test. People of African, Mediterranean, or Southeast Asian descent or people with family members with sickle cell anemia or a thalassemia are particularly at risk of interference.

However, not all of the A1C tests are unreliable for people with these diseases. The NGSP (National Glycohemoglobin Standardization Program) provides information about which A1C tests are appropriate to use for specific types of interference and details on any problems with the A1C test at [www.ngsp.org](http://www.ngsp.org). False A1C test results may also occur in people with other problems that affect their blood or hemoglobin such as chronic kidney disease, liver disease, or anemia.

More information about limitations of the A1C test and different forms of sickle cell anemia is available in the NDIC booklet *For People of African, Mediterranean, or Southeast Asian Heritage: Important Information about Diabetes Blood Tests*, available at [www.diabetes.niddk.nih.gov](http://www.diabetes.niddk.nih.gov)

### **Changes in Diagnostic Testing**

In the past, the A1C test was used to monitor blood glucose levels but not for diagnosis. The A1C test has now been standardized, and in 2009, an international expert committee recommended it be used for diagnosis of type 2 diabetes and pre-diabetes.<sup>2</sup>

### **Fasting Plasma Glucose Test**

The FPG test is used to detect diabetes and pre-diabetes. The FPG test has been the most common test used for diagnosing diabetes because it is more convenient than the OGTT and less expensive. The FPG test measures blood glucose in a person who has fasted for at least 8 hours and is most reliable when given in the morning.

People with a fasting glucose level of 100 to 125 mg/dL have impaired fasting glucose (IFG), or pre-diabetes. A level of 126 mg/dL or above, confirmed by repeating the test on another day, means a person has diabetes.

## Oral Glucose Tolerance Test

The OGTT can be used to diagnose diabetes, pre-diabetes, and gestational diabetes. Research has shown that the OGTT is more sensitive than the FPG test, but it is less convenient to administer. When used to test for diabetes or pre-diabetes, the OGTT measures blood glucose after a person fasts for at least 8 hours and 2 hours after the person drinks a liquid containing 75 grams of glucose dissolved in water.

<http://diabetes.niddk.nih.gov/dm/pubs/overview/index.aspx>

## Diagnosis of Type 2 diabetes

According to the American Diabetes Association (ADA), testing should be considered in all adults who are overweight (BMI  $\geq 25$  kg/m<sup>2</sup>) and have additional risk factors. Additionally, all adults should be *screened once they are 45 years old, regardless of risk factors. If results are normal, testing should be repeated at least at 3-year intervals, with consideration of more frequent testing depending on initial results and risk status.*

## Screening and Diagnosis of Type 2 Diabetes

<b>Fasting Plasma Glucose*</b>	Fasting with no caloric intake for at least 8 hours †	<b>Normal</b> <100 mg/dL	<b>Prediabetes</b> (Impaired Fasting Glucose) ≥100-125 mg/dL	<b>Diabetes</b> ≥126 mg/dL
<b>Random Plasma Glucose</b>	Can be performed regardless of timing of caloric intake			<b>Diabetes</b> ≥200 mg/dL w/symptoms
<b>2 hr. Plasma Glucose in the 75 gram Oral Glucose Tolerance Test (OGTT)</b>	Can be performed regardless of timing of caloric intake includes Glucose load with 75 grams	<b>Normal</b> <140 mg/dL	<b>Prediabetes</b> (Impaired Glucose Tolerance) ≥140-199 mg/dL	<b>Diabetes</b> ≥200 mg/dL
<b>A1c %*</b>		<b>Normal</b> <5.7 %	<b>Prediabetes</b> (At risk for developing diabetes) 5.7% - 6.4%	<b>Diabetes</b> ≥6.5 %

\*Confirmed by retesting on a different day in the absence of unequivocal hyperglycemia

† Patients may be allowed to drink coffee or tea without cream or sugar additive on the morning of the test.

**Prediabetes** is also called impaired fasting glucose (IFG) or impaired glucose tolerance (IGT), depending on the test used to diagnose it. (Some people have both IFG and IGT.)

American Diabetes Association, Standards of Medical Care in Diabetes, Diabetes Care, **January 2012**, vol. 35 no. Supplement 1 **S11-S61**

## Target Goals for Patients with Type 2 Diabetes

Achieving glycemic control and having good control of lipids and blood pressure early is critical to reducing serious long term complications and reduces the risk of common comorbidities such as heart attack, congestive heart failure, and chronic kidney disease.

(Handelsman Y, Mechanick JI, Blonde L., et al. American Association of Clinical Endocrinologists Medical Guidelines for Clinical Practice for developing a diabetes mellitus comprehensive care plan. *EndocrPOact.* Mar-Apr 2011; 17 Suppl 2:1-53, <http://www.ncbi.nlm.nih.gov/pubmed?term=21474420>)

Diabetes, a serious and life-threatening disease, has reached epidemic proportions in the U.S.

### Recommended Target Goals for Patients with Type 2 Diabetes

<b>Blood Glucose Treatment Goals</b>	A1c	<7% for most patients*
<b>Blood Pressure Treatment Goals</b>	Blood Pressure	<130/80 mm Hg
<b>Lipid Profile Treatment Goals</b>	LDL	< 100 mg/dL <70 mg/dL(optional goal)
	Triglycerides	<150 mg/dL
	HDL	>40 mg/dL in men > 50 mg/dL in women
	Non-HDL	<130 mg/dL; <100 mg/dL(optional goal)
	Total Cholesterol	< 200 mg/dL

\* More or less stringent A1c values may be appropriate dependent on individual history, risk factors and length of disease, among other considerations.

American Diabetes Association, *Standards of Medical Care in Diabetes, 2012* and the American Association of Clinical Endocrinologists *Medical Guidelines for Developing a Diabetes Mellitus*

## Resources

To learn more about type 1, type 2, and gestational diabetes, as well as diabetes research, statistics and education, contact:

### **American Diabetes Association**

Email: AskADA@diabetes.org

Internet: [www.diabetes.org](http://www.diabetes.org)

Key Resource: Clinical Practice Recommendations

Clinical Practice Recommendations are based on a complete review of the relevant literature by a diverse group of highly trained clinicians and researchers. After weighing the quality of evidence, from rigorous double-blind clinical trials to expert opinion, recommendations are drafted, reviewed, and submitted for approval to the ADA Executive Committee; they are then revised on a regular basis, and subsequently published in *Diabetes Care*. For more information please visit: <http://professional.diabetes.org>

### **American Association of Diabetes Educators**

Contact information:

<http://www.diabeteseducator.org/ContactUs.html>

Internet: [www.diabeteseducator.org](http://www.diabeteseducator.org)

### **AADE: Fundamentals of Diabetes Care**

<https://www.diabeteseducator.org/ProfessionalResources/products/fundamentals.html>

*Fundamentals of Diabetes Care* is a no-cost, self-paced, 6-module online program that focuses on training medical assistants, licensed practical nurses, and other healthcare technicians to deliver appropriate level diabetes care to patients within their practice setting. Technicians who complete the program will be better prepared to assist patients with diabetes and refer them to DMST/E.

### **National Diabetes Education Program**

Email: [ndep@mail.nih.gov](mailto:ndep@mail.nih.gov)

Internet: [www.ndep.nih.gov](http://www.ndep.nih.gov)  
[www.yourdiabetesinfo.org](http://www.yourdiabetesinfo.org)

### **California Diabetes Program and Diabetes Coalition of California**

Internet: [www.caldiabetes.org](http://www.caldiabetes.org)

Internet:

[www.diabetescoalitionofcalifornia.org](http://www.diabetescoalitionofcalifornia.org)

Key Resource: Basic Guidelines for Diabetes Care

The *Basic Guidelines* serve as a framework for developing diabetes care programs aimed at reducing the personal and societal impact of diabetes. These user-friendly guidelines, developed by local and national diabetes experts, are consistent with the American Diabetes Association's *Clinical Practice Recommendations*. References are individually rated by experts. All materials may be reproduced with the citation noted on the bottom of each page.

### **California Smokers' Helpline**

Internet: [www.NO BUTTS.org](http://www.NO BUTTS.org)

Phone: 1-800-NO-BUTTS

Free tobacco cessation services and counseling on the phone. Available in multiple languages and hours. Website offers free materials order system.

### **National Diabetes Information Clearinghouse (NDIC)**

Email: [ndic@info.niddk.nih.gov](mailto:ndic@info.niddk.nih.gov)

Internet: <http://www.diabetes.niddk.nih.gov/>

### **National Diabetes Prevention Program**

Internet: <http://www.cdc.gov>

Diabetes Public Health Resources

The National Diabetes Prevention Program is a public-private partnership of community organizations, private insurers, employers, health care organizations, and government agencies. These partners are working to establish local evidence-based lifestyle change programs for people at high risk for type 2 diabetes.

## End Notes:

1. California Diabetes Program. California Diabetes Fact Sheet, Technical Notes In; 2011.
2. National Diabetes Information Clearinghouse Causes of Diabetes NIH Publication No. 11-5164 September 2011.
3. Making System Change for Better Diabetes Care (Accessed at <http://www.betterdiabetescare.nih.gov/TOOLBOXclinical.htm>.)
4. Centers for Disease Control and Prevention. National Diabetes Fact Sheet: National Estimates and General Information on Diabetes and Prediabetes in the United States. In. Atlanta: U.S. Department of Health and Human Services 2011.
5. Nathan DM, Davidson MB, DeFronzo RA, et al. Impaired fasting glucose and impaired glucose tolerance: implications for care. *Diabetes Care* 2007;30:753-9.
6. Centers for Disease Control and Prevention. National Diabetes Fact Sheet: National Estimates and General Information on Diabetes and Prediabetes in the United States. In. Atlanta: U.S. Department of Health and Human Services 2011.
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8. California Diabetes Program. California Diabetes Fact Sheet, Technical Notes In; 2011.
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10. Centers for Disease Control and Prevention. National Diabetes Fact Sheet: National Estimates and General Information on Diabetes and Prediabetes in the United States. In. Atlanta: U.S. Department of Health and Human Services 2011.
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12. Funnell MM, Brown TL, Childs BP, et al. National standards for diabetes self-management education. *Diabetes Care* 2007;30:1630-7.
13. Foundation C. Improving Diabetes Care: Focus on Solo and Small Group Practices. In. Sacramento, CA 2011.
14. National Diabetes Education Program. Small Steps Big Rewards: Your GAME PLAN to Prevent Type 2 Diabetes: Information for Patients. In: Health Nlo, ed. Bethesda, MD 2006.
15. California Diabetes Program. California Diabetes Fact Sheet, Technical Notes In; 2011.



# 2

## Team Care Coordination

### Learning Objectives:

- ❖ Identify key components of team care.
- ❖ Establish a process to evaluate where the practice is in terms of the team care continuum.
- ❖ Identify who is on the team, both in the office and in the community.
- ❖ Review the Small Test of Change process to improve patient care.

# Team Care Coordination

The optimal treatment of diabetes can be complicated and time-consuming for patients and their physicians. Long-term patient self-management consists of ongoing clinic/practice visits, frequent lab testing, referral to other healthcare providers for testing and education and attention to healthy eating, and physical activity. In addition, adherence to multiple medications is usually required. Research indicates that the central institution of primary care — the 15-minute physician visit — cannot accomplish what patients and healthcare providers would like to see.<sup>1</sup>

- Forty-two percent of primary care physicians report not having adequate time to spend with their patients.
- Fifty percent of patients leave the office visit without understanding what advice their physician gave.
- Physicians, according to one study, interrupted patients' initial statement of their problem in an average of 23 seconds; in 25% of visits the patient was unable to express his/her concerns at all.
- It takes 7.4 hours per working day per patient to provide all recommended preventive care to a panel of 2,500 patients, plus 10.6 hours to manage all chronic conditions adequately.

During a 15-minute office visit, it is often difficult for primary care providers to provide quality acute, chronic, and preventive care while building meaningful relationships with their patients. During these visits, primary care providers also deal with managing multiple diseases in accordance with evidence-based guidelines.<sup>1</sup> One solution to expanding time, improving quality, and strengthening the patient's ability to manage his or her diabetes is by utilizing a team care model.

Team care can provide continuous, supportive, and effective care for people with diabetes throughout the course of their disease, assisting in the prevention of complication and management of chronic disease. A well-implemented diabetes care team can be a cost-effective method of care delivery, particularly when services include health promotion and disease prevention, in addition to intensive clinical management. Team care is a key component of health care reform and quality improvement initiatives that incorporate an integrated health care delivery system, especially those for chronic disease prevention and management.<sup>2</sup>

Effective team care requires:

- The commitment and support of organization leadership
- The active participation of the patient and health care professional team members
- Ways to identify the patient population via an information tracking system
- Adequate resources
- Payment mechanisms for team care services
- A coordinated communication system
- Documentation and evaluation of outcomes and adjustment of services as necessary<sup>2</sup>

Team care involves all the staff members in a practice who work together to provide coordinated care to people with diabetes. Team members increase their skills and expertise, working to the

maximum of their scope of practice. Team members also know what the person with diabetes needs from their health care visit, so they can remind each other and the patient to make sure nothing falls through the cracks. This frees up the primary care provider to do what only s/he can do, while improving the quality of care for patients.

Team care can improve outcomes in one or more of the following areas:<sup>2</sup>

- Improved glycemic control
- Increased patient follow-up
- Greater patient satisfaction
- Reduced risk of diabetes complications
- Improved patient quality of life
- Reduced hospitalizations
- Decreased health care costs

## **Team Care in Practice**

The key function of a multidisciplinary team is to provide continuous, supportive and aggressive care for people with diabetes throughout the course of their disease.<sup>11</sup> Identifying the roles of the team and actively engaging the entire team are essential in effectively treating patients with type 2 diabetes. Team composition may differ according to patients' needs, patient load, organizational constraints, resources, clinical setting, geographic location, and professional skills.<sup>12</sup>

### **Practice example:**

Kwabena Adubofour, MD, a solo/small practice physician in Stockton, California, who shows how simple steps can be developed to improve care:<sup>13</sup> Dr. Adubofour and his team uses color-coded charts which allows quick identification of patients with diabetes and triggers a clinical process to identify the services needed to provide patients at their visit.

Dr. Adubofour relies heavily on his medical assistants to move the patient through the visit and to be a key partner with the patient in their diabetes care. The medical assistants perform a variety of tasks, from initiating referral forms to providing basic health education that will free up valuable time to focus on patient care and management. Dr. Adubofour also relies on his staff to keep up-to-date on the key community resources available for his patients with diabetes, enabling him to more effectively refer his patients for diabetes education and community support.

## **Key Components of Team Care**

Optimizing outcomes for patients with type 2 diabetes requires two key components:

- Evidence based treatment
- Patient centered care

There are many models that address the concepts of team based care, including the Patient Centered Medical Home and the Chronic Care Model, and more. Most models include these 6 elements that are essential for planning, managing, supporting, and organizing care for patients with chronic illness including type 2 diabetes:



### Elements of a System for Continuous, Supportive and Aggressive Care

- Set team goals and objectives.
- Follow a system for patient identification, data collection, and ongoing assessment.
- Identify the work flow of the team members when providing care for patients with type 2 diabetes.
  - Provide diabetes, lipid, and hypertension management
  - Self management education
  - Nutrition therapy
  - Psychosocial counseling
  - Risk factor reduction (tobacco cessation intervention)
  - Screening for complications
  - Follow up care
  - Coordination of referrals to specialists
  - Access to supportive clinical and community resources.
- Support continuity of care through regular team meetings and documentation and communication of information among team members
- Structure a payment and/or reimbursement system for provider services.
- Monitor the achievements of specific performance measures such as use of hemoglobin

The details below are based on the Chronic Care Model, a unique and proven approach for implementing proactive strategies that are responsive to both patients and practitioner needs.<sup>3</sup> Take a moment to review these concepts and evaluate how your practice is currently using them.

Key Diabetes Change Concepts of the Chronic Care Model	
<b>Self – Management</b> (Care team assists patients to actively manage their diabetes)	<ul style="list-style-type: none"> <li>• Use diabetes self-management tools that are based on evidence of effectiveness.</li> <li>• Set and document self-management goals collaboratively with patients.</li> <li>• Train providers and other key staff to help patients with their self-management goals.</li> <li>• Develop a referral process for referring patients to self-management education/training classes or to see a certified diabetes educator</li> <li>• Follow up and monitor self-management goals.</li> <li>• Use group visits to support self-management.</li> <li>• Tap community resources to support patients with their self-management goals.</li> </ul>
<b>Decision Support</b> (Use of evidence based guidelines, tools to improve care and communication)	<ul style="list-style-type: none"> <li>• Integrate evidence-based guidelines in the delivery of care.</li> <li>• Establish linkages with key specialists to assure that primary care providers have access to expert support.</li> <li>• Provide skill-oriented interactive training programs for all staff to strengthen their performance and support the patient.</li> <li>• Educate patients about their care plan, (if possible refer to diabetes or health educator) , healthier eating, physical activity and effectively managing their medications.</li> </ul>

<p><b>Clinical Information System</b> (Collect and organize patient data for timely feedback)</p>	<ul style="list-style-type: none"> <li>• Establish a chronic disease registry or develop a system that clearly identifies patients with type 2 diabetes. This is an essential first step to strengthen a clinic or office's ability to work with their patients. For example, color-code the charts for a quick visual reference for patients with diabetes.</li> <li>• Develop processes for use of the registry, including designating personnel for data entry, assuring data integrity, and registry maintenance.</li> <li>• Use the registry to generate reminders and care-planning tools for individual patients.</li> <li>• Use the registry to provide feedback to all members of the office's care team.</li> </ul>
<p><b>Delivery System Design</b> (Create a proactive approach to patient care)</p>	<ul style="list-style-type: none"> <li>• Use the registry to review care and plan visits.</li> <li>• Assign roles, duties, and tasks for planned visits among the staff. Use cross-training to expand staff understanding and capability.</li> <li>• Use planned visits in individual and group settings.</li> <li>• Make designated staff responsible for follow-up with patients, using a variety of methods, including resource referrals, links to community outreach workers, telephone calls, and home visits.</li> <li>• Use <i>promotoras</i> and community health worker programs for outreach and follow up.</li> </ul>
<p><b>Organization of Health Care</b></p>	<ul style="list-style-type: none"> <li>• Make improving chronic care a part of the clinic or practice's goals for improving patient care.</li> <li>• Make sure physicians and staff visibly support and promote the efforts to improve chronic care and work to remove barriers and provide necessary resources.</li> <li>• Ensure that work is done daily for continued clinical improvement.</li> </ul>
<p><b>Community</b> (making the link to community resources for patient referral)</p>	<ul style="list-style-type: none"> <li>• Establish linkages with organizations to support patients in their efforts to better manage their diabetes.</li> <li>• Link patients to community resources to provide reduced medication costs, healthy lifestyle education, tobacco cessation and health education materials.</li> <li>• Encourage participation in community education classes and support groups.</li> <li>• Raise community awareness through networking, outreach, and education.</li> <li>• Refer patients to and provide a list of community resources to patients, families, and staff.</li> </ul>

As you continue to read through Chapters 3 – 5 you will have a greater understanding of the roles each team member can play in addressing these key components.

## Developing the Team

Primary care providers often lack the appropriate amount of time that it takes to explain and educate patients about treatment options. To help maximize the provider's time with diabetic patients office visits, the care team can assist by educating patients about their diabetes management. The team integrates the skills of primary care providers, other health care professionals, and office staff with those of the patient and family into a comprehensive lifetime diabetes management program. Each team member of the team brings a unique perspective to the process and is vital to the patients care plan.

A team includes the patient, the patient's primary care provider, medical assistants, and other professionals such as nurses, pharmacists, dietitians, social workers, and community health workers. Team members provide process support and share responsibilities of diabetes care to complement the activities of the primary care provider. These responsibilities include use of evidence base guidelines, medication management; patient follow-up; referral to tools and resources self-management and behavior change, and most especially to facilitate communication and care coordination among all team members.<sup>3</sup>

The patient is the central team member, since most diabetes care is carried out by the person with diabetes or his/her family. Patients need to understand their roles as self-care managers and decision-makers to effectively work with members of their health care team. Family members assume most of this role for children and teens with diabetes<sup>4</sup>

By utilizing a team care model, the team can minimize patients' health risks through assessment, intervention, and surveillance to identify problems early and initiate prompt treatment.<sup>2</sup>

## Patient Centered Team Care Model

This model shows the various members of a diabetes care team and their interaction with the patient and each other. Notice that the patient is at the center of the team. When a patient is valued as the most important member of the team, s/he is empowered to participate in decisions and set behavior change goals to create a treatment plan that is reflective of the patient's needs. This can lead to increased patient satisfaction, better quality of care and improved health outcomes.

Medical assistants are the most common non-physician staff found in clinics and private medical practices, particularly in solo/small group practices. If these practices or other clinics/practices are to succeed in diabetes care transformation, integration of the medical assistant as a care team member is essential.<sup>5</sup>

### QUICK TIP

- For a practice or clinic to succeed in diabetes care transformation, integration of the medical assistant as a care team member is essential.

## Patient Centered Team Care Model



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## Testing Changes

Before any adjustments in the practice or clinic are made, it is important to assess current processes and determine what is working in the delivery of care and areas for improvement. This will aid in determining ways to strengthen current practice/clinic performance.

The physician needs to initiate clinic systems change efforts to improve quality of care, empower staff and strengthen office procedures. The physician will need the assistance, support and buy-in from all staff to make this happen.

There are many resources available that will aid in this process. The Primary Care Resources and Supports for Self Management (PCRS) survey can help teams identify actions that can be taken to support improved self-management of patients with diabetes.

To access this tool go directly to the Improving Self-Management website by clicking the image below.

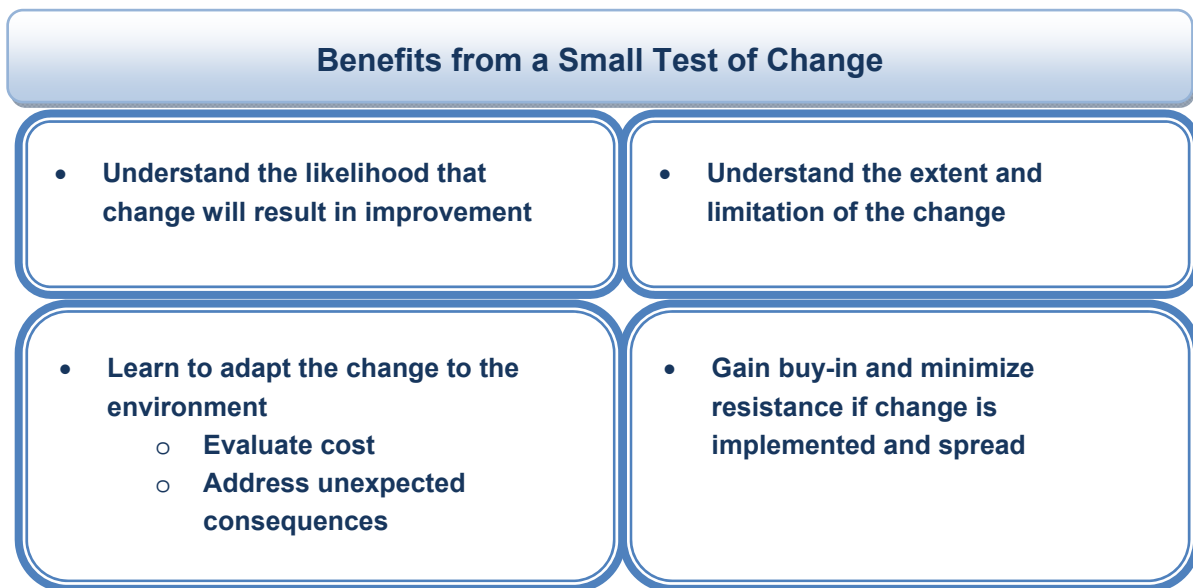
## Assessment of Primary Care Resources and Supports for Chronic Disease Self management (PCRS)

I: PATIENT SUPPORT (circle one NUMBER for each characteristic)										
Characteristic	Quality Levels									
	D	C			B			A (=all of B plus these)		
3. Goal Setting/ Action Planning	...is not done	...occurs but goals are established primarily by health care team rather than developed collaboratively with patients			...is done collaboratively with all patients/ families and member(s) of their health care team; goals are specific, documented and available to any team member; goals are reviewed and modified periodically			...is an integral part of care for patients with chronic diseases; goals are systematically reassessed and discussed with patients; progress is documented in patient charts		
	1	2	3	4	5	6	7	8	9	10

### Small Tests of Change

A medical practice may choose to look at current patient clinical data to focus on areas for improvement. For example, the team may run a report using their registry, electronic health record (EHR), or pull charts to identify patients with diabetes who have received their annual cholesterol screening. The team may choose to make changes to try to increase this screening rate if a problem is found. For example, patients with diabetes seen in the practice for two days will receive a follow up contact within one week of their visit to increase cholesterol screening. The success of this contact will be evaluated first to determine if it should be used with all patients. In this way, the practice does not spend precious time changing procedures that may not result in the desired change.

These “small tests of change” will therefore allow the team to assess whether a change has led to an improvement.



Teams might use the following questions from the Model for Improvement as they begin to explore ways to strengthen patient centered care in their practice:

1. “What are we trying to accomplish?”  
This requires setting an aim or goal to achieve.
  - Example: To increase the proportion of adults with type 2 diabetes who are at goal for LDL cholesterol.
  
2. Then ask, “How will we know a change has made an improvement?”  
Establishing measures for improvement will objectively allow your team to assess whether a change led to a desired result.
  - Example: The team chose to select the cholesterol control, which is LDL-C < 100.
  
3. Followed by, “What changes can we make that will result in an improvement?”  
Use the experience of the team members to identify potential changes to test, or changes the team may have heard other clinics or practices implement.
  - ◆ Examples:  
Choose one of the following as a small test of change:
    - For practices with a registry or EHR to identify patients that have uncontrolled LDL-C levels on a monthly basis; call these patients in for a visit with the provider. For the practice without a registry or EHR pull charts that are color-coded for type 2 diabetes.
    - If a prescription for a lipid-lowering medication was prescribed, make a plan to follow-up with each patient (or perhaps the highest risk patients) to determine if they were able to fill their prescription and use their medication.
    - Refer patients with high LDL-C levels to available local resources, for example, certified diabetes educators or case management services offered by medical groups or health plans. Teams can integrate this referral process as part of daily workflow.
  
4. Finally, the team is ready to test their changes.

For more information, teams can use the following tools to plan and implement their changes.

1. Plan to Test a Change form will aid in guiding the practice through numerous small tests of change. There may be many small tests of change to reach your long term aim or goal. These small tests can last anywhere from a day or two, to several weeks. Use this form to document EACH change you try or modify. This will give you a record of the work you’ve done and enable you to learn from each other.
  
2. The Recommended Measures and Measurement Methods, developed by the American Association

**PLAN TO TEST A CHANGE**

HOW TO USE THIS FORM: Your practice will consist of numerous small tests of change to reach your long term aim or goal. These small tests can last anywhere from a day or two, to several weeks. Use this form to document EACH change you try or modify. This will give you a record of the work you’ve done and enable you to learn from each other.

**AIM**  
What is our long term aim (or goal) for this project?  
90% of my patients with diabetes will have a foot exam at least once a year.

**CHANGE**  
To reach this long term AIM, numerous small steps or changes may be required. What is the specific change you will try now to make progress toward this AIM?  
Ask patients with diabetes to remove shoes and socks and every visit to prompt physician to conduct a foot exam.

**WHO?**  
Which patients will be included in this test?  
All diabetic patients

**WHEN?**  
When will this test begin and how long will it last? Remember this is a small test of change -! It could be a day, or a week.  
We will start this on March 3<sup>rd</sup> and it will last for 1 week.

**WHAT?**  
What steps need to be taken to make this change happen?

What needs to be done?	Who will do it?	When?	How?
1. Medical assistant will review chart to see if the patient has diabetes. If yes, she will ask the patient to remove his/her shoes and socks.	Janece	When she puts the patient into the exam room, after she checks the BP.	She will look at the front page of the chart that identifies chronic illnesses.
2. MA will document that diabetic patient took of shoes and socks (or reason if they didn't)	Janece	Before she leaves the exam room	She will place a sticky on the inside cover of the chart
3. Physician will conduct and document the foot exam.	Dr. Pastel	During the exam	Results will be entered into the progress note

of Diabetes Educators (AADE), provides recommendations for measures and methods of measurement for assessing outcomes of diabetes self care behaviors.

## Identifying Patients with Type 2 Diabetes

Improving outcomes for patients with type 2 diabetes begins by identifying these patients. If you use an EHR or a disease registry, this will help easily identify these patients. However, the high cost of an electronic health record or a disease registry continues to pose challenges for solo/small group practices. Considering there are many physicians who are currently without the benefit of health information technology, it is possible for practices to identify patients with diabetes by color coding charts and other options.

### QUICK TIP

- Assess the current processes in the practice/ clinic to enhance practice delivery.
- Test change to increase buy-in and minimize resistance to change.

One example was described earlier in this section. Another example is from Dipak Vora, MD, in Barstow, California, who in 2008 operated without a disease registry or EHR. According to the CMA Foundation Diabetes Quality Improvement Project, *Improving Diabetes Care: Focus on Solo and Small Group Practices*, 2011, Dr. Vora indicated that his “medical assistants kept track of all patients with diabetes through a simple list that indicates the patient’s name, medical record number, A1c values, microalbumin test and eye exams.”

Implementing team care coordination can improve patient outcomes and provide optimal care for patients with type 2 diabetes. Utilizing medical assistants and other office staff at their highest level allows the physician time to focus on clinical concerns and improving their patient’s health, freeing them from having to focus their time and attention on the office procedures needed to manage diabetes.

The commitment of an organization’s leadership is essential for a team to provide comprehensive, life - time management for patients with diabetes. Team care requires a collaborative, interactive, multi-skilled approach that maximizes the use of many different health professionals as educators, care coordinators, and providers of services to help patients achieve the best health outcomes possible. When patients participate as decision-making partners in their care, improved diabetes control can be achieved. This improvement, in turn, can lead to greater patient satisfaction with their care, better quality of life, improved health outcomes, and lower health care costs. Team care may play a major role in future health care systems designed to provide comprehensive lifetime prevention and management of chronic diseases such as diabetes. <sup>2</sup>

# Resources

## **American Association of Diabetes Educators, (AADE)**

AADE Guidelines for the Practice of Diabetes Self-Management Education and Training (DSME/T)

<http://www.diabeteseducator.org>

There are seven key areas of self-management for people with diabetes. It's important to understand and set goals for improvement in each area. These key areas are called the AADE7™ Self-Care Behaviors. <http://www.diabetesselfcare.org/self-care-behaviors/overview/>

## **Agency for Healthcare Research and Quality (AHRQ)** <http://www.ahrq.gov>

### **Health Resources and Services Administration (HRSA)**

Quality Improvement Toolkit

<http://www.hrsa.gov/quality/toolbox/introduction/index.html>

### **Institute for Healthcare Improvement (IHI)** Science of Improvement

<http://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx>

### **National Diabetes Education Program (NDEP):**

Redesigning the Health Care Team: Diabetes Prevention and Lifelong Management  
[www.ndep.nih.gov](http://www.ndep.nih.gov)

### **Making System Changes for Better Diabetes Care**

NDEP website that provides information, models, links, resources and tools to help health care professionals  
<http://betterdiabetescare.nih.gov>

## **American College of Physicians (ACP)**

ACP Diabetes Care Guide: A free practice guide and self-assessment program for all members of the care team involved in caring for patients with diabetes.

<http://diabetes.acponline.org>

Improving the Quality of Care in Your Practice- A Team-Based Approach, ACP Diabetes Care Guideline, 2007, **Institute for Healthcare Improvement *Partnering in Self-Management Support: A Toolkit for Clinicians***

<http://diabetes.acponline.org>  
[www.newhealthpartnerships.org/](http://www.newhealthpartnerships.org/)

## **California Smokers' Helpline**

1-800-NO BUTTS

The California Smokers' Helpline offers free, telephone-based tobacco cessation services to all Californians. It is operated by the University of California San Diego. Services are scientifically proven to be effective in helping people quit smoking and are available in multiple languages.

[www.nobutts.org](http://www.nobutts.org)

## **U.S. Department of Health and Human Services**

Public Health Service Guidelines "Treating Tobacco Use and Dependence: 2008 Update"  
[www.surgeongeneral.gov/tobacco](http://www.surgeongeneral.gov/tobacco).



## End Notes

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3. Guide to Community Preventive Services. Cardiovascular disease prevention and control: team-based care to improve blood pressure control. [www.thecommunityguide.org/cvd/teambasedcare.html](http://www.thecommunityguide.org/cvd/teambasedcare.html). April 2012.
4. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, Part 2. *JAMA* 2002;288:1909-14.
5. Tache S, Chapman S. The Expanding Roles and Occupational Characteristics of Medical Assistants: Overview of an Emerging Field in Allied Health. *J Allied Health* 2006;35:233-7.
6. Grumbach K, Dower C, Mutha S, et al. California Physicians 2002: Practice and Perceptions. San Francisco, CA: California Workforce Initiative at the UCSF Center For the Health Professions 2002.
7. American Diabetes Association. Standards of Medical Care in Diabetes 2012. *Diabetes Care*. Jan 2012 (S11-S63). [www.care.diabetesjournals.org](http://www.care.diabetesjournals.org). Accessed 24 Apr 2012.



# 3

## Before the Visit

### Learning Objectives:

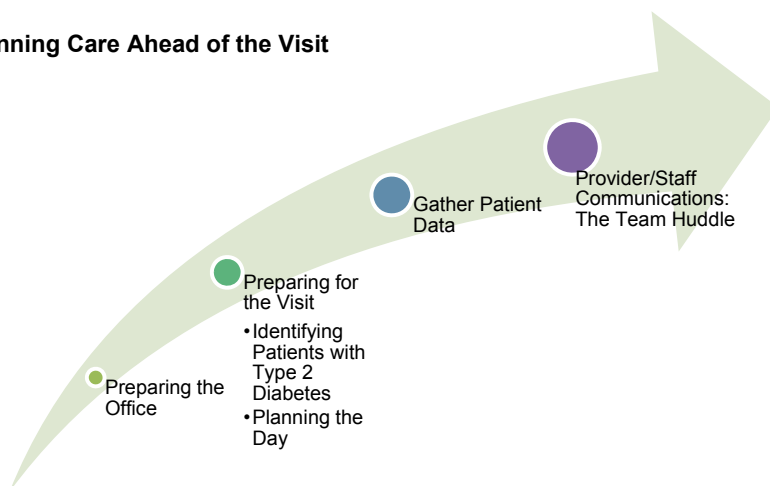
- ❖ Identify the roles in the practice when preparing for the visit.
- ❖ Map out a process to maximize the patient visit.

## Before the Visit

Planning care ahead of the visit is critical and an important task towards providing optimal care. Busy practices often lack the time they need to address the numerous tasks required for patients with chronic conditions such as type 2 diabetes. Planning ahead can optimize patient wait times, improve the referral process, organize screening and lab work in advance, identify patient needs and concerns, and avoid last minute surprises.

Planning can increase the efficiency in the office, maximize use of office time and result in greater coordination of care and patient outcomes.

### Planning Care Ahead of the Visit



## Preparing the Office

The office environment and patient visit can provide opportunities that empower patients to think about diabetes management and the prevention of diabetes related complications.

### Waiting Area

The waiting area is the first point of contact during the patient visit. Incorporate a waiting room area for health education resources addressing topics on diabetes self-management including; healthy food choices, physical activity, tobacco cessation and understanding your diabetes numbers. Provide health focused magazines, or show a health focused video. Be aware of the needs of your patients so that you provide literate and culturally appropriate materials for your patients. Make sure that materials are available in the reading level and languages spoken by your patients. Provide information on local community resources for classes and support groups that patients will notice and consider attending. Help them make the link to community resources and support as soon as they walk into the clinic door.

Please visit the CMA Foundation's Multicultural Patient Education Database at <http://www.thecmafoundation.org> and take advantage of every moment of the visit to educate, provide awareness and support to help your patients take good care of themselves.

### Receptionist Work Station

Post a reminder list of procedures for staff about preparing for the diabetes visit. This list might include: Check the chart of patients with diabetes; review the medication list, labs, referrals, exams, vaccines and self-management goals.

If this is the patient's first visit, be sure to identify on the outside of the chart the patient's preferred language.

To help identify patients with diabetes, use color-coded or place identifying stickers or stamps on the charts of patients with diabetes and other health risks such as cardiovascular disease, kidney disease, or other complications associated with type 2 diabetes. Practices may want to have one sticker for patient's generally at goal and another for patients at higher risk. This can help staff be better prepared for the patient's needs.

### Preparing for the Visit and Identifying Patients with Type 2 Diabetes

Preparing for the visit will begin by identifying the patients with type 2 diabetes and determining what their needs might be from key clinical and patient experience data before the visit. This allows the primary care provider to focus on key concerns, treatment and development of the care plan in partnership with the patient.

A planned care visit is an encounter with the patient initiated by the practice to focus on aspects of care that typically are not delivered during an acute care visit. The flow of a planned care visit and the staff available will determine tasks for each member of the team as they interact with the patient. These tasks would be assigned based upon an individual patient's needs and staff expertise identifying who is to complete the foot exam, who will review current lab work, who will update and review all medications, who will prepare, deliver and discuss appropriate educational materials, and who will review patient history.

The electronic registry would identify if the patient is on-target or not; including labs, tests and immunizations that are up-to-date. However, in most solo/small practices, an EHR may not be available. In these offices, a method to identify patients with type 2 diabetes may include checking individual charts, or quickly identifying patients with a color-coded chart. This method will require additional pre-planning that will need to take place prior to the visit.

Prepare chart prompts. Attach a [Diabetes flow sheet](#), and the [Foot exam results chart](#) to the chart for patients with type 2 diabetes.

Commented [meat1]: Be sure these are connected to the resources at the end of this chapter.

### Exam Room

The exam room is an opportunity to continue health messaging for patients with type 2 diabetes. Place posters in the room including the Shoes and Sock poster and tobacco cessation resources which are available in [English](#) and [Spanish](#) and posters or information on Smoking Cessation to call the California Smokers' Helpline 1-800-NO-BUTTS.

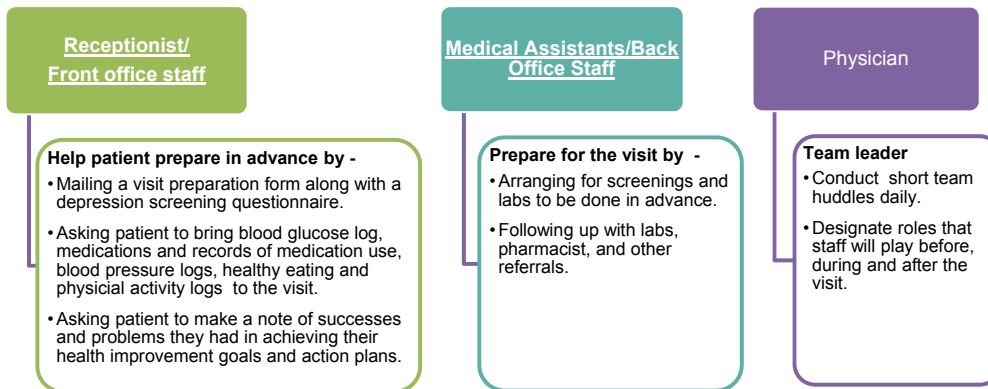
The information displayed in the exam room can empower the patient with diabetes to ask questions as well as to remind the health care provider of routine exams that need to be performed.

## Planning the Day

### Roles of the Team

The roles of the team greatly depend upon the needs of individual patients, the health status of these patients and how well controlled the patient's diabetes is. This is why physician - staff communication is important each day. This regular communication ensures the entire practice is aware of their role(s) in providing support to the physician. Having all information readily available in the patient chart frees up time for the healthcare provider and patient to communicate about issues of concern, recommendations about treatment, and collaborating in order to develop a care plan to help the patient and family members manage better at home.<sup>1</sup>

The role of each of the team member in a small practice may be divided as follows:



The better prepared the team is for the patient visit, the greater the impact will be on the patient with type 2 diabetes.

For more information on the team roles in a larger practice, visit Institute for Healthcare Improvement at <http://www.ihl.org/DefineRolesandDistributeTasksAmongTeamMembers>

### Planning the Day with the Team Huddle

Conduct a **team huddle** (a brief team meeting) at the start of each morning to review the day's schedule and communicate any issues or updates that need to be addressed. According to the Agency for Healthcare Research and Quality (AHRQ), the "Team Huddle" is a morning meeting to briefly discuss and organize each patient's planned visit. Copies of a patient summary sheet should be provided to each member of the team allowing them to quickly discuss the patient's current status on measures of interest, relevant health history, diabetes management plans, progress on self-management goals, and relevant psychosocial aspects of the patient's situation. Team decisions are then made regarding who, besides the physician, will see each patient and what needs to be accomplished during the visit. A team huddle can take place in 10 minutes!

The advantages of initiating a team huddle are that it builds a highly functioning, effective team by allowing rapid improvement and changes, improved workflow, and planned care. A team huddle also reduces unexpected events, creates a greater understanding of roles, reduces wait times, and focuses care on the patient.

In a small/ solo practice, the team huddle may include a short brief update on individual patients that are, or are not, on target. This huddle may look like the following:

### **Roles of the Team during the Team Huddle**

There may be times that a Post-Visit or end of the day Huddle is necessary to discuss what happened during the visit, to plan follow-up calls to check on patient progress, and to help build partnerships between the team and the patient.

For more information on Team Huddle, visit Improving Chronic Care at:  
[http://www.improvingchroniccare.org/partnering\\_in\\_selfmanagement](http://www.improvingchroniccare.org/partnering_in_selfmanagement)

### **Gathering Patient Experience Data**

To maximize the patient visit, it is helpful for the patient to have any labs or exams completed before the visit. When labs are done ahead of time, the physician can review them and incorporate any needed recommendations into the visit, rather than having to follow-up with the patient at a later time. In order to collect all data prior to the visit, consider making contact with the patient at least 2 weeks in advance and telling them what labs/exams they need. For more information on lab work and exams please refer to Chapter 4.

Two to three days prior to the visit, contact the patient to see if they have completed these outstanding labs, exams, and vaccines. This will allow the patient to complete labs prior to the date of the visit.

The following resources may be helpful to enhance the way in which care is provided for patients with type 2 diabetes, and aid the physician in providing the opportunities to engage or activate patients as partners in their care.

### **The Diabetes Care Guidelines Flow Sheet**

- The [Diabetes Care Guidelines Flow Sheet](#) is an excellent tool to track the care of the patient with type 2 diabetes. The Flow Sheet will show the team what labs/exams the patient has done and when, so the team can determine if the patient needs to have labs/exams done before or during the visit.

The Flow Sheet lists:

- Blood pressure
- Weight
- Foot exam
- Date of last monofilament foot exam
- Date of last dilated eye exam
- Date of last dental exam
- Depression screening attached or date of last screening
- Tobacco use status
- Date of last pap or prostate check, mammogram, chest x-ray, EKG, colorectal cancer check

- Recent lab results A1c, albumin/ creatinine ratio, serum creatinine, cholesterol, LDL, HDL, non HDL
- Dates of last vaccines flu, pneumovax, tetanus, tdap, hepatitis B

### **Standing Orders**

- Standing orders can be written by the physician to initiate necessary immunizations, labs or exams. This process frees the physician from reviewing every patient chart and enables the medical assistant to review and determine patient current needs. So that a physician does not have to review each patient chart, he/she can prepare [standing orders](#) to initiate needed immunizations, labs or exams after the medical assistant has reviewed the chart and determined the patient is not current on them.

### **Patient Contact**

- Contact the patient to make sure you ask the patient to bring items that are relevant to their visit. During this contact, remind the patient of their appointment date, time, any lab work needed, and exams. In addition, ask the patient to bring the following items to the visit as related to individual care:
  - Blood glucose log, daily activity log, etc.
  - Medications or records of medication use. If the patient has a Smart Phone or other type of device where mobile apps are available consider suggesting they use applications for Apple and Android such as [dLife](#), [My Care Connect](#), or [My Glucose Buddy](#)
  - Healthy eating and physical activity log. Consider suggesting to patients that they use applications for Apple and Android such as [My Heart. My Life. My Walking Path](#), by the American Heart Association.
  - A note of successes and challenges they had in achieving their health improvement goals and action plans.

### **Identifying Patient Needs**

Patients may have limited or no English proficiency. Identifying patient needs is important. Consider interpreter services that are available through the patient's health plan and coordinate services ahead of the visit. To access a list of California Health Plan Interpreter Services please go to [http://www.dmh.ca.gov/dmhc\\_consumer/br/br\\_language.aspx](http://www.dmh.ca.gov/dmhc_consumer/br/br_language.aspx) or <http://www.chcf.org/projects/2009/health-care-interpreter-network> .

### **Tobacco Cessation Help**

- Help your patients quit smoking. More than 70% of smokers want to quit. Advice from a health care provider can double the chances for a successful quit. Did you know it can take up to 11 or more attempts to quit smoking successfully? Coach your patients to quit trying and connect them to **FREE** Cessation Counseling at 1-800-NOBUTTS (California Smokers' Helpline) or to <http://www.nobutts.org/> to assist them with smoking cessation. Check out the **FREE resources** for your office at <http://www.nobutts.org/order.php>

### **Depression Screening**

- Because of the greater risk of depression among people with diabetes, consider adding the [Depression screening questionnaire](#) to the Visit Preparation Form.

## Chart Preparation

Prior to the team huddle the chart is pulled either electronically or manually. Make sure the chart has the following documents attached.

### Checklist for during the visit

Diabetes care guideline flow sheet with all current data:

- Last date/results of blood pressure
- Last date/results of weight
- Last date/results of foot exam
- Last date/results of foot exam monofilament
- Last date/results of dilated eye exam
- Last date/results of dental exam
- Last date asked smoking/tobacco use status
- Last date advice & referral for smoking cessation
- Last date/results of depression screening
- Last date/results of H&P, Pap or Prostate exam
- Last date/results of mammogram/ chest x-ray
- Last date/results of colorectal cancer exam
- Last date/results of EKG
- Last date/results of A1c
- Last date/results of albumin/creatinine ratio
- Last date/results of serum creatinine for eGFR
- Last date/results of LDL
- Last date/results of triglycerides
- Last date/results of HDL
- Last date/results of non-HDL
- Last date/results of total cholesterol
- Last date/results of flu vaccine
- Last date/results of pneumovax
- Last date/results of tetanus/PPD
- Last date/results of Tdap/ pertussis

Attach any additional tests/exams that have been completed.



## Checklist: Before the Visit

### **Medical Assistant/Medical Office Staff**

- Review the chart. Check for:
  - o Status of key labs (A1c, lipid panel, microalbumin, etc.); make sure results are in the chart and flagged for review
  - o Status of key exams/screenings (retinal exam, dental exam, etc.)
  - o Requested consults/referrals; make sure these are in the chart and flagged for review
  - o Medications and medication use
  
- Contact the patient to let him/her know which labs, exams or vaccinations are due:
  - o If standing orders are in place, order the needed labs or exams
  - o If the patient is non-English speaking or has limited English proficiency, coordinate interpreter services
  
- Remind the patient of the date/time of the their visit and to bring in items such as:
  - o Medications/ medication list
  - o Glucometer/blood glucose logs
  - o Blood pressure logs
  - o Healthy eating/physical activity logs
  - o A list of concerns (e.g. Visit Preparation Form)
  - o Diabetes Health Record Card
  
- Update the Diabetes Care Guidelines/Flow Sheet with lab results and place it on the front of the chart ready for physician/healthcare provider review.

### **Primary Care Provider**

- The team leader. Convene team huddles first thing every morning to review the schedule for the day and identify issues before they arise.
  
- If you find gaps in staff conducting pre-visit activities, consider holding a "pre-visit planning refresher" during the lunch hour to review team roles and tasks.
  
- Review medications and medication use
  
- Communicate with the patient about goals to improve his or her diabetes management.



## PREPARING FOR THE VISIT RESOURCES

*Diabetes Care Guidelines Flow Sheet*

*Foot exam chart*

*Shoes and Socks Poster*

*English*

*Spanish*

*Helpline (CSH) top ten tips to quit*

*English*

*Spanish*

General Resource Information

Website links, etc

## Diabetes Care Guidelines/Flow Sheet



Name \_\_\_\_\_ MR # \_\_\_\_\_ D.O.B. \_\_\_\_\_  
 Language \_\_\_\_\_ Race/Ethnicity \_\_\_\_\_

Clinical Priorities	Parameters	Frequency	Goal/ Recommendation	Date/ Results:	Date/ Results:	Date/ Results:	Date/ Results:
History, Physical and Emotional	Blood Pressure	Every Visit	<130/80 mm Hg				
	Weight	Every Visit	BMI <25 kg/m <sup>2</sup> ; reduce weight by 5%-10% if overweight				
	Foot exam	Every Visit	Inspect skin; teach protective foot behavior if sensation diminished				
	Foot exam-monofilament	Annually	Prevention of ulceration and amputations				
	Dilated Eye Exam	Annually	Retinopathy prevention				
	Dental	Bi-Annually	Assess oral symptoms/ refer to dentist				
	Depression	Annually	Assess for mood disorders; suggest support groups/counsel/referral				
	Medication Review (diabetes meds, statin, ACE/ARB and/or aspirin)	Every visit	Optimize glycemic control and for the primary or secondary prevention of CVD and/or management of HTN and hyperlipidemia; reconcile medication list; discuss adherence issues				
	Tobacco Status: _____ Never _____ Former _____ Current Quit Date: _____ If current smoker, refer to California Smokers' Helpline at <b>1-800-NO-BUTTS</b>						
General Care	Periodic H&P/ Pap or Prostate	As indicated	Early detection of cervical and prostate cancer				
	Mammogram/ Chest X-Ray	Every 1 - 2 years	Early detection of breast cancer; screening to begin at age 40 or 50 <sup>1</sup>				
	Colorectal Cancer	After age 50	Early identification of colorectal cancer				
	EKG	As indicated	Detection of cardiac abnormalities				
Lab	A1C	Quarterly	<7% for most patients*				
	Albumin/Creatinine Ratio	Annually	Check spot urine for albumin and creatinine, calculate ratio $\geq 30 \mu\text{g alb/mg creatinine}$ is abnormal				
	Serum Creatinine for eGFR	Annually	Estimate glomerular filtration rate (GFR) to stage the level of chronic kidney disease (CKD)				
	LDL	Annually	< 100 mg/dL; <70 mg/dL (optional goal)				
	Triglycerides	Annually	<150 mg/dL				
	HDL	Annually	>40 mg/dL in men; > 50 mg/dL in women				
	Non-HDL	Annually	<130 mg/dL; <100 mg/dL (optional goal)				
	Total Cholesterol	Annually	< 200 mg/dL				
Vaccine	Flu Vaccine	Encourage vaccination annually upon availability of vaccine					
	Pneumovax	Revaccinate >65 years old if initial vaccine given >5 years ago and < 65 years old					
	Tetanus/ PPD	Vaccination against tetanus; determine exposure to TB					
	Tdap/ Pertussis	Vaccination against tetanus, diphtheria & pertussis					
<b>Self Management</b>			<b>Goals</b>	<b>Patient Goals</b>			
Self-Glucose Monitoring			Pl. to monitor glucose as necessary to minimize risk of hyper/hypo glycemic episodes; review and check patient log book for accuracy				
Physical Activity			150 minutes of moderate to vigorous exercise a week				
Nutrition			Advise weight reduction if BMI $\geq 25$ ; refer to dietician/MNT				
Foot Exam			Review foot inspection instructions with patient				
Medication Management/Adherence			Discuss barriers/solutions to adherence; reconcile medication list				

<sup>1</sup> For women at average risk of breast cancer, the US Preventive Services Task Force recommends mammograms every 2 years beginning at age 50 while the American Cancer Society recommends yearly mammograms beginning at age 40.  
 \* More or less stringent A1c values may be appropriate dependent on individual history, risk factors and length of disease, among other considerations.  
 Sources: American Diabetes Association, *Standards of Medical Care in Diabetes, 2011*, and the American Association of Clinical Endocrinologists *Medical Guidelines for Developing a Diabetes Mellitus Comprehensive Care Plan, 2011*.  
 Notes: 1) Any application of these recommendations should be made in consideration of the needs, conditions and circumstances of each individual patient. 2) This flow sheet is included in the CMA Foundation's *Diabetes and Cardiovascular Disease Provider Reference Guide (2<sup>nd</sup> ed.)*, 2011.

**NATIONAL HANSEN'S DISEASE PROGRAMS  
PHYSICAL THERAPY FOOT SCREEN**

Name: \_\_\_\_\_ Age: \_\_\_\_\_ ID# \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_

Diagnosis: LL \_\_\_ BL \_\_\_ TL \_\_\_ Diabetes \_\_\_ PVD \_\_\_ Venous Insuff. \_\_\_ Other \_\_\_\_\_

Medical Hx: Foot Ulcer: Y \_\_\_ N \_\_\_ Location: \_\_\_\_\_

Surgery: Y \_\_\_ N \_\_\_ Describe: \_\_\_\_\_

Complaints / Changes in foot in last year: \_\_\_\_\_  
\_\_\_\_\_

Employed: Y \_\_\_ N \_\_\_ Job description: \_\_\_\_\_ Current Residence: \_\_\_\_\_

**ROM/STRENGTH:**

R ROM	R MMT	L MMT	L ROM

s=strong w=weak a=absent

**DEFORMITIES:**

R	L

**PLANTAR SENSATION: Sensory Level**

- 1 = 1g (4.17) Normal sensation
- 2 = 10g (5.07) Protective sensation
- 3 = 75g (6.10) Loss of protective sensation
- 4 = No perception of 75g (insensate)



**VASCULAR:**


**FOOT RISK CATEGORY (W.H.O. grade):**


**CLINICAL APPEARANCE / SKIN:**

Label: D=dryness S=swelling R=redness T=temperature M=maceration

Callus =  Pre-ulcer =  Ulcer =

**WAGNER PLANTAR ULCER GRADE:**

	0	I	II	III	IV
Ulcer 1					
Ulcer 2					
Ulcer 3					

**NERVE PALPATION:**

Common Peroneal at Fibular head	R	L	Enlarged	R	L	Tender
Posterior Tibial at Med. Malleolus			Enlarged			Tender
Sural Sensory at Lat. Lower Leg			Enlarged			Tender

**VISION:**

Able to identify foot mark  Y  N

**MOBILITY:**

Independent  Independent w/ assist. device  w / c  
 Homebound  Non-ambulatory  Requires SBA

**PLAN: Check all that apply**

<input type="checkbox"/>	Patient Education: <i>skin care, inspection, footwear</i>
<input type="checkbox"/>	Posterior Walking Splint/Total Contact Cast
<input type="checkbox"/>	Wound Care
<input type="checkbox"/>	Sandals: <input type="checkbox"/> quickie <input type="checkbox"/> semi-rigid <input type="checkbox"/> rigid
<input type="checkbox"/>	Footwear: <input type="checkbox"/> standard <input type="checkbox"/> x-depth <input type="checkbox"/> custom
<input type="checkbox"/>	<input type="checkbox"/> rocker bottom <input type="checkbox"/> FAB <input type="checkbox"/> DF asst. device
<input type="checkbox"/>	<input type="checkbox"/> Other _____
<input type="checkbox"/>	Orthotics: <input type="checkbox"/> moldable <input type="checkbox"/> non-moldable
<input type="checkbox"/>	Therapeutic Exercise/ROM
<input type="checkbox"/>	Referrals: _____
<input type="checkbox"/>	Other: _____

Clinician: \_\_\_\_\_

NHDP FORM 133 PT FOOT SCREEN

# SHOES *and* SOCKS

*take 'em off!*



**IF YOU HAVE DIABETES**  
Have your doctor check your feet.

# MEDIAS *y* ZAPATOS

*¡Sáqueselos!*



**SI TIENE DIABETES**  
Pídale a su médico que le vea los pies.

# Diabetes, Smoking, and Your Health

Smoking has severe effects on your diabetes and your health. When you quit smoking, you can have more energy, a longer life, better control of your diabetes, and less chance of a heart attack or stroke.

Call the California Smokers' Helpline – it's Fast, it's Free, and it's Easy:  
**1-800-NO-BUTTS or 1-800-662-8887**

## Eyes

Smoking can make vision problems worse which can lead to blindness.

## Teeth

Smoking raises your risk of getting gum disease and losing your teeth.

## Nerves

Smoking raises your risk of nerve damage. This can cause numbness, pain and problems with digestion.

## Heart

Smokers with diabetes are 11 times more likely to have a heart attack or stroke than people who don't have diabetes and don't smoke.

## Blood Sugar

Smoking raises your blood glucose (sugar) and reduces your body's ability to use insulin, making it more difficult to control your diabetes.

## Feet & Legs

Smoking can lead to serious foot and leg problems like infections, ulcers, and poor blood flow. Smoking raises your risk of amputation.

## Kidneys

Smoking triples your risk of getting kidney disease. Drugs that help prevent kidney failure don't work as well for smokers.

## Cholesterol

Many people with diabetes have high levels of cholesterol. Smoking makes this worse by increasing build up on artery walls, putting you at more risk for heart attack or stroke.

## Quit Smoking Today!



Call the California Smokers' Helpline at **1-800-NO-BUTTS or 1-800-662-8887**

Chewing Tobacco: 1-800-844-CHEW

### For more information about diabetes:

California Diabetes Program at (916) 552-9888 or [www.caldiabetes.org](http://www.caldiabetes.org)

American Diabetes Association at 1-800-DIABETES (1-800-342-2383) or [www.diabetes.org](http://www.diabetes.org)

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## La Diabetes, el Fumar, y Su Salud

El fumar tiene efectos negativos en su diabetes y su salud. Cuando deje de fumar, usted tendrá más energía, vivirá una vida más larga, controlará mejor su diabetes y tendrá menos riesgos de sufrir un ataque al corazón o de sufrir una embolia.

Hable a la Línea de Ayuda para Fumadores – es Gratis, es Rápido y es Fácil:  
**1-800-45-NO FUME ó 1-800-456-6386**

### Ojos

El fumar hace que sus problemas de la vista empeoren, lo que puede resultar en ceguera.

### Dientes

El fumar aumenta el riesgo de desarrollar enfermedades en las encías y puede perder sus dientes.

### Nervios

El fumar aumenta el riesgo de dañar a sus nervios. Esto puede causar entumecimiento, dolor y problemas de digestión.

### Corazón

Los fumadores con diabetes son 11 veces más propensos a sufrir un ataque al corazón o de sufrir una embolia en comparación con las personas que no tienen diabetes y no fuman.

### Pies y Piernas

Fumar puede causar problemas muy serios en sus pies y piernas, como mala circulación, infecciones y úlceras. El fumar aumenta el riesgo de amputaciones.

### Glucosa (Azúcar) En La Sangre

El fumar aumenta el nivel de glucosa (azúcar) en la sangre y disminuye la capacidad del cuerpo de usar la insulina, haciendo más difícil el control de la diabetes.

### Riñones

El riesgo de desarrollar enfermedades de los riñones aumenta por tres veces de lo normal cuando uno fuma. Las medicinas para prevenir las complicaciones de los riñones no funcionan muy bien en los fumadores.

### Colesterol

Mucha gente con diabetes tiene altos niveles de colesterol. El fumar empeora esta condición aumentando la acumulación de colesterol en las paredes de las arterias. Esta condición aumenta su riesgo de sufrir un ataque al corazón o de sufrir una embolia.

**¡Deje de fumar hoy mismo!**



California  
Smokers'  
Helpline  
1-800-NO-BUTTS

Hable a la Línea de Ayuda para Fumadores de California  
al **1-800-45-NO FUME ó 1-800-456-6386**

**Para más información sobre la diabetes:**

Programa de Diabetes de California: (916) 552-9888 ó [www.caldiabetes.org](http://www.caldiabetes.org)

Asociación Americana de Diabetes: 1-800-DIABETES (1-800-342-2383) ó [www.diabetes.org](http://www.diabetes.org)

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Resources: Before the Visit

<p>Create efficient care</p>	<ul style="list-style-type: none"> <li>• St. Peter's Family Medicine <a href="#">Standing Order</a></li> <li>• Salem Clinic <a href="#">Standing Order (sample): Page 21</a></li> <li>• California Medical Association Foundation <a href="#">Diabetes Care Guidelines/Flow Sheet</a></li> <li>• The Team Huddle <a href="http://www.ahrq.gov/populations/chroniccaremodel/chronic3a14.htm">http://www.ahrq.gov/populations/chroniccaremodel/chronic3a14.htm</a></li> </ul>
<p>Preparing the clinic</p>	<ul style="list-style-type: none"> <li>• Foot care: Lower Extremity amputation prevention (LEAP) <a href="http://www.hrsa.gov/hansensdisease/leap/">http://www.hrsa.gov/hansensdisease/leap/</a></li> <li>• Shoes and Socks Posters: <a href="http://www.health.ny.gov/publications/0946_en.pdf">http://www.health.ny.gov/publications/0946_en.pdf</a></li> <li>• NDEP Feet Can Last a Lifetime Provider publication: <a href="http://www.ndep.nih.gov/publications/PublicationDetail.aspx?PubId=116#page3">http://www.ndep.nih.gov/publications/PublicationDetail.aspx?PubId=116#page3</a></li> <li>• California Smokers Helpline: 1-800 NO-BUTTS Order free materials: <a href="http://www.nobutts.org/Order.php">http://www.nobutts.org/Order.php</a></li> </ul>
<p>Help patients prepare for the visit</p>	<ul style="list-style-type: none"> <li>• American Academy of Family Physicians <a href="#">Pre-Appointment Questionnaire (sample)</a></li> <li>• University of Michigan Depression Center <a href="#">First Meeting with your Healthcare Provider</a> (sample; includes questions related to depression):</li> <li>• California Academy of Family Physicians <a href="#">Welcome to Your Diabetic Visit</a> (with depression screen)</li> <li>• American Academy of Family Physicians <a href="#">Reminder Letter (sample)</a></li> <li>• Salem Clinic <a href="#">Overdue Labs, Exams, Etc. Letter</a> (sample; <u>note</u> – large file takes some time to download) (p.10)</li> </ul>
<p>Use planned care</p>	<ul style="list-style-type: none"> <li>• Improving Chronic Illness Care <a href="#">The Planned Care Visit</a> (website)</li> <li>• Improving Chronic Illness Care <a href="#">Watch a Planned Care Visit</a> (link to videos)</li> <li>• Primary Care Coalition of Montgomery County <a href="#">Planned Care Tips: The Team Huddle</a> (website)</li> <li>• Affinity Medical Group <a href="#">Team Huddle</a> (video):Michael Zimmerman, MD</li> </ul>

Utilize technology to support care

- Center for Medicaid and Medicare Services (CMS) for details for the diabetes measures under the Physician Quality Reporting System and EHR
- PQRS is a voluntary reporting program. The program provides an incentive payment to practices with eligible professionals (identified on claims by their individual National Provider Identifier [NPI] and Tax Identification Number [TIN]) who satisfactorily report data on quality measures for covered Physician Fee Schedule (PFS) services furnished to Medicare Part B Fee-for-Service (FFS) beneficiaries includes registry. <https://www.cms.gov>
- EHR The Medicare and Medicaid EHR Incentive Programs will provide incentive payments to eligible professionals as they adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology <https://www.cms.gov/Regulations-and-Guidance>
- American Academy of Family Physicians [Patient Registry \(sample in Excel\)](#):

Adapted from Schaefer J, Miller D, Goldstein M, Simmons L. *Partnering in Self Management Support: A Toolkit for Clinicians*. Cambridge, MA: Institute for Healthcare Improvement; 2009. Available at [www.IHI.org](http://www.IHI.org).

## End Notes:

1. Schaefer J MD, Goldstein M, Simmons L. . Partnering in Self-Management Support: A Toolkit for Clinicians. In. Cambridge, MA Institute for Healthcare Improvement; 2009.



# 4

## During The Visit

### **Learning Objectives:**

- ❖ Describe the roles in the practice during the visit
- ❖ Identify the components of diabetes care

## Diabetes Visit & Management Schedule

The American Diabetes Association (ADA) recommends that individuals with type 2 diabetes receive regular office visit exams and tests according to the following schedule:

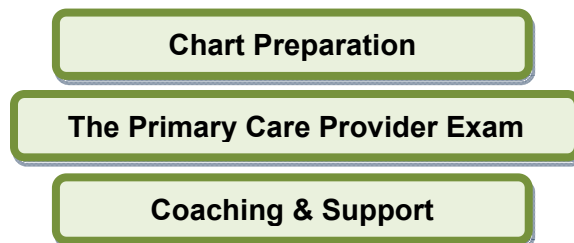
<p><b>Every Visit</b></p> <ul style="list-style-type: none"> <li>• Review patient self-management logs (glucose and blood pressure)</li> <li>• Measure weight, BMI and blood pressure</li> <li>• Review smoking status, advise to quit and refer to 1-800-NO-BUTTS for cessation services</li> <li>• Review/adjust medication regimen</li> <li>• Work with patient to identify needs and plan self care goals</li> <li>• Foot exam</li> </ul>	<p><b>Every Visit (Time Permitting)</b></p> <ul style="list-style-type: none"> <li>• Talk about weight management</li> <li>• Review physical activity goals and/or meal plans</li> <li>• Address lifestyle issues such as alcohol and drug abuse</li> <li>• Discuss nutrition and meal planning</li> <li>• Discuss medication use</li> </ul>
<p><b>3 – 6 Months</b></p> <ul style="list-style-type: none"> <li>• A1c Test</li> </ul> <p><b>Twice A Year</b></p> <ul style="list-style-type: none"> <li>• Dental exam referral</li> </ul>	<p><b>Annual Visit</b></p> <ul style="list-style-type: none"> <li>• Blood lipid profile (cholesterol)</li> <li>• Microalbumin/creatinine ratio</li> <li>• Dilated eye exam (referral to ophthalmologist)</li> <li>• Comprehensive foot exam</li> <li>• Flu vaccination</li> </ul>

This schedule provides a quick check to ensure that patients with type 2 diabetes are receiving the care recommended during each of their visits.

## During the Visit

The time required to deliver recommended primary care is almost 3 times what is available per office visit. To meet guidelines for chronic disease management and prevention, physicians would need to work 22-hour days and reorganize their practices so that they spent almost 50% of their time in chronic disease management and a third of their time in prevention.<sup>1</sup> In order to maximize each one of these very valuable minutes, the patient visit should be organized into three components where appropriate task delegation, team work and patient centeredness is key to ensuring an engaged patient and that all recommended care and services are provided.

The three components of the patient visit include:



Goals during the visit are to ensure the primary care provider reviews all key patient data, provides the patient with care and management according to evidence-based guidelines, and that all members of the care team assess the patients' understanding of the information provided. This includes communicating to help patients remember and understand the important information regarding their diagnosis and treatment.

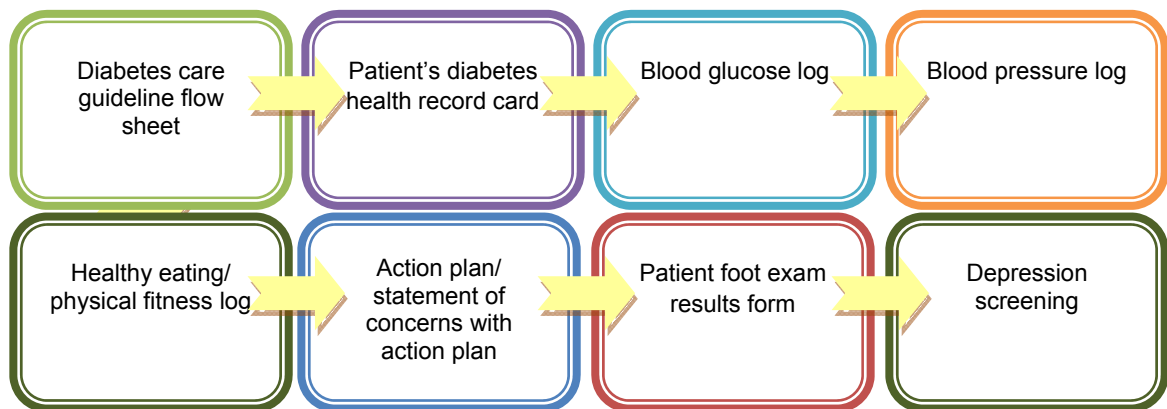
How the front office handles initial contact with the patient will set the stage for the entire visit. Creating a welcoming, private and supportive environment from the front desk to the back office at all times will improve the way patients listen and communicate with the physician and other office staff. Good personal communication skills can improve the front office communications with patients and avoid conflicts, confusion, or feelings of inadequacy.

For tips on communication for office staff refer to the American Academy of Family Physicians at: <http://www.aafp.org/fpm/2006/0900/p73.html#fpm20060900p73-b19> or refer to the Non Verbal Communication and Patient Care, Industry Collaboration Efforts (ICE) at <http://www.rihlp.org>.

## Chart Preparation

Collect all the materials the patient was asked to bring to the visit. If upon arrival the patient does not have these materials, remind the patient to bring these records to their next visit. While the patient is waiting for the visit, have the patient take a moment to jot down what has been working with their action plan since their last visit, what is not working and why. Complete a depression screening questionnaire if they did not bring one with them to the visit.

Include the following items in the chart:

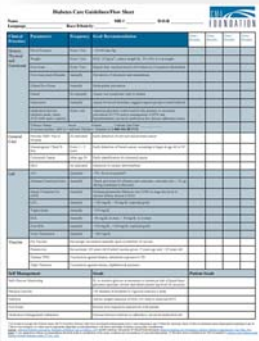


## Preparing for the Physical Exam

### Communication

Engaging a patient in their care begins at the front office and continues throughout the visit. Patients who better understand their disease and treatment may be more involved and engaged in managing their diabetes. Providers should strive for “patient empowerment”; when the patient accepts responsibility to manage their own condition and is encouraged to solve their own problems with information, but not orders, from their healthcare professional. <sup>2</sup> For more information on communication see the handout for staff on Brief Motivational Interviewing at the end of this chapter Also find self-management handout resources in the online links.

## Tools for the Visit:



### Diabetes Care Guidelines Flow Sheet

Utilization of the Diabetes Flow Sheet will help the practice match national standards as it incorporates the diabetes care guidelines approved by the American Diabetes Association, Standards of Medical Care in Diabetes, 2012.

This tool provides a framework that supports improved patient-provider communication, goal setting and better patient satisfaction with care.

### Diabetes Health Record (DHR card)

As a vital part of the health care team, you have the opportunity to help patients learn and become empowered to take better care of their health.

The Diabetes Health Record (DHR) card is the patient's component of the Basic Guidelines or Practice Standards for Diabetes Care. This is an important communication tool that can help patients take better control of their diabetes. Find this tool at:

<http://diabetescoalitionofcalifornia.org/health-records/>

There are many reasons for people with diabetes to use the DHR card:

- To learn what they need to know to take care of their health.
- To learn about all the tests and exams they need for good diabetes control.
- To learn to talk with their health care team about what they need.
- To have a record of the dates and results of tests done.
- To help patients and the health care team make decisions and set goals regarding health care based on the results of current tests and examinations.



### Interaction with the Patient

The following pages provide an overview and guide for the Medical Assistant on the Basic Guidelines for Diabetes Care using the Diabetes Health Record (DHR) Card. Here you have the opportunity to enhance and integrate this tool as a part of your work flow within the clinic and interaction with your patients with diabetes.

For each part of the DHR there is an explanation about the test, exam or topic on the card. The DHR is a great tool to assist in the patients' education and involvement in their own care. Your interaction and discussion with them is a vital part towards assisting in their understanding of diabetes and self care.

At the end of the section you will find the tools or online links suggested within the guide.

## Diabetes Health Record (DHR)

### Medical Assistant/Other Office Staff:

- Place a **(v)** in the box if the patient brought the DHR card; provide each patient with diabetes a DHR card; and as you go through the diabetes flow sheet update the patient's DHR card.
- Also keep in mind the following:
  - Encourage patients to bring their DHR to each health care visit.
  - Encourage patients to keep their DHR up to date by writing in dates of exams and new test results.
  - Encourage patients to talk to their health care team often about the results of their tests, when the next tests should be done, and what they will need to do to improve their health.
  - Encourage patients to review their results between health care visits. This will help them to stay focused on their diabetes care and general health.
  - Encourage patients to congratulate themselves for improvements. Also, remind them that taking care of diabetes is a daily process --- one day at a time.

### Provider's Responsibility:

- Review the updated DHR card with the patient at each visit.

## Review Blood Glucose Monitoring Results

Patients should have a glucose monitor and be encouraged to bring their blood glucose (blood sugar) log and monitor to every visit. Blood sugar records help patients and their health care team to correct and/or prevent problems with low and high blood sugar levels (hypoglycemia and hyperglycemia).

## Glucose Self Monitoring

### Medical Assistant/Other Office Staff:

- Place a **(v)** in the box if the patient brought the blood sugar record.
- Check the patient's DHR card.

### Provider's Responsibility:

- Review blood sugars with patient.
- Check the patient's DHR card.
- Suggest blood glucose goals outlined by the American Diabetes Association (ADA).



## Blood Pressure

About two-thirds of patients with diabetes will develop high blood pressure during their lives. It is important to find it and treat it early. Elevated blood pressure can cause kidney, eye, and heart problems. **Goal for all patients with diabetes is <130/80mmHg.**

Blood Pressure	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"><li>• Take blood pressure in a quiet room with the proper size cuff and write result in box,</li><li>• Inform patient and record in patients DHR card and on patient's progress note.</li></ul>
<b>Provider's Responsibility:</b>	<ul style="list-style-type: none"><li>• Treat high blood pressure (&gt;130/80 mmHg).</li></ul>

## Weight Management

Being overweight increases the risk for diabetes. It also makes diabetes harder to control. People who are shaped like "apples" (weight is concentrated in the stomach area) tend to be more susceptible to diabetes and heart disease. People who are shaped like "pears" (weight is concentrated in the hip and thigh area) tend to have less diabetes and heart disease. Helping patients who are overweight lose weight is often one of the goals. It is important to praise patients when they lose weight, but don't make them feel worse if they have gained weight.

Many patients who have uncontrolled diabetes will lose weight for the wrong reason. Their kidneys are eliminating the excess sugar. The patient may be eating but because their diabetes is out of control their body is unable to use the food source correctly. Once their blood sugars are controlled with healthier eating, physical activity and sometimes diabetes medication or insulin, their bodies will store those calories and patients will usually gain weight and they will need to be counseled about weight management and/or medical nutrition therapy.

Weight Management	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"><li>• Accurately weigh the patient, date and write the result in box and on progress note. Try to weigh consistently with or without shoes.</li></ul>
<b>Provider's Responsibility:</b>	<ul style="list-style-type: none"><li>• Counsel patient and/or refer for medical nutrition therapy.</li></ul>

## Height

A patient's weight doesn't mean much without knowing their height. Height should be measured once a year. People tend to lose height, as they get older.

Height	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"> <li>• Accurately check height (without shoes) and write the result in the box. <b>This only has to be done once a year for adults. Children should be measured every visit.</b></li> </ul>

## Body Mass Index (BMI)

BMI is a measure of the heaviness of the body. BMI is calculated by dividing the weight in kilograms by the height in meters, squared. Find an up to date BMI Chart at the end of this section.

A BMI of 25 to 29.9 is considered overweight, and a BMI of 30 and above is considered obese.

Body Mass Index (BMI)	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"> <li>• Using the BMI Chart, figure out the BMI based on the patient's height and weight, date and write it in the appropriate box.</li> </ul>
<b>Provider's Responsibility:</b>	<ul style="list-style-type: none"> <li>• Counsel patient and explain what a healthy weight means and what risks they may encounter at their current weight.</li> </ul>

## EXAMS

### Visual Foot Exam

The longer a patient has diabetes, and the longer it remains out of control, the higher their risk for foot problems. With time, patients can lose the feeling in their feet (called Peripheral Neuropathy) due to nerve damage. As a result, their feet may tingle, burn, or have sharp stabbing pains or they may have no feeling at all. The skin on the feet may be dry and cracked; the toenails may be thick and yellow. Fungus infections ("Athlete's foot") can grow between the toes. Patients can have blisters, sores, ulcers, corns and ingrown toenails.

Eighty percent (80%) of all amputations in patients with diabetes can be prevented if they know how to take care of their feet. The first step is to look at the patient's feet at every visit and then teach them how to do their own daily foot exam. Also, in some offices a monofilament (a nylon

filament) may be used to check to see if patients have protective sensation. Loss of protective sensation usually starts in the toes and then gradually works its way back to the heels. This happens slowly and most patients are not aware that they are losing sensation in their feet. Patients who have lack of feeling in their feet have “High Risk Feet” and should be made aware of it. Find online resources for Foot Exams at the end of this section.

<b>Visual Foot Exam</b>	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"><li>•Ask patients to remove shoes and socks and then provide them with something to put their bare feet on (for example, paper from the examining table).</li><li>•Patients may need help removing their shoes and socks if they are elderly, disabled, or overweight.</li><li>•Place a (v) in the left side of the box when you have done this.</li></ul>
<b>Provider’s Responsibility:</b>	<ul style="list-style-type: none"><li>•Examine the feet and initial beside (v) and write date. Any problems will be noted in provider’s progress note or on foot exam form.</li><li>•Refer to podiatrist as needed.</li></ul>

## Dilated Eye Exam

Diabetic eye disease (Diabetic Retinopathy) is a serious problem that can lead to blindness. If blood sugar and blood pressure are well controlled, retinopathy may be prevented in most patients. The longer the patient has poorly controlled diabetes, the greater the risk for eye problems. Regular dilated eye exams are essential for people with diabetes. When eye disease is found early and treated, the risk of blindness can be reduced.

The early stage of retinopathy has no symptoms. Therefore, it is crucial that the eye be dilated and examined at least once a year by an eye doctor. Patients with advanced eye disease (proliferative diabetic retinopathy) are sent to a retinal specialist and may require laser surgery. Signs of advanced eye disease may include difficulty reading, seeing rings around lights, cobwebs in front of the eyes, or flashing lights.

## Dilated Eye Exam

### Medical Assistant/Other Office Staff:

- Write down the date of the patient's last eye exam in box. If the patient hasn't had an eye exam within one year, place a (0) in the box. You may have to send a request to the eye doctor to get a written report of the eye exam result for the chart. The patient may also need a list of providers.

### Provider's Responsibility:

- Refer patient for a dilated eye exam once a year. Some patients may need dilated eye exams more frequently.

## Dental Exam

Elevated blood sugars can cause gum disease, which can lead to problems with their teeth. Patients can get swollen, sore, bleeding gums (gingivitis) or gums can shrink and pull away from the teeth (periodontitis). The goal is to help patients keep their teeth. False teeth just do not work as well. Patients should brush their teeth with a soft toothbrush after each meal and snack and also floss between their teeth daily. Patients should see a dentist 2 times a year.

Dental Exam	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"><li>•Ask the patient the last time they saw the dentist and write the date (approximate month/year) in box. If patient has not seen a dentist, write (0) in box.</li><li>•Encourage patients to see their dentist and to practice good dental care by brushing after each meal and snack and flossing daily.</li><li>•Patients may need help finding a good dentist. For example, provide them with a list of dentists, if covered by their health plan.</li></ul>
<b>Provider's Responsibility:</b>	<ul style="list-style-type: none"><li>•Encourage patient to see their dentist. Many dentists require a note from the patient's doctor stating that the blood sugar is in control before they will attempt any dental surgery on a patient with diabetes.</li></ul>

## Depression Screening

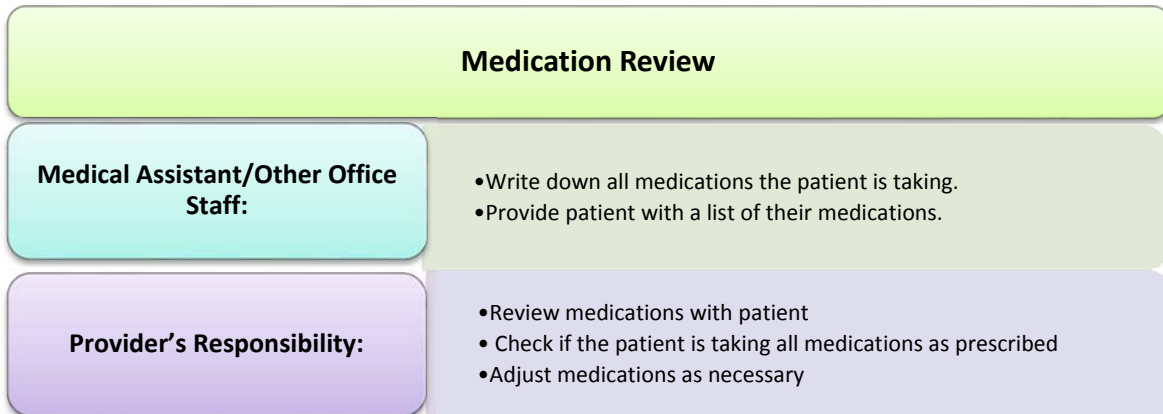
Managing diabetes can be stressful, and patients may feel alone or set apart from friends and family because of the necessary steps to manage blood glucose. Studies show that people with diabetes have a greater risk of depression than people without diabetes. This may be due to diabetes complications such as nerve damage, having trouble keeping blood sugar levels at goal, feelings that they are losing control, or tension with the doctor may make patient feel frustrated and sad.

It is important to take every opportunity to screen patients particularly those that are not able to reach goal. Psychological and social problems can impair the individual's or family's ability to carry out diabetes care tasks and therefore compromise health status. (*Standards of Medical Care, 2012*) Find links to *Depression Screening tool* at the end of this section.

Depression Screening	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"><li>•Make sure that the patient has completed the depression screening</li><li>•Write down the results and date completed in the patients chart</li></ul>
<b>Provider's Responsibility:</b>	<ul style="list-style-type: none"><li>•Order a depression screening during regularly scheduled management visits, at discovery of complications, or when problems with glucose control, quality of life, or adherence are identified</li><li>•Treat patient with appropriate medications as necessary</li><li>•Refer patients to a psychologist that can address the patients emotions and psychological needs</li></ul>

## Medication Review

It is important that patients know what medications they are prescribed and take, why each medication is prescribed for them, and any side effects that they may experience. They need to understand that if medication is taken incorrectly, it can be less effective or even cause more serious health problems. Therefore, patients should be asked to **bring all medications or a list of all their medications, to their health care visits for review. This list should include all prescription medications, all vitamins, supplements, and over the counter medications that they take.**



## Smoking Cessation

Tobacco use is a dangerous addiction for patients with diabetes. Tobacco use increases risk for diabetes complications including resistance to insulin, blindness, neuropathy, heart disease and stroke. Patients with diabetes have a 2-4 times greater risk of heart attacks than non-smoking patients without diabetes. Patients with diabetes who smoke have 14 times higher risk of a fatal heart attack than non-smoking patients without diabetes.

Incorporate the Ask – Advise - Refer Intervention into your patient engagement:

Ask every patient, every visit if they smoke or use tobacco.

Advise them to quit and keep trying to quit – A Health Care Providers advice to quit can double the chances of a patient successfully quitting.

Refer them for cessation help – Tell them to call or go online to the California Smokers' Helpline

**The California Smokers' Helpline** offers free smoking cessation help through a choice of services: self-help materials, a referral list of other programs and one-on-one counseling over the phone. Call the **California Smokers' Helpline** at 1-800- NO- BUTTS (1-800- 662-8887). Services are available in English, Spanish, Mandarin, Cantonese, Vietnamese, Korean, and for the hearing impaired.

For more information and free materials for providers from **California Smokers' Helpline** go to [www.nobutts.org](http://www.nobutts.org)

## Lab Work

Make sure all lab results are clearly documented at each and every visit for patients with type 2 diabetes. Taking the time to prepare in advance will aid the physician to focus on diagnosis, treatment and management of each individual patient's condition.

## A1C

A1C is also called a glycosylated (or glycated)-hemoglobin. This is the blood test that reveals how well the patient's blood glucose has been controlled by measuring how much glucose has been binding to the red blood cells during the 3 months immediately prior to the exam. (As three months is the approximate lifespan of a red blood cell, this tells us the average blood glucose for that period.) **The target goal is <7.0% or <1% above lab norms –the norms will depend on which lab you use.**

A1C	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"><li>•Write the date (month/year) and most recent A1C test result in the box. Note on the patient's DHR card.</li></ul>
<b>Provider's Responsibility:</b>	<ul style="list-style-type: none"><li>•Order the A1C test every three 3 months if treatment changes or if not meeting goals. Order the A1C test one to two times per year if stable. Discuss results with the patient.</li></ul>

## Microalbuminuria or Albumin/Creatinine ratio:

The kidneys are filters. They filter out harmful wastes in the blood, which then pass out of our bodies via the urine. When the kidneys fail, a person has to have his/her blood filtered through a machine in a process called dialysis, or undergo a kidney transplant.

Protein is something that is in the blood, but it shouldn't be in the urine. Protein in the urine is usually the first sign of diabetic kidney disease (diabetic nephropathy). Nephropathy can lead to kidney failure. This is by and large a preventable complication if blood sugar and blood pressure are kept under control. (Remember Blood Pressure <130/80mmHg). If kidney problems are starting it is important to find them early to prevent kidney failure. Albumin is a kind of protein and microalbumin is a very small amount of this protein. Remember that early kidney problems have no symptoms: urine looks and smells the same; there is no blood in the urine; and the patient has no pain. Therefore, it is very important to order a "urine microalbumin" test once a year. If the patient has documented protein in the urine (on the Urinalysis), then the provider will order a different urine test.

The normal amount of urine albumin is <30. If patient has 30-300, they have "microalbuminuria" and this is usually when treatment is started.

Microalbuminuria or Albumin/Creatinine Ratio	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"><li>•Write the date (month/year) and result of this urine microalbumin test in the appropriate box. Note on the patient's DHR card.</li></ul>
<b>Provider's Responsibility:</b>	<ul style="list-style-type: none"><li>•Order the correct urine screening test once a year. Discuss results with patient.</li></ul>

## Lipids (Cholesterol, Triglycerides, HDL and LDL)

Heart and blood vessel problems can cause heart attacks, strokes, and poor circulation to the legs and feet, and are the main cause of death and disability among people with diabetes. Patients are more likely to have these problems if they smoke, have high blood pressure, high cholesterol or have a high level of certain other fats in their blood. The fats in the blood should be checked on the initial visit and then once a year in all patients with diabetes.

### (a) Cholesterol

Cholesterol is a substance similar to fat that is found in the blood, muscles, liver, brain, and other body tissues. We get cholesterol in two ways: 1) It is produced naturally in your liver and it helps with important body functions, and 2) It comes from the animal products that we eat, such as meats, poultry, fish, eggs, butter, cheese and whole milk.

**Recommended Total Cholesterol: <150mg/dl**

### (b) Triglycerides (TG)

Triglycerides are one of the fats that you don't hear much about. The level is usually high if the patient has high blood sugar, is obese, or if the patient drinks a lot of alcohol. It can also be hereditary. If high levels of triglycerides are due to high blood sugars, they decrease as the patient's blood sugar decreases.

**Recommended Triglycerides: < 150mg/dl**

### (c) HDL (High Density Lipoprotein):

HDL is considered the "good cholesterol" because it removes the "bad cholesterol" (LDL) from the arteries.

**Recommended HDL: >40mg/dl for men & >50mg/dl for women**

### (d) LDL (Low Density Lipoprotein):

LDL is the "bad cholesterol" because it is the one that sticks to the arteries. Foods that are high in saturated fat (like butter, cream cheese, many cheeses, sour cream, red meats, chicken skin, bacon, sausage, lard and coconut) raise the LDL.

**Recommended LDL: < 100mg/dl**

Cholesterol is carried through the bloodstream by attaching to certain proteins. The combination is called a lipoprotein. There are four different types of lipoproteins that carry cholesterol in the blood:

- High density lipoprotein (HDL) or "good cholesterol"
- Low density lipoprotein (LDL) or "bad cholesterol"
- Very low density lipoproteins (VLDL), which are very bad forms of cholesterol.
- Chylomicrons, which carry very little cholesterol, but a lot of another fat called triglycerides.

The amount of cholesterol in your bloodstream is important because of its role in various cardiovascular diseases. The risk of developing these conditions is complex and depends not only on how much cholesterol but also what kind of cholesterol you have in your blood. Generally speaking, high levels of LDL -- the "bad cholesterol" -- are associated with increased risk of developing coronary heart disease; high levels of HDL -- or "good cholesterol" -- are associated with decreased risk.

LDL cholesterol collects in the walls of arteries, initiating "hardening of the arteries" or atherosclerosis. People with atherosclerosis are in turn vulnerable to heart disease, heart



attack, stroke, and other problems caused by clogged blood vessels. Even so, some people who have high LDL cholesterol never actually get heart disease, and many heart attack victims do not have abnormally high cholesterol levels.

Cholesterol levels can increase with:

- Diets high in saturated fats, trans fats, and sugar
- Obesity
- A sedentary lifestyle

<b>Lipids (Cholesterol, Triglycerides, HDL and LDL)</b>	
<b>Medical Assistant/Other Office Staff:</b>	<ul style="list-style-type: none"><li>• Write the date that lipids (Cholesterol, Triglycerides, HDL and LDL) were drawn and write the results in the appropriate boxes and in the patients DHR card.</li></ul>
<b>Provider's Responsibility:</b>	<ul style="list-style-type: none"><li>• Order Fasting Lipids on initial visit and once a year. Discuss results with patient.</li></ul>

## **Vaccines**

Vaccines can prevent illnesses that can be very serious for people with diabetes.

### **Influenza (Flu) Vaccine**

Influenza (also known as “the flu”) is a serious illness that can lead to pneumonia or even death. In patients with diabetes, it can make blood sugars hard to control and may lead to hospitalization. All patients with diabetes should receive the flu vaccine every year in the fall (usually between October and December).

### **Pneumococcal Vaccine (Pneumovax)**

Pneumococcal disease can cause infection in the lungs (pneumonia), or in the blood (bacteremia), or in the covering of the brain (meningitis). Pneumovax should be given to all patients with diabetes as recommended by the Centers for Disease Control and Prevention (CDC). Pneumovax is given approximately every ten years in high-risk patients. It can be given at the same time that the flu vaccine is given.

### **Hepatitis B Vaccine (HBV)**

Hepatitis B is a serious disease caused by a virus that attacks the liver. The virus can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death. HBV may be vaccinated at the discretion of the treating clinician after assessing patients risk and the likelihood of an adequate immune response to vaccination recommended by the Centers for Disease Control and Prevention (CDC). HBV usually consists of 3 doses of vaccine administered intramuscularly at 0, 1, and 6 months; other schedules are available.

## **Primary Care Provider Exam**

Generally the following responsibilities will fall to the doctor/provider. *(It is helpful for the medical assistant and or other office staff to understand what patients are learning or may have concerns about. Be sure that if the patient has comments or concerns that they are brought to the provider’s attention).*

## **Coaching the patient**

Health coaching can be defined as helping patients gain the knowledge, skills, tools and confidence to become active participants in their care so that they can reach their self-identified health goals. Coaching can be done by clinicians or other provider team members. The following are important topics to discuss with all patients with diabetes.

### **Behavioral Issues/Depression**

Sometimes chronic diseases such as diabetes can cause depression. When patients are depressed, they may have more difficulty coping with their diabetes. They may eat more and have difficulty doing what they need to do to take care of themselves (like checking blood sugars). Incorporate psychological assessment and treatment into routine care rather than waiting for identification of a specific problem or deterioration in psychological status. Although the clinician may not feel qualified to treat psychological problems, utilizing the patient-provider relationship as a foundation for further treatment can increase the likelihood that the patient will accept referral for other services. It is important to establish that emotional well-being is part of diabetes management.

### **Glucose Self-Monitoring/Problem-Solving Skills**

Patients should be checking their blood sugars at least daily or as often as needed for them to meet their treatment goals. Patients and their providers need to decide how often to check to

reach blood sugar goals, based on test results, medications being used, ability to obtain test strips, and other health conditions.

### **Medication Review**

It is important that patients know what medications they have been prescribed and take, why each medication is prescribed for them, and any side effects that they may experience. They need to understand that if medications are taken incorrectly, they can be less effective or even cause more serious health problems. Therefore, patients should be asked to **bring all medications or a list of all their medications, to their health care visits for review. This list should include all prescription medications, all vitamins, supplements, and over-the-counter medications that they take.**

### **Nutrition/Weight Management**

Healthy eating is a very important part of diabetes care. Understanding the right foods to eat, and the effect they can have on blood sugar levels will help patients to better manage their diabetes. A registered dietitian, with special training in diabetes, is the best person to help with this.

The Medical Assistant and Primary Care Provider should help the patient find a registered dietitian, and/or nutrition classes or local nutrition resources.

### **Physical Activity**

It is important to encourage patients to be active. Suggestions include: starting an exercise program slowly, doing some physical activity every day, and choosing an enjoyable activity. Some patients may need to be checked by their provider before starting an exercise program. Patients who have diabetic neuropathy and those with “high risk feet” may not be able to walk as a form of exercise. See Physical Activity recommendations at the end of this section.

### **Sick Day Management**

Patients with diabetes need to be given priority when they are sick. Sick patients with diabetes usually experience a rise in their blood sugars when they are ill. If they have vomiting and/or diarrhea, their body chemistry can be out of balance causing them to become severely ill, or require hospital care. Hospitalization can usually be avoided if patients are treated properly at the beginning of their illness.

They should call their doctor if:

- They have been sick or have had a fever for a couple of days and are not getting better
- They have been vomiting or having diarrhea for more than 6 hours
- The glucose levels are higher than 240, even though they have taken the extra insulin their sick-day plan calls for
- The patient takes pills for their diabetes and their blood sugar level climbs to more than 240 before meals, and stays there for more than 24 hours
- They have symptoms that might signal ketoacidosis, or dehydration, or some other serious condition (for example, their chest hurts, they are having trouble breathing, their breath smells fruity, or their lips or tongue are dry and cracked)

### **Hypoglycemia**

Hypoglycemia means low blood glucose. This usually occurs when the blood glucose is below 70mg/dl, but it can be different for each patient. Some patients experience low blood glucose if it is below 80mg/dl, others if it is below 60mg/dl. Many can have no symptoms at all, and the first sign for them is that they pass out or faint. Those who have few or no symptoms with low

blood glucose have “hypoglycemic unawareness.” This can be life threatening if not treated immediately.

Hypoglycemia can occur in any patient with diabetes being treated with oral medications or insulin. It is more common in those who use insulin. If patients are experiencing frequent hypoglycemia, it is important for them to see their provider and have their medications adjusted. The most frequent symptoms of hypoglycemia are trembling, heart palpitations, and a cold, clammy sweat if it is more advanced. Patients may become very confused and unable to cooperate. First, check to see if the patient has a ready source of quick acting carbohydrate that they can take. If not, always give something with sugar (the recommendation is 15 grams of a fast acting carbohydrate source) to patients having a low blood glucose reaction. Some examples are fruit juice, regular soda, skim milk, hard candy, raisins, etc.

If the patient does not feel better in 10-15 minutes, repeat the sugar. It is important to encourage the patient to carry an emergency quick acting carbohydrate source (like glucose tablets) at all times.

Find patient handouts in the end of this guide.

## **Hyperglycemia**

Hyperglycemia means high blood glucose. This can occur any time blood sugar is above the target range. Having too much blood glucose and/or not enough insulin or oral agent and/or too much food in the body causes hyperglycemia. In fact, the symptoms of hyperglycemia are the same as the symptoms of diabetes.

Signs of high blood sugar (hyperglycemia) include:

- Frequent urination
- Extreme thirst
- Unusual hunger
- Weight loss
- Fatigue
- Weakness
- Blurry vision

The two main causes of hyperglycemia are poor blood sugar control and illness. If blood sugar levels are frequently above target range, it's probably time to review and/or change the diabetes treatment. It is important to talk to the doctor about how to control blood sugar better. Also, review how and when the patient takes medications, whether the patient understands treatment, and whether there are issues affecting the patient's desire or ability to take treatment (i.e. psychological resistance, financial or job constraints, etc.). Find patient handouts in the toolbox at the end of this guide.

## **Foot Care**

There is much to teach patients about foot care. The most important things are to:

- Examine their feet every day. They should look between the toes and on the bottoms of the feet for sores, blisters, cuts, bruising, etc. Using a mirror is very helpful.
- They need to know if any injury has occurred from stepping on something sharp, or if there are cuts on the foot. If this occurs, they need to be seen by a health care provider within 24-48 hours.

Foot complications can be very critical but also preventable with proper care. If patients have lost the feeling in their feet due to peripheral neuropathy, they can easily injure or have a blister grow into an infection. The key is good foot care and daily self exam. 80% of amputations can

be avoided in patients with diabetes if they know how to take care of their feet, and if foot problems are taken care of promptly. Find more tools via the online links at the end of this section.

### **Aspirin Therapy**

Taking an aspirin each day helps to lower the risk of heart disease. Therefore, encourage patients to talk to their provider about whether they would benefit from taking aspirin each day and the amount they should take (81 - 325 mg).

## **Support Care**

### **Medical Assistant or Other Office Staff**

Immediately following the visit, it is important for the medical assistant to conclude the visit by supporting the physician as instructed. This may include making copies of the action plan, reminding patient of standing orders for future lab work, providing educational materials that are appropriate, and/or provide the connection to community services.

#### **o Action Plan**

As you work collaboratively with the physician, your role will be to reinforce a specific plan of action that was developed between the physicians and the patient. Make sure that the patient is provided with a copy to take home. If the patient should have a concerns or questions regarding the action plan discuss with the physician so this can be addressed as soon as possible.

#### **o Prescriptions**

In the U.S., 33% - 50% of patients do not take their medications as prescribed, leading to poor health outcomes.<sup>3</sup> The leading factors that influence a patient's use of their medications include social behavioral factors, drug factors, and cost factors.<sup>4</sup> By understanding these obstacles, the medical assistant and other office staff will better understand the urgency to address patients concerns with prescription medications.

The responsibility of the medical assistant may include calling in prescriptions as ordered by the physician and providing patients with contact information for prescription assistance program resources.

### **Ordering Prescriptions**

Depending upon the procedures for individual practices there may be instances when the medical assistant is instructed to call in prescriptions.

### **Prescription Assistance Program Resources**

There are prescription assistance program resources available that may assist patients with the cost of filling prescriptions. Advise on ways to decrease costs of medications and supplies by providing information on private insurance plans, prescription assistance programs, Medicare and Medicaid. The Partnership for Prescription Assistance is America's pharmaceutical companies working together with the health care community to help people in need. If you need help, call this free service at 1-888-4PPA-NOW (1-888-477-2669) or visit [www.pparx.org](http://www.pparx.org). If you need additional information consider working with local pharmacists to provide resources for patients needing additional support and resources or view the American Pharmaceutical Companies, Partnership for Prescription Assistance brochure at <http://www.pparx.org>

## **Educational Materials –Self-Management**

Upon occasion the patient will need additional education materials that the physician has introduced during the visit. It is crucial that the materials provided to patients are literacy and language appropriate (ie. blood glucose logs, medication tracker sheets, diet/fitness logs, etc.) For culturally appropriate materials visit the CMA Foundation website [Multicultural Diabetes Patient Educational Materials Database](#) for topics specific to type 2 diabetes education. You can find a list of online links for self management resources for patients at the end of this section.

## **Referrals**

The medical assistant can assist the physician in preparing the referrals to additional members of the care team. These referrals may include Certified Diabetes Educators (CDEs), Cardiologist, Endocrinologist, Podiatrist, Physical Therapist, Dietitian, Psychologist, Optometrist, or other Community Health Programs. Make sure that you keep copies and/or document in the patient's chart, disease registry or EHR.

## **Connecting Patients to Community Support**

Linking the patient to community support for physical activity, healthy lifestyles, and nutrition, is a vital part of diabetes self management. Health care systems need community partnerships because life with diabetes goes beyond health facilities. It requires patient involvement in self-management which is a complex goal requiring community support. As an important element of the Chronic Care Model, partnering with community services and organizations provide common access points for reaching people with diabetes, their families, and friends to effectively support them in diabetes self-management. Teams can help people with diabetes develop a community support network that includes support groups, the faith based group support, and needed services such as transportation. These access points can be situated in different places such as places of worship, multi-purpose social halls, city and county parks, recreation departments, hospitals, libraries and other community-based organizations.

Know what is available in the community to refer patients to by keeping an updated version of the Connecting Patients with Community and Medical Resources information. You can collect this information from your local medical society, health plans, hospitals, public health, and faith based organizations.

Consider using the Healthy Lifestyle Investigator as a tool to engage patients by finding community resources available in their communities. This activity will engage the patient in their own care and help them in identifying support services in their community regarding care and management. Studies have proven that keeping patients engaged, sometimes called patient-activation, is linked with better diabetes self care behaviors and improved outcomes.<sup>6,7</sup>

## **Disposal of Syringes and Needles**

The disposal of home generated sharps waste in California residents' trash or recycling containers are prohibited. It is required that needles, pen needles, intravenous needles, lancets and other devices that are used to penetrate the skin for medication administration be transported to a collection center in an approved sharps container.

Provide patients with an informational handout located at the end of this section.

## **Other Follow-up**

Let the patient know that you would like to schedule a time for a follow-up phone call. This will be an opportunity to support their action plan and see if there are questions or concerns with medications or referrals.

Make sure the patient gets a visit reminder sheet documenting details of their next appointment before they leave the clinic/practice.

## Front Office

As the patient schedules follow up visits it is recommended that you schedule appointments as the physician recommends, usually 3 month follow up for patients who are not at target or 6 months for patients who are at target.

Remind patient to bring their blood glucose log, blood pressure log to their next visit, and inform them you will be calling two weeks prior to visit.

## Check Lists

Since there are many tasks to quickly accomplish during a patient visit, consider utilizing the checklists in the following pages to assist as a reminder when treating patients with type 2 diabetes.

### Checklist: During the Visit - Patient Preparation

#### Front Office

- Greet and register patient; ask if they will need help with interpretation
  - Ask patient to complete intake forms
- Attach the Diabetes Care Guidelines/Flow Sheet with necessary information and place on chart
- Collect requested items, such as the patient's blood glucose log, blood pressure log, depression questionnaire, plan summary, and Diabetes Health Record Card (DHR)

#### Medical Assistant/Medical Office Staff

- Record height, weight, blood pressure, smoking status and other vitals on the Diabetes Care Guidelines/Flow Sheet
- If standing orders are in place, other tasks may include:
  - Calculate the BMI
  - Administer flu vaccinations, if indicated
  - Initiate referrals for physician/healthcare provider review (e.g. eye exam, dental exam, diabetes education, mental health, etc.)
  - Initiate lab requisitions for physician/healthcare provider review
  - Note patients current smoking/tobacco status and current medications
  - Ask patients to remove shoes and socks before the physician/healthcare provider enters the room (note: physicians/healthcare providers may train medical assistants on how to perform foot exams)
- Provide patient with literacy and language appropriate education materials or have them watch short educational videos while they wait

#### Primary Care Provider

- Be prepared to answer any questions that arise while the medical assistant/medical office staff prepares the patient for the visit
- Review clinical and patient concern data collected by medical assistants / medical office staff

## Checklist: During the Visit: Coaching & Support

### Medical Assistant/Medical Office Staff

- Work collaboratively with the physician and patients to reinforce a specific plan of action
  - Provide the patient with a copy to take home
  - At subsequent visits, reinforce the action plan for progress towards meeting goals and discuss with physician any concerns, or questions.
- Identify barriers to positive patient behavior
  - Brainstorm with the patient possible strategies to overcome identified barriers
    - Non-adherence to filling prescriptions
    - Healthy eating, and physical activity
- Refer patients with community resources as instructed by physician
  - Referrals to Certified Diabetes Educators (CDEs) Diabetes self-management education or other resources in the community that can offer ongoing patient education and self management support
  - Other sources of support include recreation or senior centers, support groups or voluntary community organizations
- Let the patient know that you would like to schedule a time for a follow-up phone call
  - Make sure the patient gets a visit reminder sheet documenting details of their next appointment before they leave the clinic/practice
- Provide patient with literacy and language appropriate education or self management materials as directed by physician. (ie. blood glucose logs, medication tracker sheets, diet/fitness logs, etc.)

### Primary Care Provider

- Provide a “warm handoff” to medical assistants who are trained to provide coaching and support to patients
- Encourage coaching staff to focus on patient needs and priorities when developing action plans



## Resources: During the Visit

<b>Use evidence-based guidelines</b>	<p><a href="#">Diabetes Clinical Practice Guidelines</a> (list of guidelines/resources): California Medical Association Foundation</p> <p>Basic Guidelines for Diabetes Care - Diabetes Coalition of California: ADA AACE practice standards in an easy to use format:  <a href="http://www.diabetescoalitionofcalifornia.org">www.diabetescoalitionofcalifornia.org</a></p>
<b>Foot Care Resources</b>	<p>Foot care: Lower Extremity amputation prevention (LEAP)  <a href="http://www.hrsa.gov/hansensdisease/leap/">http://www.hrsa.gov/hansensdisease/leap/</a></p> <p>Shoes and Socks Posters:  <a href="http://www.health.ny.gov/publications/0946_en.pdf">http://www.health.ny.gov/publications/0946_en.pdf</a></p> <p>NDEP Feet Can Last a Lifetime Provider publication:  <a href="http://www.ndep.nih.gov/publications/PublicationDetail.aspx?PubId=116#page3">http://www.ndep.nih.gov/publications/PublicationDetail.aspx?PubId=116#page3</a></p>
<b>Screen for depression</b>	<p><a href="#">PHQ-9 Screening Questionnaire</a> (English &amp; Spanish)</p> <p><a href="#">Recognizing and Handling Depression for People with Diabetes</a> (patient education handout): American Diabetes Association, American College of Cardiology and Preventive Cardiovascular Nurses Association</p> <p><b>Behavioral Diabetes Institute</b> Web Site: <a href="http://www.behavioraldiabetes.org">www.behavioraldiabetes.org</a>          The Behavioral Diabetes Institute (BDI) is a nonprofit 501(c)3 organization dedicated to helping people with diabetes live long and healthy lives. Living well with diabetes takes time, knowledge and effort.</p>
<b>Consider health literacy and cultural competency</b>	<p><a href="#">Office Guide to Communicating with Limited English Proficiency Patients:</a>          American Medical Association</p> <p><a href="#">Cultural Competency in Health Services and Care</a> (health care provider guide):          Washington State Department of Health</p> <p><a href="#">Cultural Competence: It all Starts at the Front Desk</a> (article): National Center for Cultural Excellence</p> <p><a href="#">Working with Diverse Patients: Tips For Successful Patient Encounters</a>,          (Industry Collaboration Effort)</p>
<b>Use effective communication techniques</b>	<p><a href="#">5 A's: Physician Tip Sheet for Self Management Support</a> (tip sheet): American Medical Association</p> <p><a href="#">Coaching Patients for Successful Self Management</a> (video): California Health Care Foundation.</p>
<b>Use effective tools to set goals/priorities for the visit</b>	<p><a href="#">Bubble Diagram</a> and <a href="#">Dinner Plate Menus</a></p> <p>Diabetes health record card <a href="http://www.caldiabetes.org">www.caldiabetes.org</a></p>
<b>Develop action plans in partnership with patients</b>	<p><a href="#">My Diabetes Self Management Goals</a> (worksheet): New York City Health Department</p> <p><a href="#">Conviction Confidence Ruler</a></p> <p>AADE Self-Care: <a href="http://www.diabetesselfcare.org/">http://www.diabetesselfcare.org/</a></p> <p>AADE Patient Resources:  <a href="http://www.diabeteseducator.org/DiabetesEducation/Patient_Resources/">http://www.diabeteseducator.org/DiabetesEducation/Patient_Resources/</a></p>

<b>Provide self management and patient education resources</b>	<p>American Association of Diabetes Educators: <a href="http://www.diabeteseducator.org">www.diabeteseducator.org</a>  AADE 7 Patient Self-Management fact sheets: <a href="http://www.diabeteseducator.org/DiabetesEducation/Patient_Resources/AADE7_PatientHandouts.html">http://www.diabeteseducator.org/DiabetesEducation/Patient_Resources/AADE7_PatientHandouts.html</a>  American Diabetes Association, American College of Cardiology  <a href="#">Diabetes Health Sense</a>: National Diabetes Education Program  American Diabetes Association online tools and education <a href="http://www.diabetes.org">www.diabetes.org</a>  <a href="#">Diabetes &amp; Cardiovascular Disease Provider Reference Guide: Ch. 6 Patient Resources</a>: California Medical Association Foundation  <a href="#">Reducing Cardiometabolic Risk: Patient Education Toolkit</a>: Preventive Cardiovascular Nurses Association,  More Diabetes Self-Management Resources online links:  ADA Living with Type 2 Diabetes: <a href="#">American Diabetes Association Living with Type 2 Diabetes</a>  Lilly for Better Health: <a href="http://www.lillyforbetterhealth.com/">http://www.lillyforbetterhealth.com/</a>  Merck Engage: <a href="http://www.merckengage.com/">http://www.merckengage.com/</a>  Health Education Answers:  <a href="http://www.healtheducationanswers.com/Home/CalDIRC">http://www.healtheducationanswers.com/Home/CalDIRC</a></p>
<b>Utilize technology to support care</b>	<p><a href="#">Supporting Care Management: The Role of Electronic Health Record (EHR) Systems</a>: Doctor's Office Quality – Information Technology (DOQ-IT), Center for Medicaid and Medicare Services (CMS)  <a href="#">What Do Electronic Health Records Mean for Our Practice?</a> New York City Department of Health and Mental Hygiene</p>

Adapted from Schaefer J, Miller D, Goldstein M. Simmons L. *Partnering in Self Management Support: A Toolkit for Clinicians*. Cambridge, MA: Institute for Healthcare Improvement; 2009. Available at [www.IHI.org](http://www.IHI.org).

## Resources to use when engaging patients about self care:

### **Healthier Living workshops - English and Spanish**

Living your best life means not letting arthritis, diabetes, high blood pressure, or smoking hold you back. Learn tips on how to manage your health conditions by attending a *Healthier Living* workshop. *Healthier Living* workshops, developed by Stanford University, are designed to empower you to take small steps to make big life changes.

*Healthier Living* workshops are led by two trained leaders. Leaders are individuals who may have chronic conditions themselves or have helped someone who is living with chronic conditions. Small group workshops are held once a week for six weeks for 2 ½ hours. Participants who have completed the workshops have expressed how helpful the information is to understand their symptoms and live healthier lives with chronic conditions.

To sign-up for a *Healthier Living* workshop, visit <http://www.cahealthierliving.org>

### **Walk with Ease - Physical Activity Program**

*Walk with Ease*, an Arthritis Foundation Program, offers support, information, and tools to safely make walking a part of your everyday life. Walking can help prevent and control high blood pressure, diabetes, arthritis, and help deal with urges to smoke. You can join a walking group led by a trained leader in your community or use the program workbook to walk by yourself.

To learn more about *Walk with Ease* visit [www.arthritis.org/ww](http://www.arthritis.org/ww)

San Joaquin Health Hub: [www.healthhubsj.com](http://www.healthhubsj.com)



**Help make the link -The San Joaquin Health Hub:**

Recognizing a need for people with chronic diseases to have easier access to self-management classes, the San Joaquin Medical Society in collaboration with the San Joaquin County Public Health and the California Diabetes Program developed this online resource to keep track of available classes in one place.

**What Does the Hub Provide?**

The Hub provides a comprehensive, yet user-friendly website that can be accessed by physicians, nurses, and medical assistants who are looking for local resources to refer patients to.

- Diabetes self-management classes
- Screening locations
- No cost or low-cost medical care options
- Support services: location, providing organization, cost
- Links to online diabetes self-management services
- Downloadable educational materials (English and Spanish)
- Has mobile capability
- The “Hub” will eventually be a resource for other chronic diseases such as asthma and heart disease, but will initially be focused on diabetes.
- Creates a “community-clinic” linkage that helps create a system for supporting diabetes self-management while the patient is outside the health care setting

**Benefits of the Health Hub for health care providers:**

- Referral resource
- Accreditation requirements
- Pay for performance
- Meaningful use
- Patient satisfaction
- Improve patient disease clinical outcomes

For health care organization training, questions on how to navigate the website or find a class, residents may call Vanessa Armendariz, Community Relations Manager at the San Joaquin Medical Society, at (209) 952-5299.

This project is a part of the Diabetes Work Group, a subcommittee of San Joaquin County Public Health’s Obesity and Chronic Disease Prevention Task Force; supported by the San Joaquin County Medical Society and the California Diabetes Program.

# Diabetes Health Record

Discuss these with your diabetes care provider and use this to record your results. Fold to fit into your wallet.  
 Note: You may require other tests that are not listed.

<b>Review Blood Sugar Records</b> (every visit) Target:	Date:				
<b>Blood Pressure</b> (every visit) Target:	Date:				
	Value:				
<b>Weight</b> (every visit) Target:	Date:				
	Value:				
<b>Body Mass Index (BMI)</b> (every visit) Target:	Date:				
	Value:				
<b>Foot Exam</b> (every visit)	Date:				
<b>Dental Exam</b> (every six months)	Date:				
<b>Dilated Eye Exam</b> (every year)	Date:				
<b>A1C</b> Blood test to measure past 3 mos. blood sugar level (every 3 months) Target:	Date:				
	Value:				
<b>Albumin/Creatinine Ratio</b> Urine kidney test (every year) Target:	Date:				
	Value:				
<b>Serum Creatinine (GFR)</b> Blood kidney test (every year) Target:	Date:				
	Value:				
<b>Cholesterol</b> (every year) Target:	Date:				
	Value:				
<b>HDL</b> (every year) Target:	Date:				
	Value:				
<b>LDL</b> (every year) Target:	Date:				
	Value:				
<b>Triglycerides</b> (every year) Target:	Date:				
	Value:				
<b>Flu Shot</b> (every year)	Date:				
<b>Pneumonia Vaccine</b> (at least once/ask provider)	Date:				
<b>Hepatitis B Vaccine</b> ages 19-59 (ask provider)	Date:				
<b>Tuberculosis (TB)/PPD Status</b>	Date:				
<b>Depression Screening</b>	Date:				
<b>Smoking/Tobacco Exposure</b> (every visit)	Date:				
<b>Sexual Health Family Planning</b> (every visit)	Date:				

Discuss these issues often with your health care provider to improve your diabetes management skills:

- Medications
- Nutrition Therapy
- Physical Activity
- Weight Management
- Complications
- Aspirin Therapy
- Hypoglycemia (low sugar)
- Hyperglycemia (high sugar)
- Sick Day Rules
- Psychosocial Issues
- Pre-pregnancy Counseling
- Pregnancy and Post-pregnancy Management

If you smoke and want to quit, call the California Smoker's Helpline  
 1-800-NOBUTTS or 1-800-662-8887

# Diabetes Health Record

\_\_\_\_\_  
 Your Name

\_\_\_\_\_  
 Diabetes Care Provider

\_\_\_\_\_  
 Diabetes Care Provider Telephone

**Take Charge of Your Diabetes!**

**Medications** – list your medications here and discuss with your diabetes care provider at every visit




The Diabetes Health Record is based on the *Basic Guidelines for Diabetes Care* and was developed by the Diabetes Coalition of California, in collaboration with the California Diabetes Program.

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Download the Diabetes Health Record in multiple languages and the *Basic Guidelines for Diabetes Care* at

[www.caldiabetes.org](http://www.caldiabetes.org)

## Registro de Salud de Diabetes

Discute sobre estas con su proveedor de servicios y use esta tarjeta para apuntar sus resultados. Doble esta tarjeta y guárdela en su billetera.  
Nota: Es posible que necesite otras pruebas que no aparecen en la lista.

Revisar los análisis del azúcar en la sangre (cada visita) Meta:	Fecha:				
Presión de la sangre (cada visita) Meta:	Fecha:				
	Resultado:				
Peso (cada visita) Meta:	Fecha:				
	Resultado:				
Índice de Masa Corporal (IMC) (cada visita)	Fecha:				
	Resultado:				
Examen de los pies (cada visita)	Fecha:				
Examen dental (cada seis meses)	Fecha:				
Examen de la vista con dilatación (cada año)	Fecha:				
A1C Análisis de sangre para medir el nivel de azúcar en la sangre de los últimos 3 meses (cada 3 meses) Meta:	Fecha:				
	Resultado:				
Albumin/Creatinine Ratio Análisis de orina (cada año) Meta:	Fecha:				
	Resultado:				
Serum Creatinine (GFR) Prueba sangre renal (cada año) Meta:	Fecha:				
	Resultado:				
Colesterol (cada año) Meta:	Fecha:				
	Resultado:				
HDL (cada año) Meta:	Fecha:				
	Resultado:				
LDL (cada año) Meta:	Fecha:				
	Resultado:				
Triglicéridos (cada año) Meta:	Fecha:				
	Resultado:				
Vacuna contra la gripe (cada año)	Fecha:				
Vacuna contra la Neumonía (por lo menos una vez/pregunte a su doctor)	Fecha:				
Vacuna contra la Hepatitis B entre 19-59 (pregunte a su doctor)	Fecha:				
Tuberculosis (TB)/PPD Status	Fecha:				
Detectar Depresión	Fecha:				
Exposición al humo y tabaco (cada visita)	Fecha:				
Salud Sexual Planificación Familiar (cada visita)	Fecha:				

Hable sobre estos temas con su médico para mejorar el manejo de la Diabetes.

- Medicamentos
- Terapia Nutricional
- Actividad Física
- Control de Peso
- Complicaciones
- Terapia con Aspirina
- Hipoglucemia (bajo azúcar)
- Hiperglucemia (alto azúcar)
- Reglas de días enfermos
- Problemas psicosociales
- Consejería de Pre-embarazo
- El embarazo y el periodo de posparto Gestión

Si usted fuma y desea dejar de fumar, llame a la línea del fumador California 1-800-45NOFUME o 1-800-456-6386

## Registro de Salud de Diabetes

Nombre \_\_\_\_\_

Proveedor de Cuidado de Diabetes \_\_\_\_\_

Numero de telefono de Proveedor de Cuidado de Diabetes \_\_\_\_\_

*Tome el control de su Diabetes.*

Medicamentos - Anote los medicamentos aquí y discuta con su proveedor sobre el cuidado de la diabetes cada visita



El Registro de Salud de Diabetes está basado en *Las Guías Básicas para el Cuidado de la Diabetes* desarrolladas por la Diabetes Coalition of California, en colaboración con el Programa California de Diabetes

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Descargar la Registro de Salud de Diabetes en varios idiomas y las guías básicas para el cuidado de Diabetes:  
[www.caldiabetes.org](http://www.caldiabetes.org)

Body Mass Index Table																																				
	Normal					Overweight					Obese					Extreme Obesity																				
BMI	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Height (inches)	Body Weight (pounds)																																			
58	91	98	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220	224	229	234	239	244	248	253	258
59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198	203	208	212	217	222	227	232	237	242	247	252	257	262	267
60	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204	209	215	220	225	230	235	240	245	250	255	261	266	271	276
61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211	217	222	227	232	238	243	248	254	259	264	269	275	280	285
62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218	224	229	235	240	246	251	256	262	267	273	278	284	289	295
63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225	231	237	242	248	254	259	265	270	278	282	287	293	299	304
64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232	238	244	250	256	262	267	273	279	285	291	296	302	308	314
65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276	282	288	294	300	306	312	318	324
66	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	223	229	235	241	247	253	260	266	272	278	284	291	297	303	309	315	322	328	334
67	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	230	236	242	249	255	261	268	274	280	287	293	299	306	312	319	325	331	338	344
68	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230	236	243	249	256	262	269	276	282	289	295	302	308	315	322	328	335	341	348	354
69	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236	243	250	257	263	270	277	284	291	297	304	311	318	324	331	338	345	351	358	365
70	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	250	257	264	271	278	285	292	299	306	313	320	327	334	341	348	355	362	369	376
71	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	257	265	272	279	286	293	301	308	315	322	329	338	343	351	358	365	372	379	386
72	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	265	272	279	287	294	302	309	316	324	331	338	346	353	361	368	375	383	390	397
73	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265	272	280	288	295	302	310	318	325	333	340	348	355	363	371	378	386	393	401	408
74	148	155	163	171	179	188	194	202	210	218	225	233	241	249	256	264	272	280	287	295	303	311	319	326	334	342	350	358	365	373	381	389	396	404	412	420
75	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	287	295	303	311	319	327	335	343	351	359	367	375	383	391	399	407	415	423	431
76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328	336	344	353	361	369	377	385	394	402	410	418	426	435	443

Source: Adapted from Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report.

# *Physical Activity Recommendations*

For People with Type 2 Diabetes



Regular physical activity is a key part of diabetes self-management. Studies show that the risk of mortality among people with diabetes is inversely related to fitness level.<sup>1</sup> The new guidelines of the American Diabetes Association and American College of Sports Medicine *Exercise and Type 2 Diabetes Recommendations (2010)* states that it is now well-established that physical activity improves blood glucose control and can prevent or delay Type 2 diabetes mellitus, along with positively affecting lipids, blood pressure, cardiovascular events, mortality, and quality of life by reducing symptoms of depression.

A health care professional exercise prescription and clear directions for physical activity can help increase awareness and motivate individuals to engage in regular physical activity. To help individuals begin and sustain regular physical activity, encourage the selection of activities that reflect their goals, desires, and the availability of appropriate support.<sup>2</sup> Medical assessment is needed to determine appropriate, individualized physical activity. The following are guidelines to help patients set individual goals.

**EVERY visit, perform the three A's—Ask, Assess, and Act:**

**Ask:** “What kind, how often and how much physical activity do you do?”

**Assess:**

- Current health status, daily schedule, glucose control, medications, diet, feet, and comorbidities (e.g. arthritis, heart disease, high blood pressure)
- Support system
  - Family and friend support?
  - Transportation needed?
  - Safe environment?
- Real or perceived reasons for doing or not doing physical activity
- Problem-solve and discuss how to safely meet goals

**Act - FIT:** Discuss the following:

- **Frequency (How often?):** Be active 4–7 days of the week<sup>2</sup>
  - No more than 2 days between periods of aerobic activity<sup>3</sup>
- **Intensity (How hard?):** People should perform *moderate intensity* exercise

The “*Talk Test*” is an easy way to determine intensity of physical activity:

- **Light intensity:** Able to sing while exercising
- **Moderate intensity:** Able to comfortably carry on a conversation while exercising
- **Vigorous intensity:** Not able to carry on a conversation while exercising

- **Time (How long?):** At least 150 minutes per week (i.e. 30 minutes per day)
  - May be divided into three 10-minute sessions per day

### **1. Basic Principles of Physical Activity**

- **Start slowly:**
  - Begin with 10–15 minutes
  - Work up to at least 30 minutes
  - Set time goals, not distance goals
  - Give the body time to warm-up and cool-down (begin and end at a lower intensity)
- **Do:**
  - Include flexibility and joint range of motion exercises
  - Select low-impact activities to avoid excessive force on the joints
- **Avoid:**
  - Overstretching
  - Activity that will cause increased joint pain lasting more than an 1-2 hours, though some post-exercise soft tissue discomfort may be expected
- **Evaluate and, if needed, refer to a:**
  - Podiatrist for biomechanical correction with orthotics
  - Physical Therapist for specific recommendations

### **2. Special Considerations:**

- **Weight Management:** Physical activity, when combined with reduced calorie intake, is more effective than either alone in achieving moderate weight reduction.
- **Hypoglycemia, Prevention:** Hypoglycemia may occur in patients taking insulin. Recommend that during and after physical activity:
  - Have a source of rapidly acting carbohydrate available to treat hypoglycemia (i.e. glucose tablets totaling 15 grams)
  - Before or after exercise: For every one hour of exercise, consume an additional 15 grams of carbohydrates.<sup>4</sup>
  - Drink adequate fluids
- **Hyperglycemia:** Avoid exercise when blood glucose is too high.<sup>4</sup>
- **Dehydration, Prevention:** To minimize risk of heat illness:
  - Drink plenty of water
  - Exercise during the cool part of the day
  - Wear loose-fitting clothing
- **Foot Injury, Prevention:** People with diabetes are more vulnerable to loss of protective sensation in the feet, poor circulation, and impaired healing of foot ulcers.
  - Wear comfortable shoes designed for activity and socks
  - Check inside shoes to ensure lining is smooth and no objects are inside prior to wearing



- Never walk barefoot or wear uncomfortable shoes, sandals, etc.
- Check each foot for sores or injury every day, and before and after activity

**Arthritis, Considerations and Recommendations:** Of California adults with diabetes, 40% *also* have arthritis. Arthritis may be an unrecognized barrier for adults with diabetes attempting to manage their condition through physical activity. Individuals with diabetes and arthritis have unique physical activity concerns about aggravating arthritis pain and causing further joint damage, and uncertainty about which types and amounts of activity are safe for their joints. People with arthritis not only *can* exercise, but are *encouraged* to exercise. Regular, moderate, physical activity for people with arthritis is safe, improves function, and reduces pain. Communicating the benefits of physical activity to patients with diabetes *and* arthritis is essential to improving overall diabetes self-management.

▪ **Recommend:**

- Low-impact activities such as, walking, swimming, water exercise, and biking
- Adequate warm-up, cool-down, and flexibility and joint range of motion activities
- Gradual increase in duration and intensity
- Alternate exercise types and methods to accommodate for changes in arthritis symptoms
- Evidence-based, community physical activity programs such as the Arthritis Foundation Walk with Ease, Exercise, and Aquatics Programs.
- Evidence-based, community self-management program such as Chronic Disease Self-Management Program and the Arthritis Foundation Self-Help Program. Available in both English and Spanish.

**Sources Cited:**

- <sup>1</sup> Morrato E.H. et al. (2006). Are Health Care Professionals Advising Patients With Diabetes or At Risk for Developing Diabetes to Exercise More? *Diabetes Care* 29(3), 543-548. Available at <http://care.diabetesjournals.org/content/29/3/543.full.pdf>
- <sup>2</sup> American College of Sports Medicine. (2003). Exercise Management for Persons with Chronic Diseases and Disabilities. *Human Kinetics*. Champaign, IL.
- <sup>3</sup> American College of Sports Medicine and the American Diabetes Association Joint Position Statement on Exercise and Type 2 Diabetes: [http://journals.lww.com/acsmmsse/Fulltext/2010/12000/Exercise\\_and\\_Type\\_2\\_Diabetes\\_American\\_College\\_of\\_18.aspx?WT.mc\\_id=HPxADx20100319xMP](http://journals.lww.com/acsmmsse/Fulltext/2010/12000/Exercise_and_Type_2_Diabetes_American_College_of_18.aspx?WT.mc_id=HPxADx20100319xMP)
- <sup>4</sup> Exercise is Medicine. Your Prescription for Health Series – Exercising with Type 2 Diabetes. Available at: [http://exercisemedicine.org/documents/YPH\\_DiabetesType2.pdf](http://exercisemedicine.org/documents/YPH_DiabetesType2.pdf)

**Physical Activity Guidelines, Resources, and Special Considerations**

- American College of Sports Medicine and the American Diabetes Association Joint Position Statement on Exercise and Type 2 Diabetes: [http://journals.lww.com/acsmmsse/Fulltext/2010/12000/Exercise\\_and\\_Type\\_2\\_Diabetes\\_American\\_College\\_of\\_18.aspx?WT.mc\\_id=HPxADx20100319xMP](http://journals.lww.com/acsmmsse/Fulltext/2010/12000/Exercise_and_Type_2_Diabetes_American_College_of_18.aspx?WT.mc_id=HPxADx20100319xMP)
- American College of Sports Medicine and the American Medical Association - Exercise is Medicine: [www.exercisemedicine.org/physicians.htm](http://www.exercisemedicine.org/physicians.htm)

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 For further information: [www.diabetescoalitionofcalifornia.org](http://www.diabetescoalitionofcalifornia.org) · [www.caldiabetes.org](http://www.caldiabetes.org) · (916) 552-9888

- *National Institute on Aging: Exercise & Physical Activity: Your Everyday Guide*  
PDF and FREE hard copies available at: [www.nia.nih.gov/HealthInformation/Publications/ExerciseGuide/](http://www.nia.nih.gov/HealthInformation/Publications/ExerciseGuide/)
- *National Institute Diabetes and Digestive and Kidney Disease: Walking*  
<http://win.niddk.nih.gov/publications/walking.htm>
- *International Council on Activity Aging: Identify appropriate fitness facilities and exercise professionals*  
[www.icaa.cc/FacilityLocator/icaapftguide.pdf](http://www.icaa.cc/FacilityLocator/icaapftguide.pdf) [www.icaa.cc/FacilityLocator/facilitylocator.asp](http://www.icaa.cc/FacilityLocator/facilitylocator.asp)
- *Centers for Disease Control and Prevention: "Talk Test"*  
[www.cdc.gov/nccdphp/dnpa/physical/measuring/talk\\_test.htm](http://www.cdc.gov/nccdphp/dnpa/physical/measuring/talk_test.htm)
- *US Department of Health Services: Foot Screening and Patient Education*  
[www.hrsa.gov/leap/](http://www.hrsa.gov/leap/)
- *Arthritis Foundation Programs: [www.arthritis.org](http://www.arthritis.org)*  
Walk with Ease: [www.arthritis.org/walk-with-ease.php](http://www.arthritis.org/walk-with-ease.php)  
Exercise: [www.arthritis.org/af-exercise-program.php](http://www.arthritis.org/af-exercise-program.php)  
Aquatics: [www.arthritis.org/aquatic-program.php](http://www.arthritis.org/aquatic-program.php)  
Self-Help: [www.arthritis.org/self-help-program.php](http://www.arthritis.org/self-help-program.php)
- *California Department of Public Health: California Arthritis Partnership Program*  
[www.cdph.ca.gov/arthritis](http://www.cdph.ca.gov/arthritis)
- *Centers for Disease Control and Prevention: Arthritis*  
[www.cdc.gov/arthritis/](http://www.cdc.gov/arthritis/)  
[www.cdc.gov/nccdphp/publications/AAG/pdf/arthritis.pdf](http://www.cdc.gov/nccdphp/publications/AAG/pdf/arthritis.pdf)  
[www.cdc.gov/arthritis/data\\_statistics/comorbidities.htm](http://www.cdc.gov/arthritis/data_statistics/comorbidities.htm)
- *Centers for Disease Control and Prevention: Physical Activity*  
[www.cdc.gov/diabetes/consumer/beactive.htm](http://www.cdc.gov/diabetes/consumer/beactive.htm)

## Home-Generated Medical Sharps Disposal Household Hazardous Waste



Over 3 billion needles are thrown into the trash each year by individuals treating themselves in their homes for conditions such as diabetes. Even when placed into a secured container (sharps container) needles can still injure someone, as these containers can break open when compacted by a garbage truck. Solid waste workers are stuck with needles and must go through months of testing for HIV and hepatitis because they do not know where the needles came from, or what diseases they may carry.

### Home-Generated Sharps Disposal Legislation

Beginning on September 1, 2008, State law ([Section 118286](#) of the California Health and Safety Code) makes it illegal to dispose of home-generated sharps waste in the trash or recycling containers, and requires that all sharps waste be transported to a collection center in an approved sharps container.

[Section 117671](#) of the California Health and Safety Code defines "home-generated sharps waste" as hypodermic needles, pen needles, intravenous needles, lancets, and other devices that are used to penetrate the skin for the delivery of medications derived from a household, including a multifamily residence or household.

### Disposal Sites for Household Hazardous Waste

Call your local household hazardous waste department to determine the appropriate way to dispose of sharps waste in your city or county. Many collection facilities are the same facilities that collect your florescent lights and batteries.

Visit <http://www.calrecycle.ca.gov/homehazwaste/healthcare/collection/> where you can enter "home-generated sharps" and your "county" and you will be directed to collections sites in your area. This site will also direct you to where you can dispose of pharmaceuticals that are not longer needed or expired preventing misuse and environmental impacts. You can also receive information at [www.Earth911.org](http://www.Earth911.org). If you are unable to locate a disposal site, a list of California approved mail back sharps containers are listed at <http://www.cdph.ca.gov/certlic/medicalwaste/Documents/MedicalWaste/SharpsMailBackList.pdf>.

Some hospitals may take home-generated sharps from patients receiving regular outpatient services. Check with your hospital before bringing sharps to the facility.

Some pharmacies will agree to accept home-generated sharps from people that purchase their sharps at that pharmacy. Call your pharmacy to find out if they provide this service.

### Waste Containers

Sharps waste containers can be purchased at your local pharmacy or on the internet. The following site will allow you to enter your zip code and tell you where in your area you can purchase a sharps container <http://www.sharpsinc.com/locations/>. Some mail order pharmacies and certain drug manufacturers will include a sharps container with your sharps order so check with your provider.

### Learn More about Safe Disposal

You can learn more by visiting the Food & Drug Administration's updated website:

<http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/HomeHealthandConsumer/ConsumerProducts/Sharps/ucm20025647.htm#stuck>

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For further information: [www.diabetescoalitionofcalifornia.org](http://www.diabetescoalitionofcalifornia.org) or [www.caldiabetes.org](http://www.caldiabetes.org) or (916) 552-9888

### Spirit and Guiding Principles

1. Express empathy.
2. Try to understand.
3. Support autonomy and self-efficacy.
4. Evoke a person's *own* reasons to change.

### Goals:

Explore and resolve ambivalence about change; increase confidence about making a change.

### Key Techniques

- Ask permission to give advice.
- Talk less, listen more.
- Use more open than closed questions.
- Affirm strengths, intentions, efforts, choice.
- Summarize what you hear.



## BE CURIOUS

- » Goals, values, desires
- » Strengths, challenges, fears
- » Reasons to change or not change
- » How the person sees and understands the situation



**Listen for change talk:**  
Desire • Ability • Reasons • Need

*Commitment is necessary for change to happen.*

### You are not listening to me when:

- You say you understand.
- You say you have an answer before I finish telling you my story.
- You cut me off before I have finished speaking.
- You finish my sentences for me.
- You tell me about yours or another person's experiences, making mine seem unimportant.
- Your response is not consistent with what I said.

### You are listening to me when:

- You really try to understand, even if I am not making much sense.
- You grasp my point of view, even when it's against your own view.
- You allow me the dignity of making my own decisions, even when you feel they may be wrong.
- You do not take my problem from me but allow me to deal with it in my own way.
- You hold back the desire to give advice (or only offer it with permission).
- You give me room to discover what is really going on.

*(Author unknown)*

**Talk with your patients about their interest in connecting with Community Supports:**

**Healthy Lifestyle Investigator**

What's in your Community? Let's find out!

Take a walk through your neighborhood, talk with your neighbors, ask 2 of them what they do to live a healthy life.

- 1.
- 2.

What's in the paper today?

Community events, farmers markets, physical activity classes at the park, nutrition classes at the supermarket? Write down a couple that interest you.

- 1.
- 2.
- 3.

What's happening this weekend? Any walks for health (heart walk, diabetes walk, fundraisers)?

Are there any health fairs or health events?

Which ones would you like to participate in?

- 1.
- 2.
- 3.

Where's your nearest park? How far is it?

How does it look?

Can you walk there?

What's happening at the local parks and recreation?

Is this a City program or County?

What do they have to offer?

What would you like to sign up for?

How often to you go to the supermarket to buy food?

Talk with customer service and find out what the healthy options are at the store.

Do they offer any classes on nutrition?

Ask the produce service where the freshest fruits and vegetables are and where they come from.

## End Notes:

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2. Bodenheimer T, Lorig K, Holman H, Grumbach K. Patient self-management of chronic disease in primary care. *JAMA* 2002;288:2469-75.
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4. Browyn Starr R. Improving Outcomes for Patients with Chronic Disease: The Medication Adherence Project(MAP). In: New Your City Health and Human Services 2010.
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7. Mayberry R, Willock, R.J., Boone, L., Lopez, P., Qin, H., Nicewander, D. A High Level of Patient Activation Is Observed But Unrelated to Glycemic Control Among Adults With Type 2 Diabetes. . *Diabetes Spectrum* 2010;23:171-6.

# 5

## After The Visit



### Learning Objectives:

- ❖ Describe the key activities that can take place when the patient visit is completed.
- ❖ Identify roles for office staff to help patient's complete referrals and action steps prescribed or recommended by their healthcare provider.

## After the Visit

Patient care does not end when the patient leaves the provider's office. In many instances there will be several procedures that need to be completed. These may include follow-up on the patient's progress in meeting the objectives identified in their action plan, checking whether the patient was able to follow through with referrals to the lab, specialists, and other members of the care team, such as diabetic educators, and connecting with peer support groups, or picking up medications.

### Patient Follow-up

If resources in the practice are limited, follow-up and care management may be prioritized for patients at higher risk for complications. For example, some practices may choose to target follow-up phone calls to patients with an A1C greater than 9.0%.

Follow-up activities may include the following:

#### Action Plan

It may be necessary for you to follow up on patients' progress with their action plan to see if there are any questions and or concerns in reaching their goals. It is important to relay these questions and/or concerns to the physician so that these can be addressed as soon as possible.

#### Labs

Follow up on all lab work should be conducted by contacting the lab and/or patient to make sure labs are completed. Identify if there are issues with location, cost, or other reasons for the patient not completing his or her labs. Discuss with this with the physician and reply as directed.

#### Referrals

Follow up on all referrals to make sure the patient has followed through with scheduling appointments with other care team members. Remind the patient that their illness is serious and the treatment has value. Identify what the obstacles are and discuss these with the physician.

#### Medication Adherence

Follow up with the pharmacist and/or patient to see if they have filled all prescriptions. Identify if the patient is taking the prescribed medication regimen. Discuss with the patient the importance to follow this regimen, and discuss reasons why the patient has not filled their prescription or is not following current treatment. Relay feedback to the physician and make sure the patient's concerns are addressed in a timely manner.

#### Community Resources

Creating sustainable, effective linkages between the clinical and community settings can improve patients' access to preventive and chronic care services by developing partnerships between organizations that share a common goal of improving the health of people and the communities in which they live. These linkages connect clinical providers to local healthy living educational & recreational resources, community based organizations, and public health programs.



During your follow-up it is important to keep your patient connected to community resources and support. The amount of time you have with a patient is limited. It is therefore important for a patient to find resources that can help sustain the care and support they need to be successful in their health care. You can collect this information from your local medical society, health plans, hospitals, public health, and faith based organizations.

An example of a Community Connection resource that can be tailored for other communities is the San Joaquin Health Hub. The Health Hub is an online community connection resource developed by the San Joaquin County Health Task Force and the San Joaquin Medical Society, which can help health care providers and their patients find Diabetes Self – Management Education classes and resources: [www.healthhubsj.com](http://www.healthhubsj.com)

Other community connection resources include 211 information and referral search available in many cities, city and county parks and recreation departments, educational classes offered by local hospitals, non-profit networks, check out the local paper for community events, etc. It is important the practice team get to know the community they are working in for opportunities to refer patients for wellness and self management.

Document all patient referrals or outreach in the medical record, disease registry and/or EHR. This allows all team members access to key information about follow-up care and information provided.

Find additional resources for patient self-management in Addendum 2.

## **Other Duties**

### **Lab Work/ Test Results**

Handling of lab work/ test results may be included in the duties of the medical assistant or other office staff. If there is not a process for handling lab/test results it would be beneficial to implement the following processes:

- Results that are faxed, mailed, or given by phone are attached to the patient chart. If a disease registry or EHR exist, results are inputted and placed in a designated spot for the physician to review.
- Physician signs off on the results, and indicates the appropriate action (physician call, MA call, e-mail patients, schedule an appointment, etc.)

It is important to keep the patient informed by making sure the patient is updated as results are received. Make sure the following are addressed:

- Inform the patient how long the results will take place to be sent to the practice.
- Inform the patient how they will be notified when results are received, and who will notify the patient of results.
- When the patient should check back (if they haven't heard after x number of days, if additional complications arise, if they have questions, etc.)

### **Prescription Refills<sup>1</sup>**

Prescription refills are likely to be included in the duties of the medical assistant or other office staff. Implementing a process for handling prescription refills can alleviate any mishaps.

- Encourage patients to contact their pharmacy for prescription refill requests.

- Pharmacy requests for refills can be addressed in the following ways:
- Time is set aside for the physician to review routine refill requests received by fax or phone (e.g. during lunch hour, and/or after 5:00 pm.)
  - Make sure the chart is located and the message or fax is attached for the physician to review.
  - Contact patient via phone and/or e-mail to inform them of the status of their prescription.
  - Consider providing information about prescription refills via the office website if the practice has established its own website. This is a quick and easy way to deliver information specific to patient needs.

### **Billing and Coding**

Understanding billing and coding is essential. The International Classification of Diseases, 9<sup>th</sup> Revision, Clinical Modification (ICD-9) Healthcare Common Procedure Coding System (HCPCS) Codes are the codes used by Medicare and monitored by the Centers for Medicare and Medicaid Services (CMS). They are based on the Current Procedural Technology codes (CPT) developed by the American Medical Association.

For specific codes used when treating patients with type 2 diabetes, refer to ***Addendum 1: Billing/Coding Quick Reference Guide*** at the end of this guide.

### **Sustaining Practice Excellence**

Practice excellence does not happen overnight. It is imperative that each practice continue to strive. The way a practice can continue to make improvements in treating patients with type 2 diabetes includes periodically generating feedback from patients.

### **Patient Feedback**

The front office staff can periodically mail, email, or hand patients a Patient Satisfaction Survey located in the Toolbox section. Keeping a comment box centrally located in the office can also be used to generate feedback.

Try to focus your survey on the following:

- Ease of care
- Wait times
- Physician and staff communications
- Billing
- Facility
- Confidentiality
- Pros and cons with the practice visit

Once the information has been collated, share with the physician the feedback and continue working as a team to improve patient care.

## Resources

Resources: After the Visit	
<b>Community-Clinical Linkages</b>	<p>Clinical-community linkages help to coordinate health care delivery, public health, and community-based activities to promote healthy behavior, fill gaps in needed services, and promoting patient, family, and community involvement.  <a href="http://www.ahrq.gov/legacy/clinic/pcc/clincomlink.htm">http://www.ahrq.gov/legacy/clinic/pcc/clincomlink.htm</a></p>
<b>Identify Community Resources</b>	<p>Contact the following to learn more about patient education and self management support available in your local community:</p> <ul style="list-style-type: none"> <li>• American Diabetes Association <a href="http://www.diabetes.org">www.diabetes.org</a></li> <li>• American Heart Association <a href="http://www.cancer.org">www.cancer.org</a></li> <li>• Medical group you may belong to</li> <li>• Health plan(s) in which you are a provider</li> <li>• Your state public health programs</li> <li>• Your local health department</li> <li>• Local medical society</li> </ul>
<b>Engage the Care Team</b>	<p><a href="#">Building Teams in Primary Care: Lessons from 15 Case Studies</a>: California Health Care Foundation</p> <p><a href="#">Redesigning the Health Care Team</a>: National Diabetes Education Program            AHRQ: Prevention and Chronic Care Program/Improving Primary Care:  <a href="http://www.ahrq.gov/legacy/clinic/prevenix.htm">http://www.ahrq.gov/legacy/clinic/prevenix.htm</a></p>
<b>Partner with organizations to provide ongoing self Management Support</b>	<p><a href="#">Tools for Building Clinic/Community Partnerships to Support Chronic Disease Control &amp; Prevention</a>: New Partnerships for Health</p> <p>American Association of Diabetes Educators  <a href="http://www.diabeteseducator.org">www.diabeteseducator.org</a></p> <ul style="list-style-type: none"> <li>• AADE 7</li> <li>• Online learning modules about Medicare DSMT and MNT payment provided in a variety of practice settings</li> <li>• Ask the Reimbursement Expert (a free benefit for AADE members—login required)</li> <li>• Diabetes Education program accreditation</li> <li>• Reimbursement Tips for Primary Care Practice, revised 2009</li> <li>• Position Statement: Community Health Workers in Diabetes Management and Prevention</li> <li>• Guidelines for the Practice of Diabetes Education</li> <li>• Competencies for Diabetes Educators</li> </ul>

## End Notes:

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# Addendum

- ❖ 1. Billing and Coding Quick Reference Guide
- ❖ 2. Additional Resources

## Billing and Coding Quick Reference Guide

### ICD9-CM Coding for Type 2 Diabetes Mellitus<sup>71</sup>

The International Classification of Diseases, 9th Revision, Clinical Modification, also known as ICD-9-CM, is the official United States system of assigning codes to medical diagnoses. The following two tables list ICD-9-CM diagnoses and codes for diabetes risk factors and cardiovascular comorbidities, and for type 2 diabetes mellitus

**Table 41: ICD 9-CM Coding for Diabetes Risk Factors and Cardiovascular Co-morbid Diagnoses**

Diagnosis	ICD-9-CM code
<b>Impaired fasting glucose</b> Elevated fasting glucose	790.21
<b>Impaired glucose tolerance test (oral)</b> Elevated glucose tolerance test	790.22
<b>Other abnormal glucose</b> Abnormal glucose, non specific (NOS) Abnormal non-fasting glucose Hyperglycemia (NOS) Pre-diabetes (NOS)	790.29
<b>Dysmetabolic syndrome X</b> Use Additional Code: for associated manifestation, such as: cardiovascular disease (414.00-414.07) obesity (278.00-278.03)	277.7
<b>Hypertensive disease</b>	
<b>Essential hypertension:</b> Malignant Benign Unspecified	401.1 401.2 401.9
<b>Hypertensive heart disease:</b> Malignant – Without heart failure Malignant – With heart failure Benign – Without heart failure Benign – With heart failure Unspecified – Without heart failure Unspecified – With heart failure	402.00 402.01 402.10 402.11 402.90 402.91

<b>Hypertensive chronic kidney disease</b>	
Malignant, with chronic kidney disease stage I through stage IV, or unspecified <i>Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)</i>	403.00
Malignant, with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	403.01
Benign, with chronic kidney disease stage I through stage IV, or unspecified <i>Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)</i>	403.10
Benign, with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	403.11
Unspecified, with chronic kidney disease stage I through stage IV, or unspecified <i>Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)</i>	403.90
Unspecified, with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	403.91
<b>Hypertensive heart and chronic kidney disease</b>	
Malignant, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified <i>Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)</i>	404.00
Malignant, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified <i>Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)</i>	404.01
Malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	404.02
Malignant, with heart failure and chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5-585.6)</i>	404.03

Benign, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)	404.10
Benign, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)	404.11
Benign, without heart failure and with chronic kidney disease stage V or end stage renal disease Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)	404.12
Benign, with heart failure and chronic kidney disease stage V or end stage renal disease Use Additional Code: to identify the stage of chronic kidney disease (585.5-585.6)	404.13
Unspecified, without heart failure and with chronic kidney disease stage I through stage IV, or unspecified Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)	404.90
Unspecified, with heart failure and with chronic kidney disease stage I through stage IV, or unspecified Use Additional Code: to identify the stage of chronic kidney disease (585.1-585.4, 585.9)	404.91
Unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)	404.92
Unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease Use Additional Code: to identify the stage of chronic kidney disease (585.5-585.6)	404.93
<b>Secondary hypertension</b>	
Malignant – Renovascular	405.01
Malignant – Other	405.09
Benign – Renovascular	405.11
Benign – Other	405.19
Unspecified – Renovascular	405.91
Unspecified - Other	405.99





<b>Dyslipidemia</b>	
<b>Pure hypercholesterolemia</b> Familial hypercholesterolemia Fredrickson Type IIa hyperlipoproteinemia Hyperbetalipoproteinemia Hyperlipidemia, Group A Low-density-lipoid-type [LDL] hyperlipoproteinemia	272.0
<b>Pure hyperglyceridemia</b> Endogenous hyperglyceridemia Fredrickson Type IV hyperlipoproteinemia Hyperlipidemia, Group B Hyperprebetalipoproteinemia Hypertriglyceridemia, essential Very-low-density-lipoid-type [VLDL] hyperlipoproteinemia	272.1
<b>Mixed hyperlipidemia</b> Broad- or floating-betalipoproteinemia Combined hyperlipidemia Elevated cholesterol with elevated triglycerides NEC Fredrickson Type IIb or III hyperlipoproteinemia Hypercholesterolemia with endogenous hyperglyceridemia Hyperbetalipoproteinemia with prebetalipoproteinemia Tubo-eruptive xanthoma Xanthoma tuberosum	272.2
<b>Hyperchylomicronemia</b> Burger-Grutz syndrome Fredrickson type I or V hyperlipoproteinemia Hyperlipidemia, Group D Mixed hyperglyceridemia	272.3
<b>Other and unspecified hyperlipidemia</b> Alpha-lipoproteinemia Hyperlipidemia NOS Hyperlipoproteinemia NOS	272.4
<b>Overweight and obesity</b>	
Obesity (use additional code to identify body mass index, if know (V85.0-V85.54)	278.00
Morbid obesity (increased weight beyond limits of skeletal and physical requirements (125 percent or more over ideal body weight) as a result of excess fat in subcutaneous connective tissues (BMI greater than 39)	278.01

practice / clinic  
resources

**Table 42: ICD 9-CM Coding for Type 2 Diabetes Mellitus Diagnoses**

Diagnosis	ICD- 9-CM Code
<p><b>Diabetes mellitus type 2</b>            Diabetes mellitus: codes under category 250, diabetes mellitus, identify complications/ manifestations associated with diabetes mellitus. A fifth-digit is required for all category 250 codes to identify the type of diabetes mellitus and whether the diabetes is controlled or uncontrolled.</p>	
<p><b>Diabetes mellitus</b></p>	
<ul style="list-style-type: none"> <li>➤ Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled               <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit “0” is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.00
<ul style="list-style-type: none"> <li>➤ Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled               <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.02
<p><b>Diabetes with ketoacidosis</b></p>	
<ul style="list-style-type: none"> <li>➤ Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled               <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 0 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.10
<ul style="list-style-type: none"> <li>➤ Diabetes with ketoacidosis, type II or unspecified type, uncontrolled               <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.12
<p><b>Diabetes with hyperosmolarity</b></p>	
<ul style="list-style-type: none"> <li>➤ Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled               <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 0 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.20
<ul style="list-style-type: none"> <li>➤ Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled               <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.22



**Table 42: ICD 9-CM Coding for Type 2 Diabetes Mellitus Diagnoses**

Diagnosis	ICD- 9-CM Code
<b>Diabetic Coma</b> <ul style="list-style-type: none"> <li>○ Diabetic coma (with ketoacidosis)</li> <li>○ Diabetic hypoglycemic coma</li> <li>○ Insulin coma NOS</li> </ul> <p><i>Excludes: diabetes with hyperosmolar coma (250.2)</i></p>	
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with other coma, type II or unspecified type, not stated as uncontrolled</b> <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 0 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.30
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with other coma, type II or unspecified type, uncontrolled</b> <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.32
<b>Diabetes with renal manifestations:</b> <ul style="list-style-type: none"> <li>➤ <b>Use Additional Code:</b> to identify manifestation, as: <ul style="list-style-type: none"> <li>-<i>chronic kidney disease (585.1-585.9)</i></li> <li>-<i>diabetic:</i> <ul style="list-style-type: none"> <li><i>nephropathy NOS (583.81)</i></li> <li><i>nephrosis (581.81)</i></li> </ul> </li> <li>-<i>intercapillary glomerulosclerosis (581.81)</i></li> <li>-<i>Kimmelstiel-Wilson syndrome (581.81)</i></li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled</b> <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 0 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.40
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with renal manifestations, type II or unspecified type, uncontrolled</b> <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.42
<b>Diabetes with ophthalmic manifestations</b> <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> to identify manifestation, as: <ul style="list-style-type: none"> <li><i>diabetic:</i> <ul style="list-style-type: none"> <li><i>blindness (369.00-369.9)</i></li> <li><i>cataract (366.41)</i></li> <li><i>glaucoma (365.44)</i></li> <li><i>macular edema (362.07)</i></li> <li><i>retinal edema (362.07)</i></li> <li><i>retinopathy (362.01-362.07)</i></li> </ul> </li> </ul> </li> </ul>	250.50

**Table 42: ICD 9-CM Coding for Type 2 Diabetes Mellitus Diagnoses**

Diagnosis	ICD- 9-CM Code
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled</b> <ul style="list-style-type: none"> <li>Use <b>Additional Code:</b> if applicable, for associated long-term (current) insulin use V58.67</li> <li>Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.52
<b>Diabetes with neurological manifestations</b> <ul style="list-style-type: none"> <li>➤ Use <b>Additional Code:</b> to identify manifestation, as:           <ul style="list-style-type: none"> <li><i>diabetic:</i> <ul style="list-style-type: none"> <li><i>amyotrophy (353.5)</i></li> <li><i>gastroparalysis (536.3)</i></li> <li><i>gastroparesis (536.3)</i></li> <li><i>mononeuropathy (354.0-355.9)</i></li> <li><i>neurogenic arthropathy (713.5)</i></li> <li><i>peripheral autonomic neuropathy (337.1)</i></li> <li><i>polyneuropathy (357.2)</i></li> </ul> </li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled</b> <ul style="list-style-type: none"> <li>○ Use <b>Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> </ul> </li> <li>➤ <b>Fifth digit 0 is for use for type II patients even if the patient requires insulin</b></li> </ul>	250.60
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with neurological manifestations, type II or unspecified type, uncontrolled</b> <ul style="list-style-type: none"> <li>○ Use <b>Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.62
<b>Diabetes with peripheral circulatory disorders</b> <ul style="list-style-type: none"> <li>➤ Use <b>Additional Code:</b> to identify manifestation, as:           <ul style="list-style-type: none"> <li><i>diabetic:</i> <ul style="list-style-type: none"> <li><i>gangrene (785.4)</i></li> <li><i>peripheral angiopathy (443.81)</i></li> </ul> </li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled</b> <ul style="list-style-type: none"> <li>○ Use <b>Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 0 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.70
<ul style="list-style-type: none"> <li>➤ <b>Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled</b> <ul style="list-style-type: none"> <li>○ Use <b>Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.72



**Table 42: ICD 9-CM Coding for Type 2 Diabetes Mellitus Diagnoses**

Diagnosis	ICD- 9-CM Code
<b>Diabetes with other specified manifestations</b>	
<ul style="list-style-type: none"> <li>○ Diabetic hypoglycemia NOS</li> <li>○ Hypoglycemic shock NOS</li> <li>○ Use Additional Code: to identify manifestation, as: any associated ulceration (707.10-707.9) diabetic bone changes (731.8)</li> </ul>	
<ul style="list-style-type: none"> <li>➤ Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled                             <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 0 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.80
<ul style="list-style-type: none"> <li>➤ Diabetes with other specified manifestations, type II or unspecified type, uncontrolled                             <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.82
<b>Diabetes with unspecified complication</b>	
<ul style="list-style-type: none"> <li>➤ Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled                             <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 0 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.90
<ul style="list-style-type: none"> <li>➤ Diabetes with unspecified complication, type II or unspecified type, uncontrolled                             <ul style="list-style-type: none"> <li>○ <b>Use Additional Code:</b> if applicable, for associated long term (current) insulin use V58.67</li> <li>○ Fifth digit 2 is for use for type II patients even if the patient requires insulin</li> </ul> </li> </ul>	250.92
<b>Other disorders of pancreatic internal secretion</b>	
<ul style="list-style-type: none"> <li>➤ Hypoglycemic coma</li> </ul>	251.0
<ul style="list-style-type: none"> <li>➤ Other specified hypoglycemia</li> </ul>	251.1
<ul style="list-style-type: none"> <li>➤ Hypoglycemia, unspecified</li> </ul>	251.2
<ul style="list-style-type: none"> <li>➤ Post surgical hypoinsulinemia</li> </ul>	251.3
<ul style="list-style-type: none"> <li>➤ Abnormal secretion of glucagon</li> </ul>	251.4
<ul style="list-style-type: none"> <li>➤ Abnormal secretion of gastrin</li> </ul>	251.5
<ul style="list-style-type: none"> <li>➤ Other specified disorder of pancreatic internal secretion</li> </ul>	251.8
<ul style="list-style-type: none"> <li>➤ Unspecified disorder of pancreatic internal secretion</li> </ul>	251.9
<b>Exclusions</b>	
<ul style="list-style-type: none"> <li>➤ Diabetes, complications associated with pregnancy, childbirth, or the puerperium</li> </ul>	648.8
<ul style="list-style-type: none"> <li>➤ Gestation diabetes, abnormal glucose tolerance</li> </ul>	790.2
<ul style="list-style-type: none"> <li>➤ Non clinical diabetes</li> </ul>	648.0

**Table 43: ICD 9-CM Coding for Diabetes Related Complications and/or Comorbidities**

<b>Diagnosis</b>	<b>ICD-9-CM code</b>
<b>Cardiovascular disease</b>	
➤ Hyperchylomicronemia	272.3
➤ Other and unspecified hyperlipidemia	272.4
➤ Acute myocardial infarction (4th digit required)	410.0
➤ Other acute and subacute forms of ischemic heart disease (4th digit required)	411.0
➤ Old myocardial infarction	412.0
➤ Angina pectoris (4th digit required)	413.0
➤ Coronary atherosclerosis (5th digit required)	414.0
➤ Cardiovascular disease, unspecified	429.2
➤ Occlusion of cerebral arteries (4th digit required)	434.0
➤ Transient cerebral ischemia (4th digit required)	435.0
➤ Other and unspecified cerebrovascular disease (4th digit required)	437.0
<b>Diabetic retinopathy</b>	
<b>Code First: diabetes (249.5, 250.5)</b>	
➤ Background diabetic retinopathy <ul style="list-style-type: none"> <li>○ Diabetic retinal microaneurysms</li> <li>○ Diabetic retinopathy NOS</li> </ul>	362.01
➤ Proliferative diabetic retinopathy	362.02
➤ Nonproliferative diabetic retinopathy, NOS	362.03
➤ Mild nonproliferative diabetic retinopathy	362.04
➤ Moderate nonproliferative diabetic retinopathy	362.05
➤ Severe nonproliferative diabetic retinopathy	362.06
➤ Diabetic macular edema <ul style="list-style-type: none"> <li>○ Diabetic retinal edema</li> </ul> Note: Code 362.07 must be used with a code for diabetic retinopathy (362.01-362.06)	362.07
➤ Glaucoma	365.9
➤ Diabetic cataract <ul style="list-style-type: none"> <li>○ <b>Code First: diabetes (249.5, 250.5)</b></li> </ul>	366.41
<b>Other complications</b>	
➤ Polyneuropathy in diabetes <ul style="list-style-type: none"> <li>○ <b>Code First: underlying disease (249.6, 250.6)</b></li> </ul>	357.2
➤ Nephritis and nephropathy, not specified as acute or chronic, in diseases classified elsewhere <ul style="list-style-type: none"> <li>○ <b>Code First: underlying disease, as: diabetes mellitus (249.4, 250.4)</b></li> </ul>	583.81
➤ Acquired acanthosis nigricans <ul style="list-style-type: none"> <li>○ Keratosis nigricans (...often associated with diabetes)</li> </ul>	701.2
➤ Proteinuria (albuminuria)	791.0



## HCPCS Level II Codes for Self Monitoring Blood Glucose Products

Level II HCPCS codes are used primarily to identify products, supplies, and services not included in the CPT-4 codes, such as durable medical equipment which includes blood glucose monitors and supplies used by patients outside a physician's office, including:

**Table 44: HCPCS Codes Self Monitoring Blood Glucose Products**

Description		HCPCS code
Blood glucose test or reagent strips for home blood glucose monitor	per 50 strips	A4253
Replacement battery, alkaline (other than J cell), for use with medically necessary home blood glucose monitor owned by patient	each	A4233
Replacement battery, alkaline, J cell, for use with medically necessary home blood glucose monitor owned by patient	each	A4234
Normal, low and high calibrator solution / chips		A4256
Spring-powered device for lancet	each	A4258
Lancets	per box (100)	A4259
Home blood glucose monitor		E0607
Blood glucose monitor with integrated voice synthesizer		E2100
Platforms for home blood glucose monitor	50 per box	A4255

^ Typically not covered: A4250 Urine test or reagent strips/tablets

## HCPCS Codes Medicare Preventive and Screening Services

The following tables contain commonly used procedure codes for diabetes related prevention and screening services, including Medical Nutrition Therapy (MNT) and Diabetes Self Management Trainings (DSMT).

**Table 45: HCPCS Codes Medicare Preventive and Screening Services**

Service Description	Procedure code	Covered diagnosis
<b>Influenza Vaccine</b>		V04.81  Note: Providers must report diagnosis code V06.6 on claims when the purpose of the visit was to receive both the pneumococcal and influenza vaccines during the same visit.
Influenza virus vaccine, split virus, preservative free, when administered to children 6-35 months of age, for intramuscular use	90655	
Influenza virus vaccine, split virus, preservative free, when administered to individuals 3 years and older, for intramuscular use	90656	
Influenza virus vaccine, split virus, when administered to children 6-35 months of age, for intramuscular use	90657	
Influenza virus vaccine, split virus, when administered to individuals 3 years of age and older, for intramuscular use	90658	
Influenza virus vaccine, live, for intranasal use	90660	
Influenza virus vaccine, split virus, preservative free, enhanced immunogenicity via increased antigen content, for intramuscular use	90662	
<b>Influenza Administration</b>		
Immunization administration through 18 years of age via any route of administration, with counseling by physician or other qualified health care professional; first vaccine/toxoid component	90460	
Immunization administration (includes percutaneous, intradermal, subcutaneous, or intramuscular injections); 1 vaccine (single or combination vaccine/toxoid)	90471	
Immunization administration by intranasal or oral route; 1 vaccine (single or combination vaccine/toxoid)	90473	
When billing Medicare, use HCPCS code for administration of influenza vaccine	G0008	



**Table 45: HCPCS Codes Medicare Preventive and Screening Services**

Service Description	Procedure code	Covered diagnosis
<b>Pneumococcal vaccine</b>		
Pneumococcal conjugate vaccine, polyvalent, for children under 5 years, for intramuscular use	90669	V03.82
Pneumococcal conjugate vaccine, polyvalent, for children under 5 years, for intramuscular use	90669	Note: Providers must report diagnosis code V06.6 on claims when the purpose of the visit was to receive both pneumococcal and influenza vaccines during the same visit. To bill Medicare, report both vaccine codes and administration codes on the same claim form or electronic format.
Pneumococcal conjugate vaccine, 13-valent, for intramuscular use	90670	
Pneumococcal polysaccharide vaccine, 23-valent, adult or immunosuppressed patient dosage, for use in individuals 2 years or older, for subcutaneous or intramuscular use	90732	
<b>Pneumococcal Administration</b>		
When billing Medicare, use HCPCS code for administration of pneumococcal vaccine	G0009	
<b>H1N1 Vaccine</b>		
Influenza virus vaccine, pandemic formulation, H1N1	90663	V04.81
Level II Healthcare Common Procedure Coding System code is used to identify the H1N1 vaccine on Medicare claims	G9142	
<b>Glaucoma Screening</b> Glaucoma screening for high risk patients furnished by an optometrist or ophthalmologist (every 12 months)	G0117	V80.1
Glaucoma screening for high risk patient furnished under the direct supervision of an optometrist or ophthalmologist	G0118	
<b>Glucose</b>		
Glucose; quantitative, blood (except reagent strip)	82947	V77.1
post glucose dose (includes glucose)	82950	
tolerance test (GTT), three (3) specimens (includes glucose)	82951	

**Table 45: HCPCS Codes Medicare Preventive and Screening Services**

Service Description	Procedure code	Covered diagnosis
<b>Lipid panel</b>		
This panel must include the following: Cholesterol, serum, total (82465) Lipoprotein, direct measurement, high density cholesterol (HDL cholesterol) (83718) Triglycerides (84478) *See excerpt of 190.23 Lipids Testing Medicare National Coverage Determination below	80061	One or more of the following: V81.0, V81.1, V81.2
Cholesterol (Every 5 years for asymptomatic beneficiaries)	82465	One or more of the following: V81.0, V81.1, V81.2
Lipoprotein (Every 5 years for asymptomatic beneficiaries)	83718	One or more of the following: V81.0, V81.1, V81.2
Triglycerides (Every 5 years for asymptomatic beneficiaries)	84478	One or more of the following: V81.0, V81.1, V81.2

\* 190.23 Lipids Testing

<http://www.cms.gov/CoverageGenInfo/Downloads/manual201104.pdf>



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## Description

Lipoproteins are a class of heterogeneous particles of varying sizes and densities containing lipid and protein. These lipoproteins include cholesterol esters and free cholesterol, triglycerides, phospholipids and A, C, and E apoproteins. Total cholesterol comprises all the cholesterol found in various lipoproteins.

Factors that affect blood cholesterol levels include age, sex, body weight, diet, alcohol and tobacco use, exercise, genetic factors, family history, medications, menopausal status, the use of hormone replacement therapy, and chronic disorders such as hypothyroidism, obstructive liver disease, pancreatic disease (including diabetes), and kidney disease.

In many individuals, an elevated blood cholesterol level constitutes an increased risk of developing coronary artery disease. Blood levels of total cholesterol and various fractions of cholesterol, especially low density lipoprotein cholesterol (LDL-C) and high density lipoprotein cholesterol (HDL-C) are useful in assessing and monitoring treatment for that risk in patients with cardiovascular and related diseases. Blood levels of the above cholesterol components including triglyceride have been separated into desirable, borderline and high-risk categories by the National Heart, Lung, and Blood Institute in their report in 1993. These categories form a useful basis for evaluation and treatment of patients with hyperlipidemia. Therapy to reduce these risk parameters includes diet, exercise and medication, and fat weight loss, which is particularly powerful when combined with diet and exercise.

### Indications

The medical community recognizes lipid testing as appropriate for evaluating atherosclerotic cardiovascular disease. Conditions in which lipid testing may be indicated include:

- Assessment of patients with atherosclerotic cardiovascular disease
- Evaluation of primary dyslipidemia
- Any form of atherosclerotic disease, or any disease leading to the formation of atherosclerotic disease
- Diagnostic evaluation of diseases associated with altered lipid metabolism, such as: nephrotic syndrome, pancreatitis, hepatic disease, and hypo and hyperthyroidism
- Secondary dyslipidemia, including diabetes mellitus, disorders of gastrointestinal absorption, chronic renal failure
- Signs or symptoms of dyslipidemias, such as skin lesions
- As follow-up to the initial screen for coronary heart disease (total cholesterol + HDL cholesterol) when total cholesterol is determined to be high (>240 mg/dL), or borderline-high (200-240 mg/dL) plus two or more coronary heart disease risk factors, or an HDL cholesterol <35 mg/dL

### Medicare Limitations

Lipid panel and hepatic panel testing may be used for patients with severe psoriasis which

has not responded to conventional therapy and for which the retinoid etretinate has been prescribed and who have developed hyperlipidemia or hepatic toxicity. Specific examples include erythrodermia and generalized pustular type and psoriasis associated with arthritis. Routine screening and prophylactic testing for lipid disorder are not covered by Medicare. While lipid screening may be medically appropriate, Medicare by statute does not pay for it. Lipid testing in asymptomatic individuals is considered to be screening regardless of the presence of other risk factors such as family history, tobacco use, etc.

Once a diagnosis is established, one or several specific tests are usually adequate for monitoring the course of the disease. Less specific diagnoses (for example, other chest pain) alone do not support medical necessity of these tests.

When monitoring long term anti-lipid dietary or pharmacologic therapy and when following patients with borderline high total or LDL cholesterol levels, it is reasonable to perform the lipid panel annually. A lipid panel at a yearly interval will usually be adequate while measurement of the serum total cholesterol or a measured LDL should suffice for interim visits if the patient does not have hypertriglyceridemia.

Any one component of the panel or a measured LDL may be medically necessary up to six times the first year for monitoring dietary or pharmacologic therapy. More frequent total cholesterol HDL cholesterol, LDL cholesterol and triglyceride testing may be indicated for marked elevations or for changes to anti-lipid therapy due to inadequate initial patient response to dietary or pharmacologic therapy. The LDL cholesterol or total cholesterol may be measured three times yearly after treatment goals have been achieved.

If no dietary or pharmacological therapy is advised, monitoring is not necessary.

When evaluating non-specific chronic abnormalities of the liver (for example, elevations of transaminase, alkaline phosphatase, abnormal imaging studies, etc.), a lipid panel would generally not be indicated more than twice per year

**Table 46: HCPCS Codes Self-Management Training Services**

<b>Diabetes self-management training services</b>			
Diabetes outpatient self-management training services	Individual	per 30 minutes	G0108
Diabetes outpatient self-management training services	Group session(2 or more individuals)	per 30 minutes	G0109



**Table 47: CPT Codes Medical Nutrition Therapy (MNT)**

Diagnosis	Code
➤ Medical Nutrition Therapy; initial assessment and intervention, individual, face-to-face with patient, each 15 minutes	97802
➤ Medical Nutrition Therapy; re-assessment and intervention, individual, face-to-face with the patient each 15 minutes	97803
➤ Medical Nutrition Therapy; group (2 or more), face-to-face with patient, each 30 minutes	97804
<p><b>*Medicare MNT Code</b></p> <p>➤ Medical nutrition therapy; reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition or treatment regimen (including additional hours needed for renal disease), individual, face to face with the patient, each 15 minutes</p> <ul style="list-style-type: none"> <li>○ Requires referral for beneficiaries with diabetes or renal disease</li> <li>○ Services must be provided by a dietitian or nutritionist</li> </ul>	G0270
<p><b>*Medicare MNT Code</b></p> <p>➤ Medical nutrition therapy, reassessment and subsequent intervention(s) following second referral in same year for change in diagnosis, medical condition, or treatment regimen (including additional hours needed for renal disease), group (2 or more individuals), each 30 minutes</p> <ul style="list-style-type: none"> <li>○ Requires referral for beneficiaries with diabetes or renal disease</li> <li>○ Services must be provided by a dietitian or nutritionist</li> </ul>	G0271

\* For Medicare-covered MNT services, CMS established two HCPCS level II G-codes (see codes above) for MNT reassessment and subsequent intervention following a second referral in the same calendar year for a change in diagnosis, medical condition, or treatment regimen. G codes are used to identify professional health care procedures and services for which there are no specific CPT codes. According to a Medicare Intermediary Program Memorandum (Transmittal A-02-115), dated November 1, 2002, “These new G-codes should be used when additional hours of MNT services are performed beyond the number of hours typically covered (3 hours in the initial calendar year, and 2 follow-up hours in subsequent years with a physician referral) when the treating physician determines there is a change of diagnosis or medical condition that makes a change in diet necessary.” Non-Medicare third-party payers may prefer, that RDs and other licensed nutrition professionals report MNT reassessment and subsequent intervention in the same calendar year using MNT CPT codes 97803 and 97804 for individual and group follow-up MNT encounters, respectively. For reporting these MNT services for non-Medicare patients, check third-party payers’ policies and guidelines.

<b>Diagnosis</b>	<b>ICD-9-CM code</b>
Organ or tissue replaced by transplant; kidney	V42.0
Diabetes mellitus	250.00 - 250.93
<b>Hypertensive chronic kidney disease:</b>	
Malignant, with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	403.01
Benign, with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	403.11
Unspecified, with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	403.91
<b>Hypertensive heart:</b>	
Malignant, without heart failure and with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	404.02
Malignant, with heart failure and chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	404.03
Benign, without heart failure and with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	40.12
Benign, with heart failure and chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	404.13
Unspecified, without heart failure and with chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	404.92



**Table 48: ICD-9-CM Codes that Support Medical Nutrition Therapy (MNT) Services**

Unspecified, with heart failure and chronic kidney disease stage V or end stage renal disease <i>Use Additional Code: to identify the stage of chronic kidney disease (585.5, 585.6)</i>	404.93
<b>Chronic kidney disease (Stages 1 through V)</b>	585.1 - 585.5
<b>End stage renal disease</b> Chronic kidney disease requiring chronic dialysis	585.6
<b>Chronic kidney disease, unspecified</b> Chronic renal disease Chronic renal failure NOS Chronic renal insufficiency	585.9
<b>Unspecified disorder of kidney and ureter</b> Acute renal disease Acute renal insufficiency Renal disease NOS Salt-losing nephritis or syndrome Excludes: chronic renal insufficiency (585.9) cystic kidney disease (753.1) nephropathy, so stated (583.0-583.9) renal disease: arising in pregnancy or the puerperium (642.1-642.2, 642.4-642.7, 646.2) not specified as acute or chronic, but with stated pathology or cause (583.0-583.9)	593.9
<b>Diabetes mellitus, unspecified as to episode of care or not applicable</b>	648.00
<b>Diabetes mellitus, delivered, with or without mention of antepartum condition</b> <b>Antepartum condition with delivery</b> NOS (with mention of antepartum complication during current episode of care) Intrapartum obstetric condition (with mention of antepartum complication during current episode of care) Pregnancy delivered (with mention of antepartum complication during current episode of care)	648.01
<b>Diabetes mellitus, delivered, with mention of postpartum complication</b> Delivery with mention of puerperal complication during current episode of care	648.02
<b>Diabetes mellitus, antepartum condition or complication</b> Antepartum obstetric condition, not delivered during the current episode of care	648.03

<p><b>Diabetes mellitus, postpartum condition or complication</b>  Postpartum or puerperal obstetric condition or complication following delivery that occurred:  during previous episode of care  outside hospital, with subsequent admission for observation or care</p>	648.04
<p><b>Abnormal glucose tolerance, unspecified as to episode of care or not applicable</b></p>	648.8
<p><b>Abnormal glucose tolerance, delivered, with or without mention of antepartum condition</b>  Antepartum condition with delivery  NOS (with mention of antepartum complication during current episode of care)  Intrapartum obstetric condition (with mention of antepartum complication during current episode of care)  Pregnancy delivered (with mention of antepartum complication during current episode of care)</p>	648.81
<p><b>Abnormal glucose tolerance, delivered, with mention of postpartum complication</b>  Delivery with mention of puerperal complication during current episode of care</p>	648.82
<p><b>Abnormal glucose tolerance, antepartum condition or complication</b>  Antepartum obstetric condition, not delivered during the current episode of care</p>	648.83
<p><b>Abnormal glucose tolerance, postpartum condition or complication</b>  <b>Postpartum or puerperal obstetric condition or complication following delivery that occurred:</b>  during previous episode of care  outside hospital, with subsequent admission for observation or care</p>	648.84





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## Billing and Coding Internet Resources:

- Code Manager® 2011, American Medical Association
- Physicians' Current Procedural Terminology (CPT) 2011  
<http://www.ama-assn.org>
- ICD-9-CM Official Guidelines for Coding and Report, October 2010  
<http://www.cdc.gov/nchs/data/icd9/icdguide10.pdf>
- International Classification of Diseases, 9th Revision, (ICD-9-CM), 2011
- National Center for Health Statistics – Classification of Diseases and Functioning, and Disability  
<http://www.cdc.gov/nchs/icd.htm>
- Healthcare Common Procedure Coding System (HCPCS) American Medical Association 2011  
<https://www.cms.gov/MedHCPCSGenInfo/>
- Medi-Cal/Medicaid Provider Manual  
[www.medi-cal.ca.gov/](http://www.medi-cal.ca.gov/)
- Center for Medicare and Medicaid Services, Preventive Services Guidelines  
[www.cms.hhs.gov/](http://www.cms.hhs.gov/)
- Palmetto GBA – Medicare Fiscal Intermediary, J1 MAC  
[www.palmettogba.com/j1b](http://www.palmettogba.com/j1b)
- Provider Manuals for Contracted Payers  
To obtain a copy of the provider manual from a specific payer, contact your local provider relations representative. Many health plans have electronic versions online.

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## Addendum 2 - Additional Resources

### Diabetes Education Resources

**American Diabetes Association:** [www.diabetes.org](http://www.diabetes.org)

Downloadable Diabetes Risk Screen: <http://www.diabetes.org/are-you-at-risk/diabetes-risk-test/>

Type 2 Diabetes: Where Do I Begin?:

<http://www.diabetes.org/living-with-diabetes/recently-diagnosed/where-do-i-begin/>

**American Diabetes Association: *Living with Type 2 Diabetes Program*** Providers can order free copies of Where Do I Begin? booklets at [www.diabetes.org/atdx](http://www.diabetes.org/atdx)

**American Association of Diabetes Educators (AADE)** <http://www.diabeteseducator.org/>

AADE7: <http://www.diabeteseducator.org/ProfessionalResources/AADE7/>

Diabetes Education: <http://www.diabeteseducator.org/DiabetesEducation/Definitions.html>

**Academy of Nutrition and Dietetics:** <http://www.eatright.org/>

**American Academy of Family Physicians - Diabetes Toolbox**

<http://www.aafp.org/fpm/toolBox/viewToolType.htm?toolTypeId=10>

**Behavioral Diabetes Institute:** <http://behavioraldiabetesinstitute.org/>

The Behavioral Diabetes Institute (BDI) is dedicated to helping people with diabetes live long, healthy and happy lives. Excellent resource for those living with diabetes and depression.

**Diabetes Coalition of California:** [www.DiabetesCoalitionofCalifornia.org](http://www.DiabetesCoalitionofCalifornia.org)

An independent, volunteer organization consisting of individuals and agencies dedicated to the prevention, recognition, and reduction of the adverse personal and public impact of diabetes in the state's diverse communities.

**Lilly for Better Health:** <http://www.lillyforbetterhealth.com/>

Non-Branded publications:

<http://www.lillyforbetterhealth.com/health-resources/health-publications-and-tools.aspx>

**National Diabetes Education Program:**

Free materials, multilingual education campaigns, toolkits <http://www.ndep.nih.gov/>

**Diabetes Health Sense:**

Tools and Resources for health professionals and people with diabetes

<http://www.ndep.nih.gov/resources/diabetes-healthsense/>

**National Eye Institute**

<http://www.nei.nih.gov/health/diabetic>

This site provides information on eye diseases and disorders and their treatment.

**National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK):**

National research projects, educational materials, etc.

<http://www.niddk.nih.gov/Pages/default.aspx>

## **Patient Engagement**

**California Health Care Foundation (CHCF)** sponsors free access to select articles of the February 2013 issue of *Health Affairs* explores challenges and opportunities that arise when patients are engaged to make value-based decisions about their care. Read more:  
<http://www.chcf.org/publications/2013/02/health-affairs-patient-engagement#ixzz2tvAoxeUG>

**Motivational Interviewing:** <http://www.motivationalinterview.org/>

### **American Academy of Family Physicians**

“Encouraging Patients to Change Unhealthy Behaviors with Motivational Interviewing”:

<http://www.aafp.org/fpm/2011/0500/p21.html>

“4 Strategies for Promoting Healthy Lifestyles in Your Practice”:

<http://www.aafp.org/fpm/2011/0300/p16.html>

### **Substance Abuse and Mental Health Services Administration (SAMHSA)**

Motivational interviewing techniques:

<http://www.samhsa.gov/co-occurring/topics/training/motivational.aspx>

## **Medication Adherence**

**Script Your Future:** Patient education and materials.

<http://www.scriptyourfuture.org/>

**Adult Meducation:** The American Society on Aging and the American Society of Consultant Pharmacists Foundation have collaborated on the development of Adult Meducation: Improving Medication Adherence in Older Adults, a web-based program to educate ASA and ASCP members on important aspects of medication adherence in older adults.

<http://www.adultmeducation.com/>

**American Society of Consultant Pharmacists Foundation:** <http://www.ascpfoundation.org/>

**Center for Medicines and Healthy Aging:** <http://medsandaging.com/>

## **Quality Improvement**

**Institute for Healthcare Improvement:** [www.IHI.org](http://www.IHI.org)

How to improve: <http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>

The Science of Improvement:

<http://www.ihl.org/resources/Pages/HowtoImprove/ScienceofImprovementSelectingChanges.aspx>

Plan Do Study Act Worksheet:

<http://www.ihl.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx>

### **Health Resources and Services Administration (HRSA)**

Quality Improvement Toolkit

<http://www.hrsa.gov/quality/toolbox/introduction/index.html>

**Improving Chronic Illness/Chronic Care Model:** <http://www.improvingchroniccare.org/>

**Quality Improvement Library:** <http://www.healthcarecommunities.org/ResourceCenter.aspx>



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